

The Weblate Manual

Release 4.0.4

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CHAPTER 1

User docs

1.1 Weblate basics

1.1.1 Project structure

In Weblate translations are organized into projects and components. Each project can contain number of components and those contain translations into individual languages. The component corresponds to one translatable file (for example *GNU gettext* or *Android string resources*). The projects are there to help you organize component into logical sets (for example to group all translations used within one application).

Internally, each project has translations to common strings propagated across other components within it by default. This lightens the burden of repetitive and multi version translation. Disable it as per *Component configuration*, still producing errors for seemingly inconsistent resulting translations.

1.2 Registration and user profile

1.2.1 Registration

Everybody can browse projects, view translations or suggest translations by default. Only registered users are allowed to actually save changes, and are credited for every translation made.

You can register by following a few simple steps:

1. Fill out the registration form with your credentials.
2. Activate registration by following the link in the e-mail you receive.
3. Optionally adjust your profile to choose which languages you know.

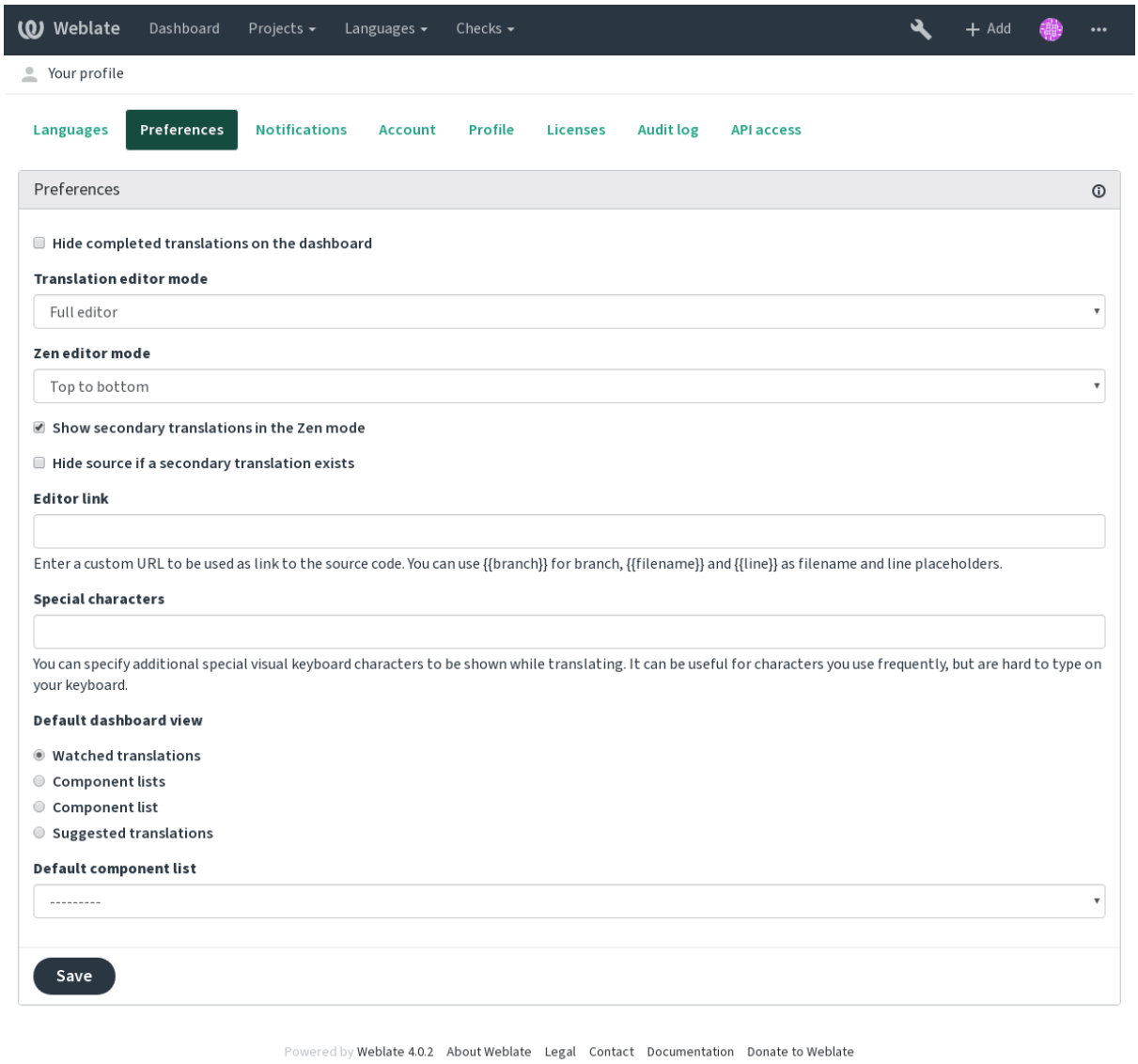
1.2.2 Dashboard

When you sign in, you will see an overview of projects and components, as well as their respective translation progression.

New in version 2.5.

Components of projects you are watching are shown by default, and cross-referenced with your preferred languages.

Hint: You can switch to different views using the navigation tabs.



The menu has these options:

- *Projects* > *Browse all projects* in the main menu showing translation status for each project on the Weblate instance.
- Selecting a language in the main menu *Languages* will show translation status of all projects, filtered by one of your primary languages.
- *Watched translations* in the Dashboard will show translation status of only those projects you are watching, filtered by your primary languages.

In addition, the drop-down can also show any number of *component lists*, sets of project components preconfigured by the Weblate administrator, see *Component Lists*.

You can configure your personal default dashboard view in the *Preferences* section of your user profile settings.

Note: When Weblate is configured for a single project using *SINGLE_PROJECT* in the `settings.py` file (see *Configuration*), the dashboard will not be shown, as the user will be redirected to a single project or component instead.

1.2.3 User profile

The user profile is accessible by clicking your user icon in the top-right of the top menu, then the *Settings* menu.

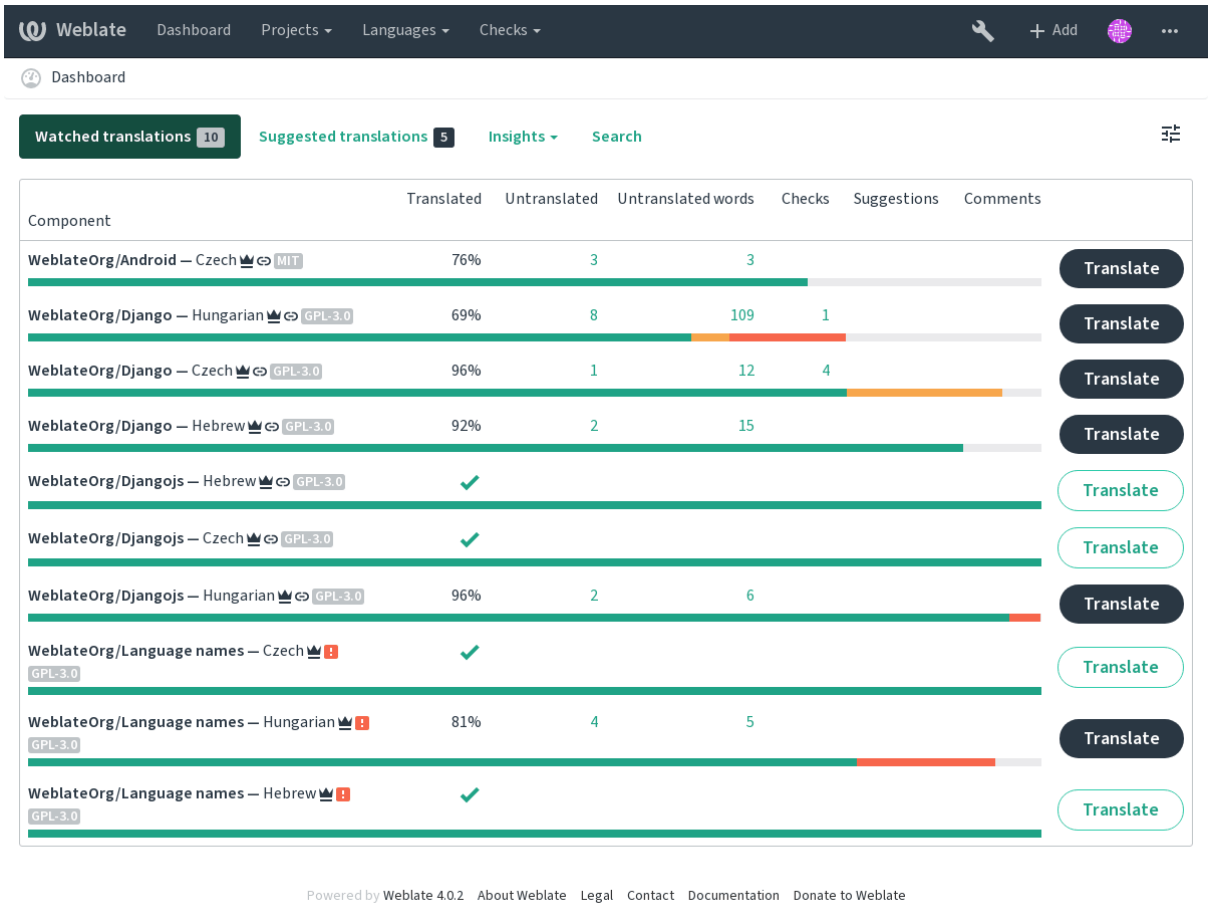
The user profile contains your preferences. Name and e-mail address is used in VCS commits, so keep this info accurate.

Note: All language selections only offer currently translated languages.

Hint: Request or add other languages you want to translate by clicking the button to make them available too.

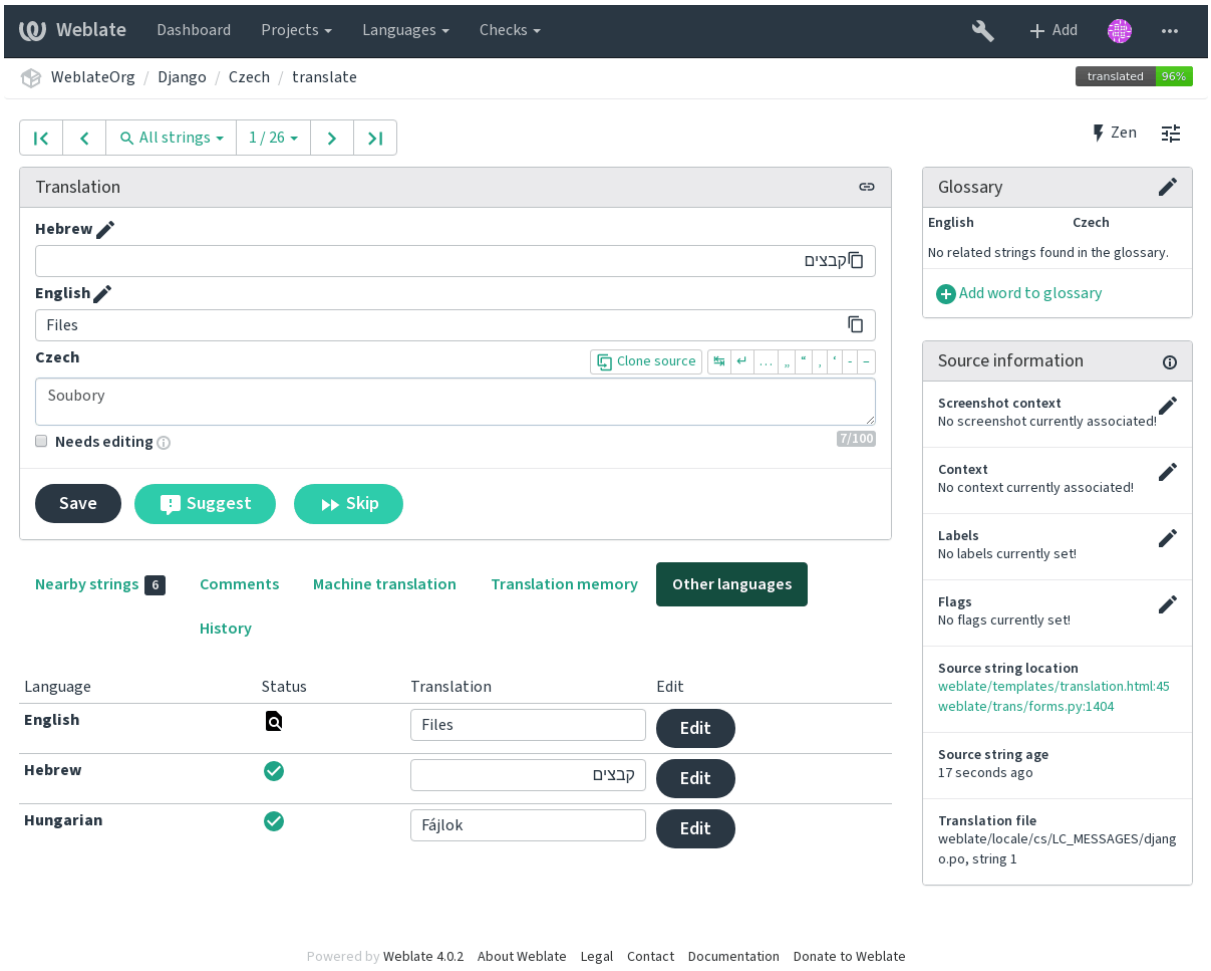
Translated languages

Choose which languages you prefer to translate, and they will be offered on the main page of watched projects, so that you have easier access to these all translations in each of those languages.



Secondary languages

You can define which secondary languages are shown to you as a guide while translating. An example can be seen in the following image, where the Hebrew language is shown as secondarily:



Default dashboard view

On the *Preferences* tab, you can pick which of the available dashboard views to present by default. If you pick the *Component list*, you have to select which component list will be displayed from the *Default component list* drop-down.

See also:

Component Lists

Avatar

Avatar can be shown for each user (depending on *ENABLE_AVATARS*). These images are obtained using https://gravatar.com/.

Editor link

A source code link is shown in the web-browser configured in the *Component configuration* by default.

Hint: By setting the *Editor link*, you use your local editor to open the VCS source code file of translated strings. You can use *Template markup*.

Usually something like `editor://open/?file={{filename}}&line={{line}}` is a good option.

See also:

You can find more info on registering custom URL protocols for the editor in the Nette documentation.

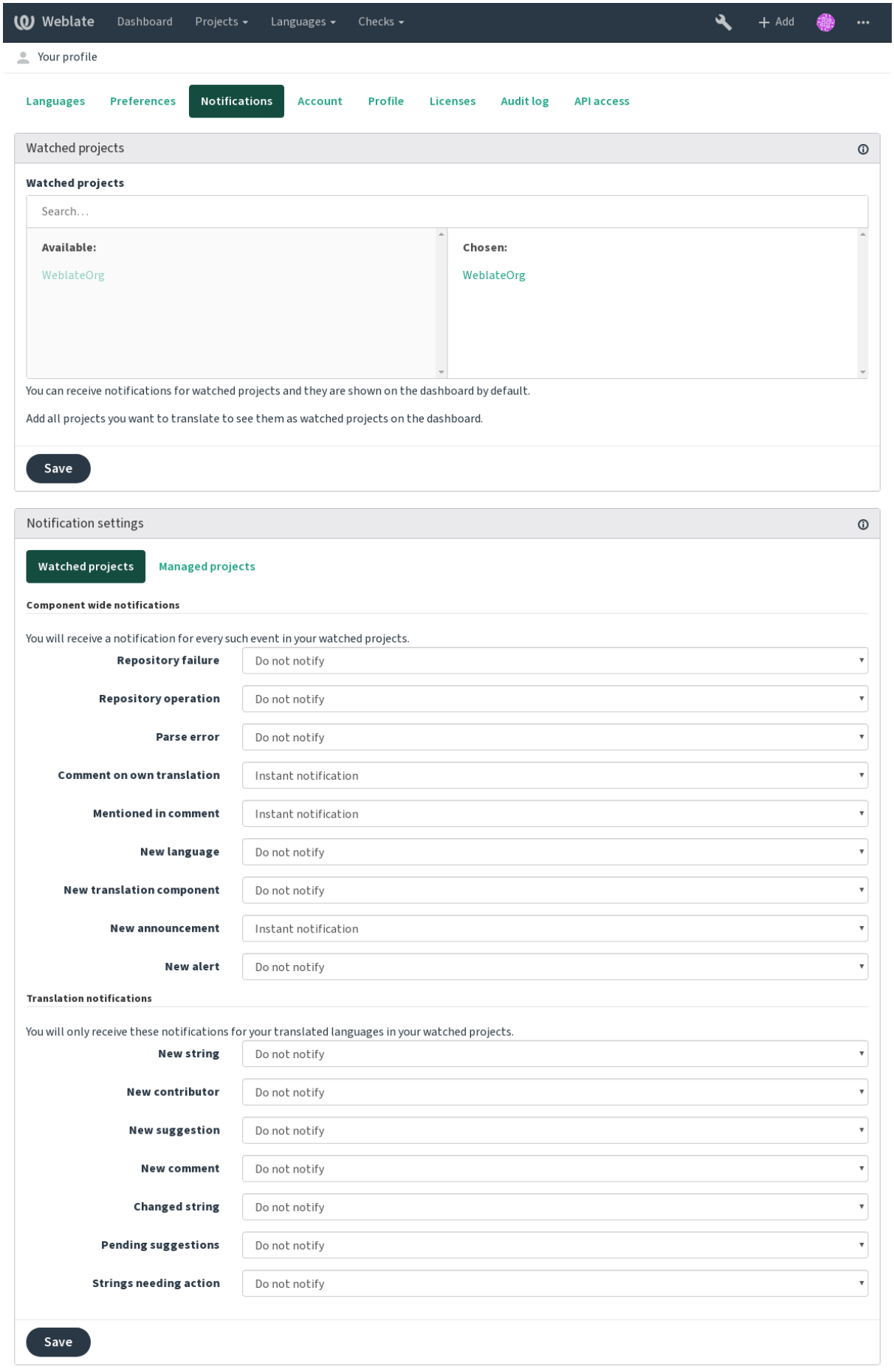
1.2.4 Notifications

Subscribe to various notifications from the *Subscriptions* tab. Notifications for selected events on watched or administered projects will be sent to you per e-mail.

Some of the notifications are sent only for events in your languages (for example about new strings to translate), while some trigger at component level (for example merge errors). These two groups of notifications are visually separated in the settings.

You can toggle notifications for watched projects and administered projects and it can be further tweaked (or muted) per project and component. Visit the component page and select appropriate choice from the *Watching* menu.

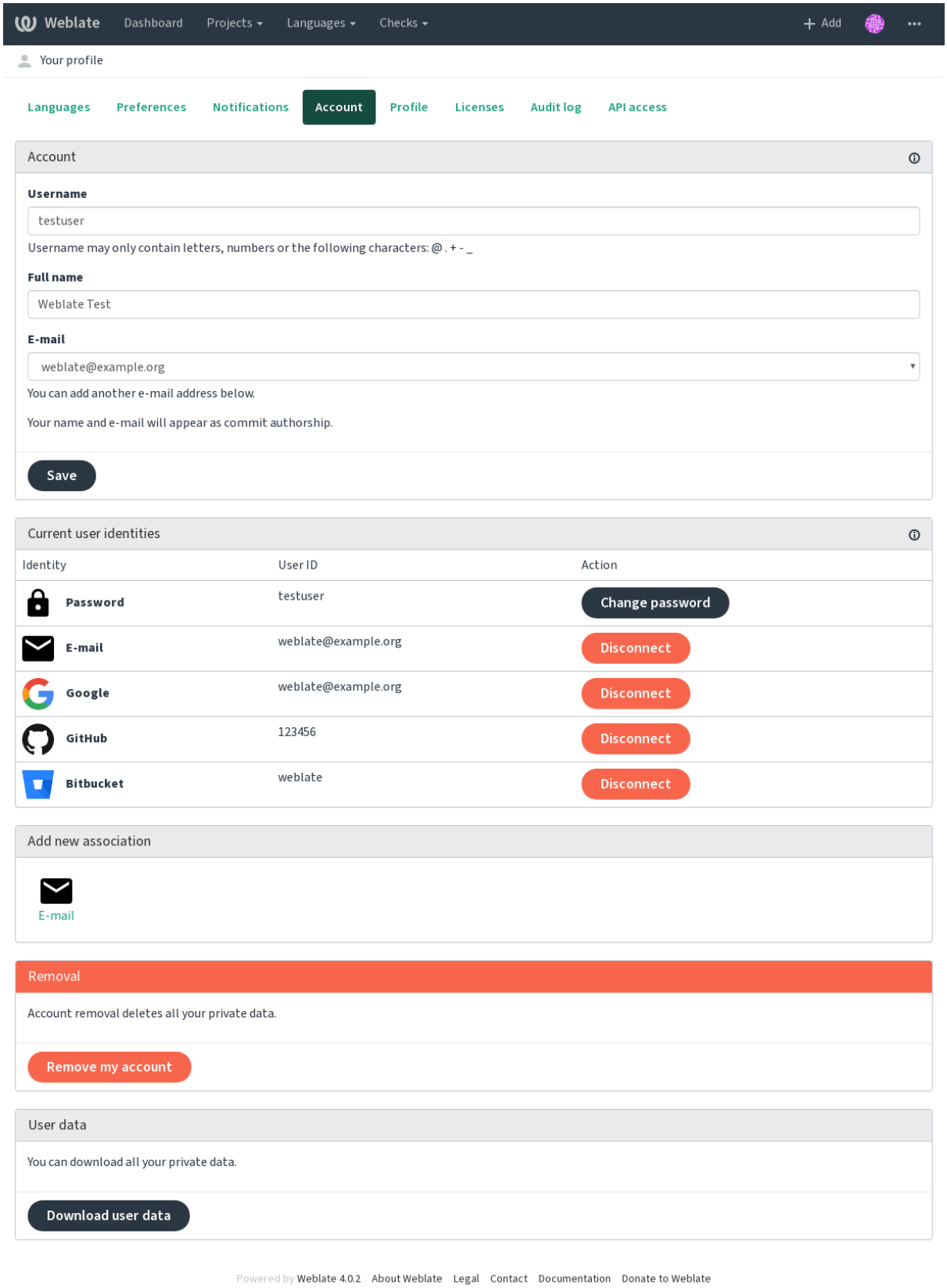
Note: You will not receive notifications for your own actions.


Weblate
Dashboard
Projects
Languages
Checks
Add
Your profile
Languages
Preferences
Notifications
Account
Profile
Licenses
Audit log
API access
Watched projects
Watched projects
Search...
Available:
WeblateOrg
Chosen:
WeblateOrg
You can receive notifications for watched projects and they are shown on the dashboard by default.
Add all projects you want to translate to see them as watched projects on the dashboard.
Save
Notification settings
Watched projects
Managed projects
Component wide notifications
You will receive a notification for every such event in your watched projects.
Repository failure
Do not notify
Repository operation
Do not notify
Parse error
Do not notify
Comment on own translation
Instant notification
Mentioned in comment
Instant notification
New language
Do not notify
New translation component
Do not notify
New announcement
Instant notification
New alert
Do not notify
Translation notifications
You will only receive these notifications for your translated languages in your watched projects.
New string
Do not notify
New contributor
Do not notify
New suggestion
Do not notify
New comment
Do not notify
Changed string
Do not notify
Pending suggestions
Do not notify
Strings needing action
Do not notify
Save
Powered by Weblate 4.0.2 About Weblate Legal Contact Documentation Donate to Weblate

1.2.5 Account

The *Account* tab lets you set up basic account details, connect various services you can use to sign in into Weblate, completely remove your account, or download your user data.

Note: The list of services depends on your Weblate configuration, but can be made to include popular sites such as GitLab, GitHub, Google, Facebook, or Bitbucket or other OAuth 2.0 providers.


Weblate
Dashboard
Projects
Languages
Checks
Add
Your profile
Languages
Preferences
Notifications
Account
Profile
Licenses
Audit log
API access
Account
Username
testuser
Username may only contain letters, numbers or the following characters: @ . + - _
Full name
Weblate Test
E-mail
weblate@example.org
You can add another e-mail address below.
Your name and e-mail will appear as commit authorship.
Save
Current user identities
Identity
User ID
Action
Password
testuser
Change password
E-mail
weblate@example.org
Disconnect
Google
weblate@example.org
Disconnect
GitHub
123456
Disconnect
Bitbucket
weblate
Disconnect
Add new association
E-mail
Removal
Account removal deletes all your private data.
Remove my account
User data
You can download all your private data.
Download user data
Powered by Weblate 4.0.2
About Weblate
Legal
Contact
Documentation
Donate to Weblate

1.3 Translating using Weblate

Thank you for interest in translating using Weblate. Projects can either be set up for direct translation, or by way of accepting suggestions made by users without accounts.

Overall, there are two modes of translation:

- The project accepts direct translations
- The project accepts only suggestions, which are automatically validated once a defined number of votes is reached

Please see *Translation workflows* for more information on translation workflow.

Options for translation project visibility:

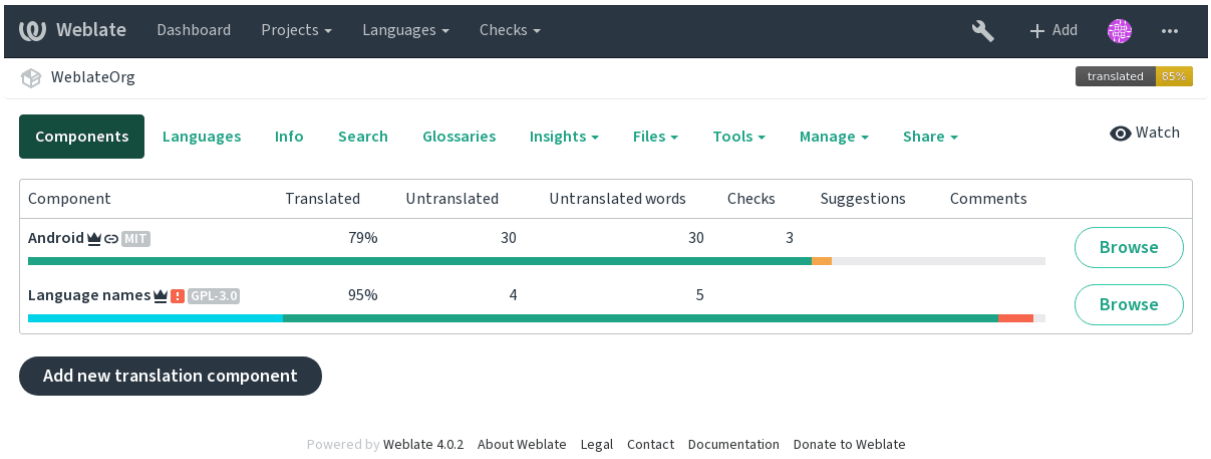
- Publicly visible and anybody can contribute
- Visible only to a certain group of translators

See also:

Access control, *Translation workflows*

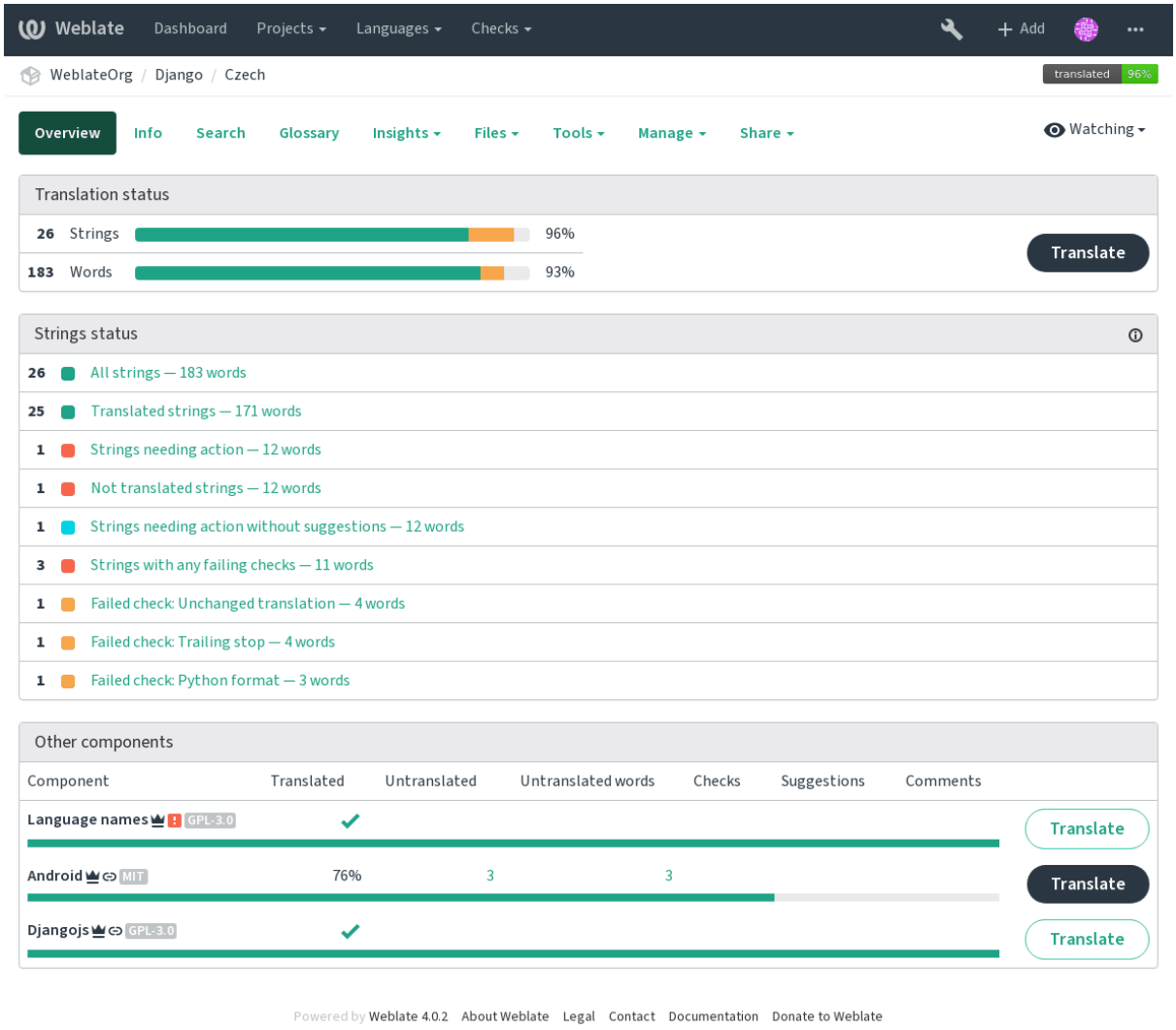
1.3.1 Translation projects

Translation projects hold related components, related to the same software, book, or project.



1.3.2 Translation links

Having navigated to a component, a set of links lead to actual translation. The translation is further divided into individual checks, like *Untranslated* or *Needing review*. If the whole project is translated, without error, *All translations* is still available. Alternatively you can use the search field to find a specific string or term.



1.3.3 Suggestions

Note: Actual permissions might vary depending on your Weblate configuration.

Anonymous users can only (if permitted) forward suggestions. Doing so is still available to signed in users, in cases where uncertainty about the translation arises, which will prompt another translator to review it.

The suggestions are scanned on a daily basis to remove duplicate ones or suggestions that match the current translation.

1.3.4 Comments

The comments can be posted in two scopes - source string or translation. Choose the one which matches the topic you want to discuss. The source string comments are good for privinding feedback on the original string, for example that it should be rephrased or it is confusing.

You can use Markdown syntax in the comments and mention other users using `@mention`.

1.3.5 Shapings

Shapings are used to group variants of the string in different lengths. The frontend can use different strings depending on the screen or window size.

See also:

String shapings

1.3.6 Labels

Labels are used to categorize strings within a project. These can be used to further customize the localization workflow, for example to define categories of strings.

See also:

String labels

1.3.7 Translating

On the translation page, the source string and an edit area for translating are shown. Should the translation be plural, multiple source strings and edit areas are shown, each described and labeled in plural form.

All special whitespace characters are underlined in red and indicated with grey symbols. More than one subsequent space is also underlined in red to alert the translator to a potential formatting issue.

Various bits of extra information can be shown on this page, most of which coming from the project source code (like context, comments or where the message is being used). When you choose secondary languages in your preferences, translation to these languages will be shown (see *Secondary languages*) above the source string.

Below the translation, any suggestion made by others will be shown, which you can in turn accept, accept with changes, or delete.

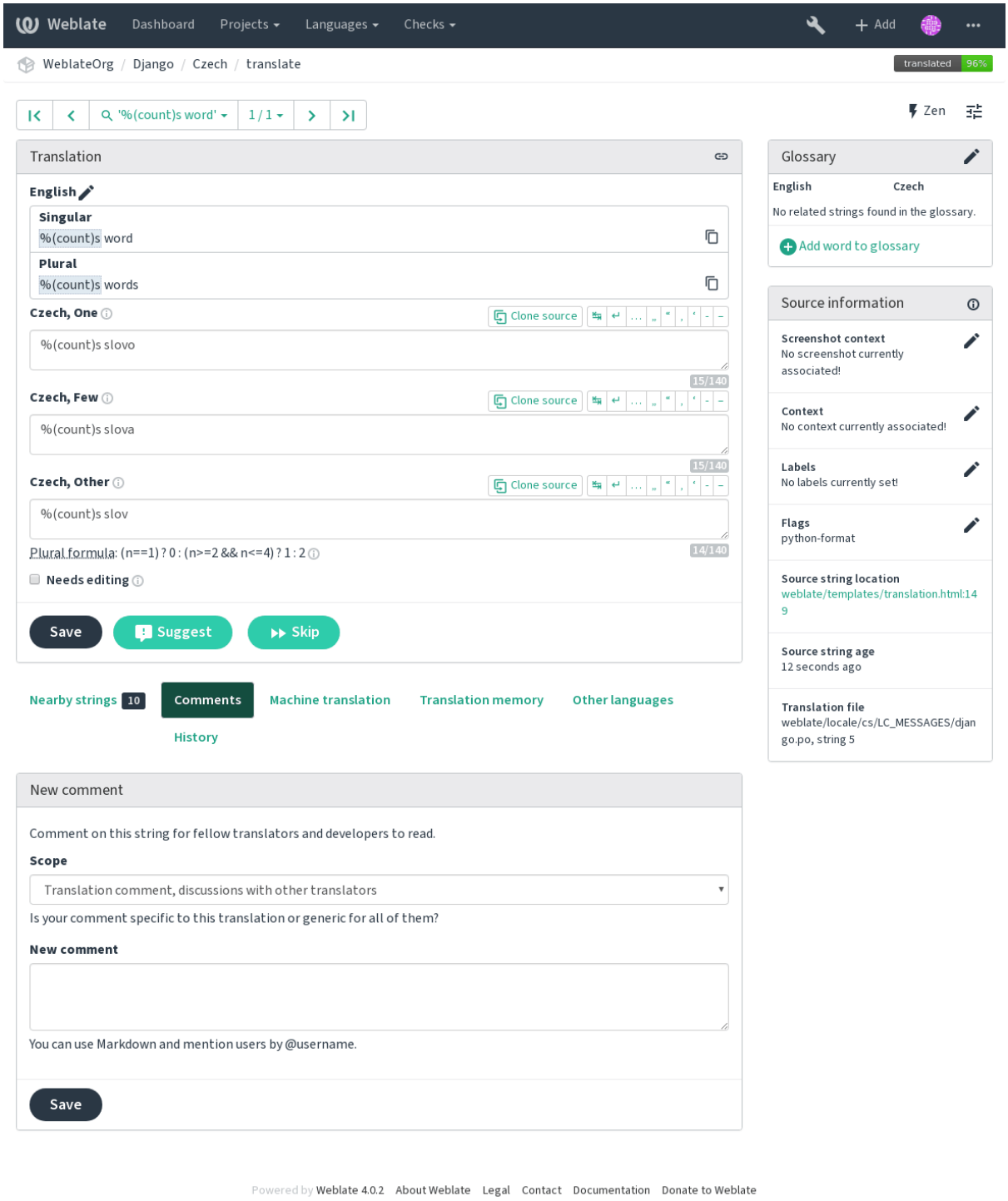
Plurals

Words that change form to account of their numeric designation are called plurals. Each language has its own definition of plurals. English, for example, supports one plural. In the singular definition of for example “car”, implicitly one car is referenced, in the plural definition, “cars” two or more cars are referenced, or the concept of cars as a noun. Languages like for example Czech or Arabic have more plurals and also their rules for plurals are different.

Weblate has full support for each of these forms, in each respective language by translating every plural separately. The number of fields and how it is used in the translated application depends on the configured plural formula. Weblate shows the basic information, but you can find a more detailed description in the Language Plural Rules by the Unicode Consortium.

See also:

Plural formula



Keyboard shortcuts

Changed in version 2.18: The keyboard shortcuts have been revamped in 2.18 to less likely collide with browser or system defaults.

The following keyboard shortcuts can be utilized during translation:

`Alt+Home` Navigates to first translation in current search.

`Alt+End` Navigates to last translation in current search.

`Alt+PageUp` Navigates to previous translation in current search.

Alt+PageDown Navigates to next translation in current search.

Ctrl+Enter or Option+Enter Saves current translation.

Ctrl+Shift+Enter or Option+Shift+Enter Unmarks translation as fuzzy and submits it.

Ctrl+E or Option+E Focus translation editor.

Ctrl+U or Option+U Focus comment editor.

Ctrl+M or Option+M Shows machine translation tab.

Ctrl+<NUMBER> or Option+<NUMBER> Copies placeable of given number from source string.

Ctrl+M <NUMBER> or Option+M <NUMBER> Copy machine translation of given number to current translation.

Ctrl+I <NUMBER> or Option+I <NUMBER> Ignore failing check of given number.

Ctrl+J or Option+J Shows nearby strings tab.

Ctrl+S or Option+S Shows search tab.

Ctrl+O or Option+O Copies source string.

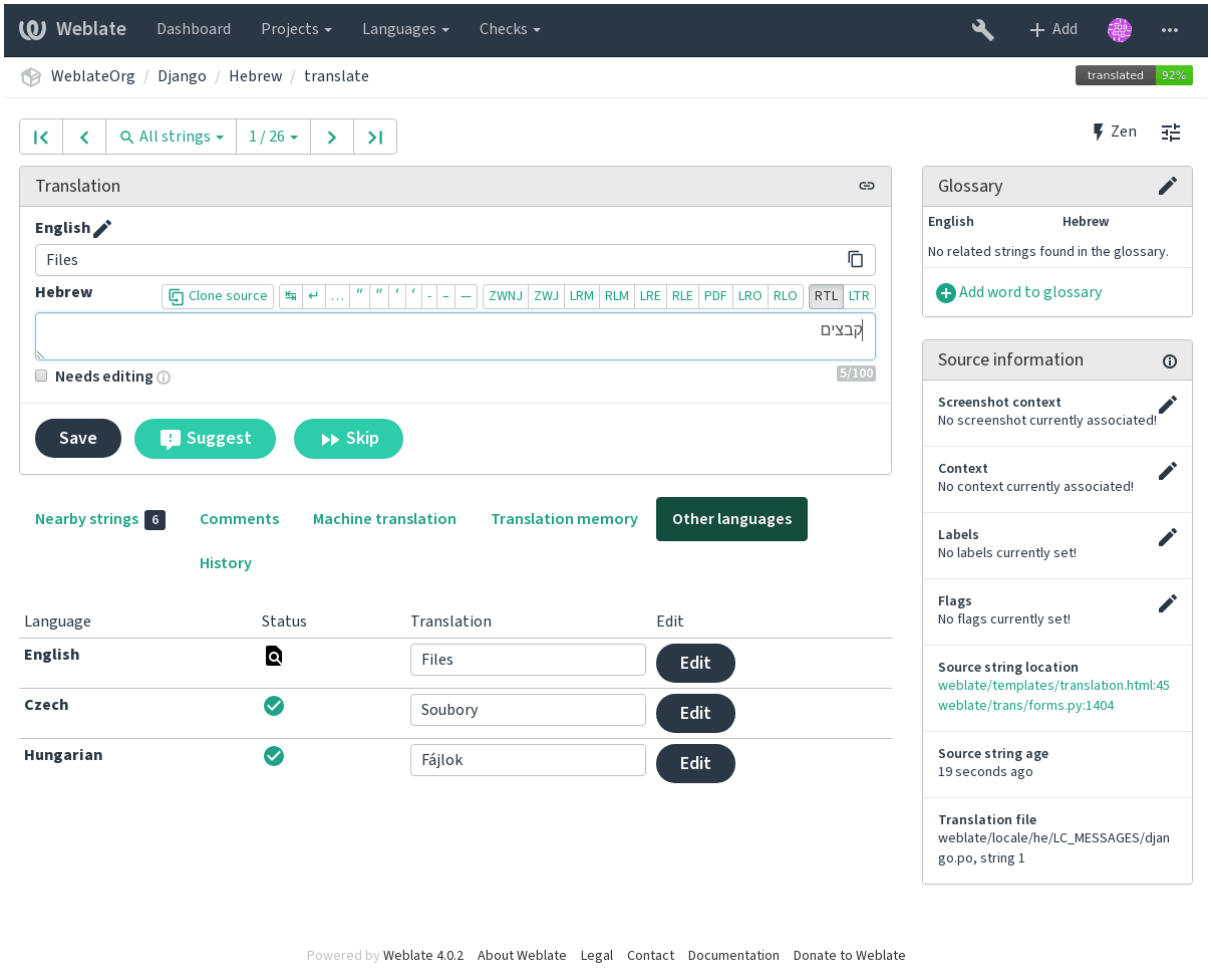
Ctrl+T or Option+T Toggles "Needs editing" flag.

Visual keyboard

A small visual keyboard is shown just above the translation field. This can be useful for typing characters not usually found or otherwise hard to type.

The shown symbols factor into three categories:

- User configured characters defined in the *User profile*
- Per language characters provided by Weblate (e.g. quotes or RTL specific characters)
- Chars configured using *SPECIAL_CHARS*



Translation context

This contextual description provides related information about the current string.

String attributes Things like message ID, context (`msgctxt`) or location in source code.

Screenshots Screenshots can be uploaded to Weblate to better inform translators of where and how the string is used, see *Visual context for strings*.

Nearby strings Displays neighbouring messages from the translation file. These are usually also used in a similar context and prove useful in keeping the translation consistent.

Other occurences In case a message appears in multiple places (e.g. multiple components), this tab shows all of them if they are found to be inconsistent (see *Inconsistent*). You can choose which one to use.

Translation memory Look at similar strings translated in past, see Memory Management.

Glossary Displays terms from the project glossary used in the current message.

Recent edits List of people whom have changed this message recently using Weblate.

Project Project information like instructions for translators, or information about its version control system repository.

If the translation format supports it, you can also follow supplied links to respective source code containing each source string.

Translation history

Every change is by default (unless turned off in component settings) saved in the database, and can be reverted. Optionally one can still also revert anything in the underlying version control system.

Translated string length

Weblate can limit length of translation in several ways to ensure the translated string is not too long:

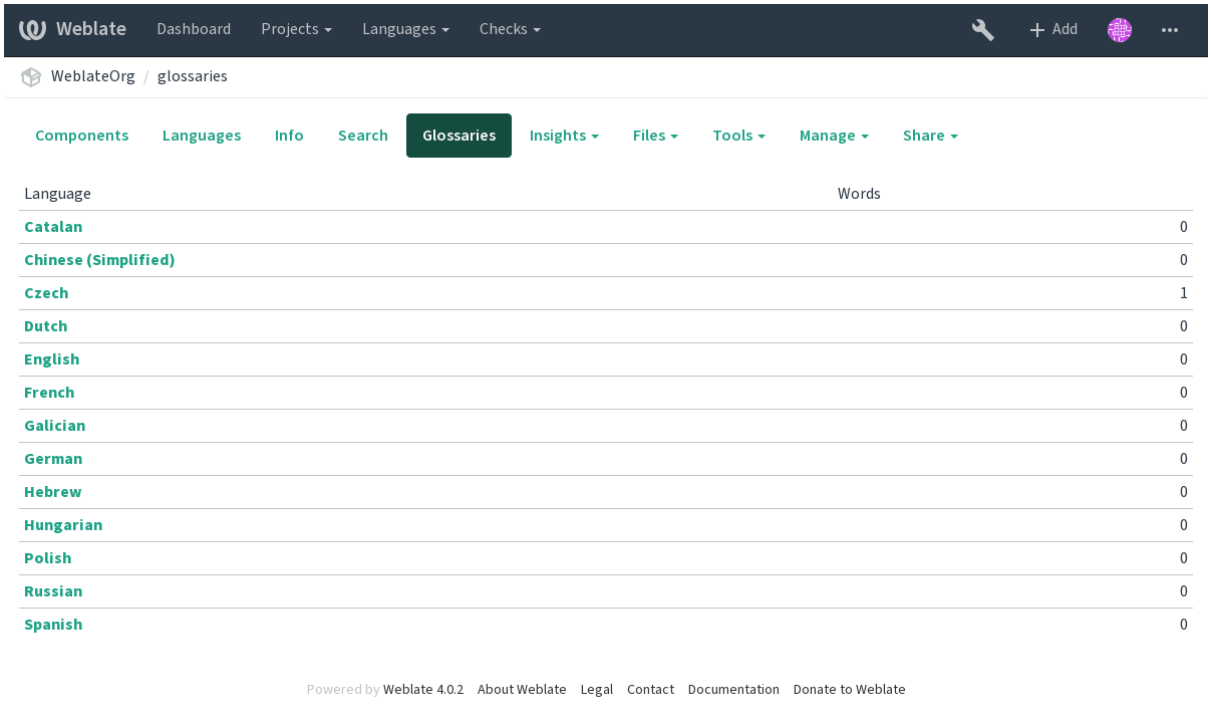
- The default limitation for translation is ten times longer than source string. This can be turned of by *LIMIT_TRANSLATION_LENGTH_BY_SOURCE_LENGTH*. In case you are hitting this, it might be also caused by monolingual translation being configured as bilingual, making Weblate see translation key as source string instead of the actual source string. See *Bilingual and monolingual formats* for more info.
- Maximal length in characters defined by translation file or flag, see *Maximum length*.
- Maximal rendered size in pixels defined by flags, see *Maximum size of translation*.

1.3.8 Glossary

Each project can have an assigned glossary for any language as a shorthand for storing terminology. Consistency is more easily maintained this way. Terms from the currently translated string can be displayed in the bottom tabs.

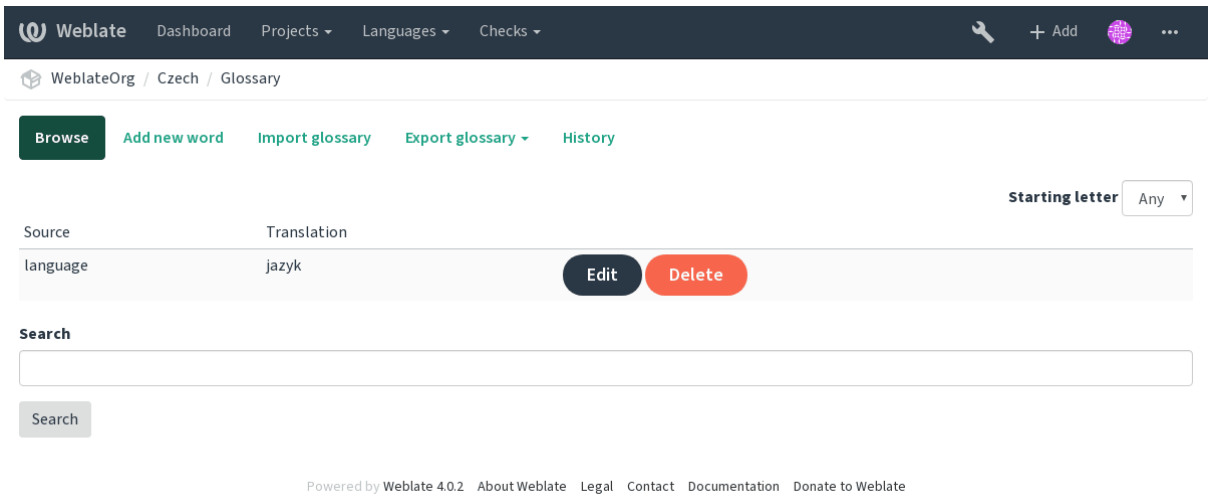
Managing glossaries

On the *Glossaries* tab of each project page, you can edit existing glossaries. An empty glossary for a given project is automatically created when a language is added to a component (to do this, select a component, its *Translation* tab and click *Start new translation*). Once a glossary exists, it will also show up in this list.



Glossaries are shared among all components of the same project.

On this list, you can choose which glossary to manage (all languages used in the current project are shown). Following one of the language links will lead you to a page which can be used to edit, import or export the selected glossary, or view the edit history:



1.3.9 Machine translation

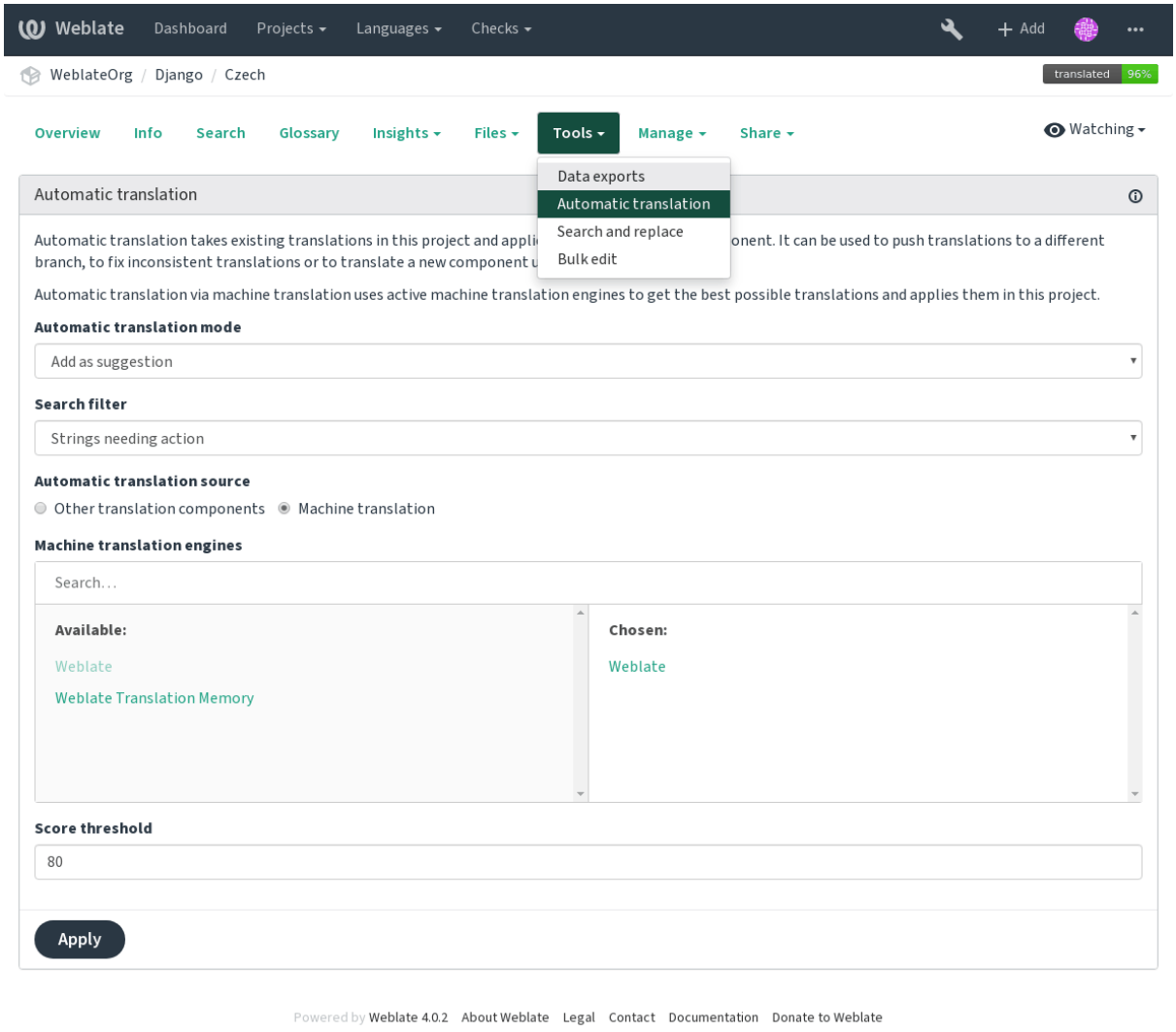
Based on configuration and your translated language, Weblate provides you suggestions from several machine translation tools. All machine translations are available in a single tab of each translation page.

See also:

You can find the list of supported tools in *Machine translation*.

1.3.10 Automatic translation

You can use automatic translation to bootstrap translation based on external sources. This tool is called *Automatic translation* accessible in the *Tools* menu, once you have selected a component and a language:



Two modes of operation are possible:

- Using other Weblate components as a source for translations.
- Using selected machine translation services with translations above a certain quality threshold.

You can also choose which strings are to be auto-translated.

Warning: Be mindful that this will overwrite existing translations if employed with wide filters such as *All strings*.

Useful in several situations like consolidating translation between different components (for example website and application) or when bootstrapping translation for a new component using existing translations (translation memory).

See also:

Keeping translations same across components

1.3.11 Rate limiting

To avoid abuse of the interface, there is rate limiting applied to several operations like searching, sending contact form or translating. In case you are are hit by this, you are blocked for a certain period until you can perform the operation again.

The default limits are described in the administrative manual in *Rate limiting*, but can be tweaked by configuration.

1.4 Downloading and uploading translations

You can export files from a translation, make changes, and import them again. This allows working offline, and then merging changes back into the existing translation. This works even if it has been changed in the meantime.

Note: The available options might be limited by *Access control*.

1.4.1 Downloading translations

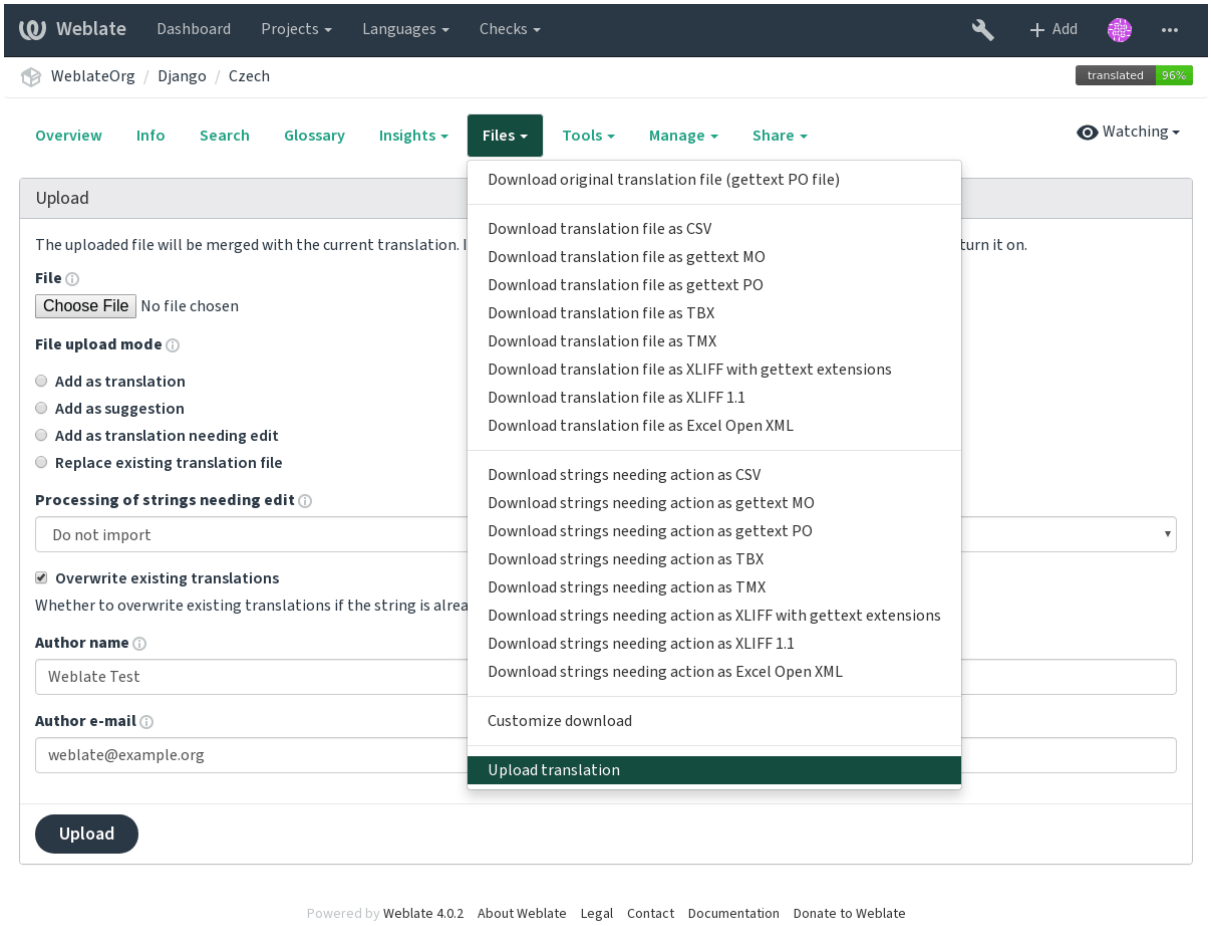
From the project or component dashboard, translatable files can be downloaded using the *Download source file* in the *Files* menu, producing a copy of the file as it is stored in the upstream Version Control System.

You can either download the original file as is or converted into one of widely used localization formats. The converted files will be enriched with data provided in Weblate such as additional context, comments or flags.

Several file formats are available, including a compiled file to use in your choice of application (for example `.mo` files for GNU Gettext) using the *Files* menu.

1.4.2 Uploading translations

When you have made your changes, use *Upload translation* in the *Files* menu.



Supported file formats

Any file in a supported file format can be uploaded, but it is still recommended to use the same file format as the one used for translation, otherwise some features might not be translated properly.

See also:

Supported file formats

The uploaded file is merged to update the translation, overwriting existing entries by default (this can be turned off or on in the upload dialog).

Import methods

These are the choices presented when uploading translation files:

Add as translation Imported translations are added as translations. This is the most common usecase, and the default behavior.

Add as suggestion Imported translations are added as suggestions, do this when you want to have your uploaded strings reviewed.

Add as translation needing edit Imported translations are added as translations needing edit. This can be useful when you want translations to be used, but also reviewed.

Replace existing translation file Existing file is replaced with new content. This can lead to loss of existing translations, use with caution.

Update source strings Updates source strings in bilingual translation file. This is similar to what *Update PO files to match POT (msgmerge)* does.

Strings needing edit

There is also an option for how to handle strings needing edit in the imported file. Such strings can be handle in one of the three following ways: “Do not import”, “Import as string needing edit”, or “Import as translated”.

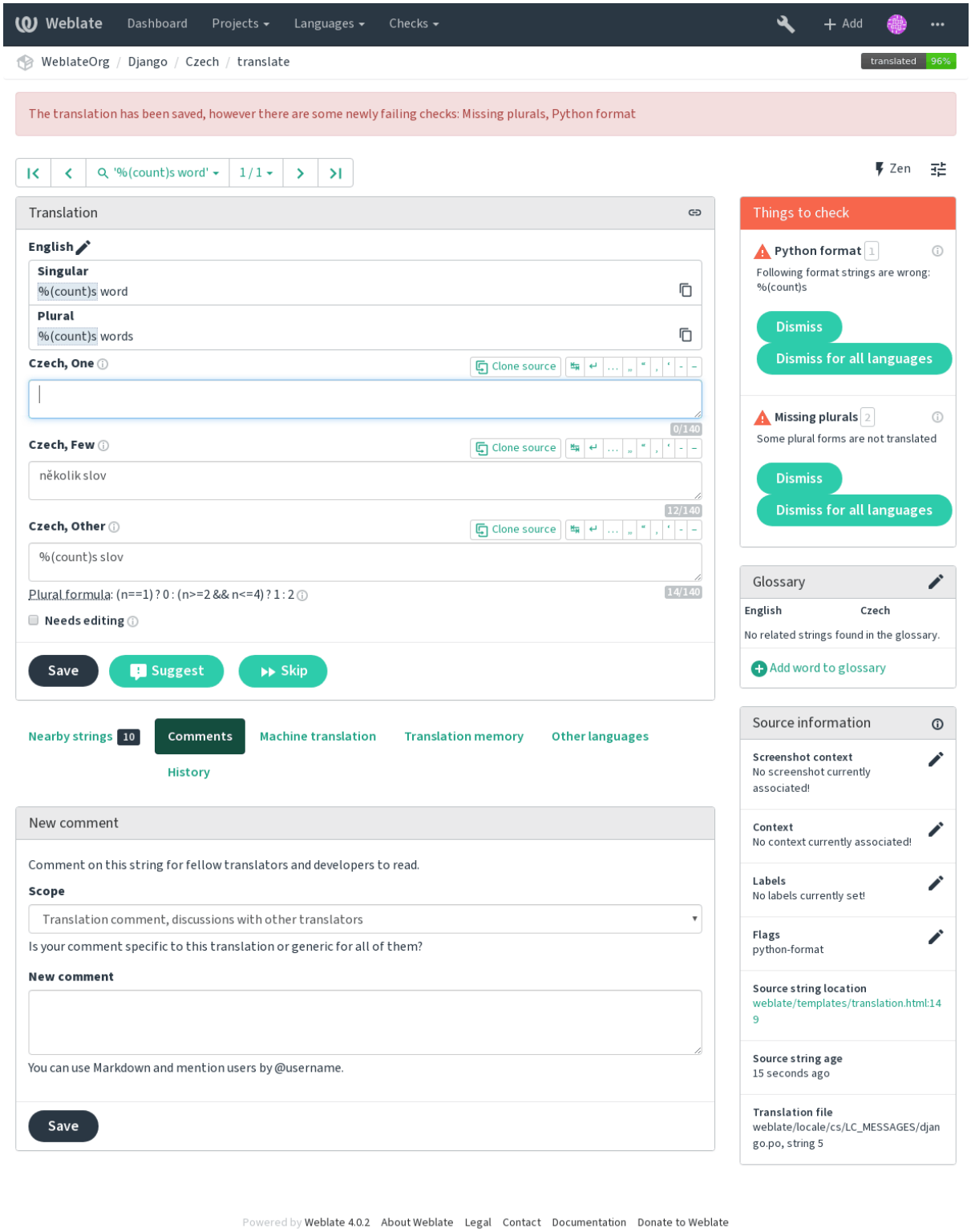
Overriding authorship

With admin permissions, you can also specify authorship of uploaded file. This can be useful in case you’ve received the file in another way and want to merge it into existing translations while properly crediting the actual author.

1.5 Checks and fixups

The quality checks help catch common translator errors, ensuring the translation is in good shape. The checks are divided into three levels of severity, and can be ignored in case of false positives.

Once submitting a translation with a failing check, this is immediately shown to the user:



1.5.1 Automatic fixups

In addition to *Quality checks*, Weblate can also fix some common errors in translated strings automatically. Use it with caution to not have it add errors.

See also:

AUTOFIX_LIST

1.5.2 Quality checks

Weblate employs a wide range of quality checks on strings. The following section describes them all in further detail. There are also language specific checks. Please file a bug if anything is reported in error.

See also:

CHECK_LIST, *Customizing behavior*

1.5.3 Translation checks

Executed upon every translation change, helping translators maintain good quality translations.

Unchanged translation

Happens if the source and corresponding translation strings is identical, down to at least one of the plural forms. Some strings commonly found across all languages are ignored, and various markup is stripped. This reduces the number of false positives.

This check can help find strings mistakenly untranslated.

The default behavior of this check is to exclude words from the built-in blacklist from the checking. These are words which are frequently not being translated. This is useful to avoid false positives on short strings, which consist only of single word which is same in several languages. This blacklist can be disabled by adding `strict-same` flag to string or component.

See also:

Component configuration, *Customizing behavior*

Starting or trailing newline

Source and translation do not both start (or end) with a newline.

Newlines usually appear in source strings for good reason, omissions or additions can lead to formatting problems when the translated text is put to use.

Starting spaces

Source and translation do not both start with the same number of spaces.

A space in the beginning of a string is usually used for indentation in the interface and thus important to keep.

Trailing space

Checks that trailing spaces are replicated between both source and translation.

Trailing space is usually utilized to space out neighbouring elements, so removing it might break layout.

Double space

Checks that double space is present in translation to avoid false positives on other space-related checks.

Check is false when double space is found in source meaning double space is intentional.

Trailing stop

Checks that full stops are replicated between both source and translation. The presence of full stops is checked for various languages where they do not belong (Chinese, Japanese, Devanagari or Urdu).

See also:

Full stop on Wikipedia

Trailing colon

Checks that colons are replicated between both source and translation. The presence of colons is also checked for various languages where they do not belong (Chinese or Japanese).

See also:

Colon on Wikipedia

Trailing question mark

Checks that question marks are replicated between both source and translation. The presence of question marks is also checked for various languages where they do not belong (Armenian, Arabic, Chinese, Korean, Japanese, Ethiopic, Vai or Coptic).

See also:

Question mark on Wikipedia

Trailing exclamation

Checks that exclamations are replicated between both source and translation. The presence of exclamation marks is also checked for various languages where they do not belong (Chinese, Japanese, Korean, Armenian, Limbu, Myanmar or Nko).

See also:

Exclamation mark on Wikipedia

Punctuation spacing

New in version 3.9.

Checks that there is non breakable space before double punctuation sign (exclamation mark, question mark, semicolon and colon). This rule is used only in a few selected languages like French or Breton, where space before double punctuation sign is a typographic rule.

See also:

French and English spacing on Wikipedia

Trailing ellipsis

Checks that trailing ellipses are replicated between both source and translation. This only checks for real ellipsis (…) not for three dots (...).

An ellipsis is usually rendered nicer than three dots in print, and sounds better with text-to-speech.

See also:

Ellipsis on Wikipedia

Trailing semicolon

Checks that semicolons at the end of sentences are replicated between both source and translation. This can be useful to keep formatting of entries such as desktop files.

See also:

Semicolon on Wikipedia

Maximum length

Checks that translations are of acceptable length to fit available space. This only checks for the length of translation characters.

Unlike the other checks, the flag should be set as a `key:value` pair like `max-length:100`.

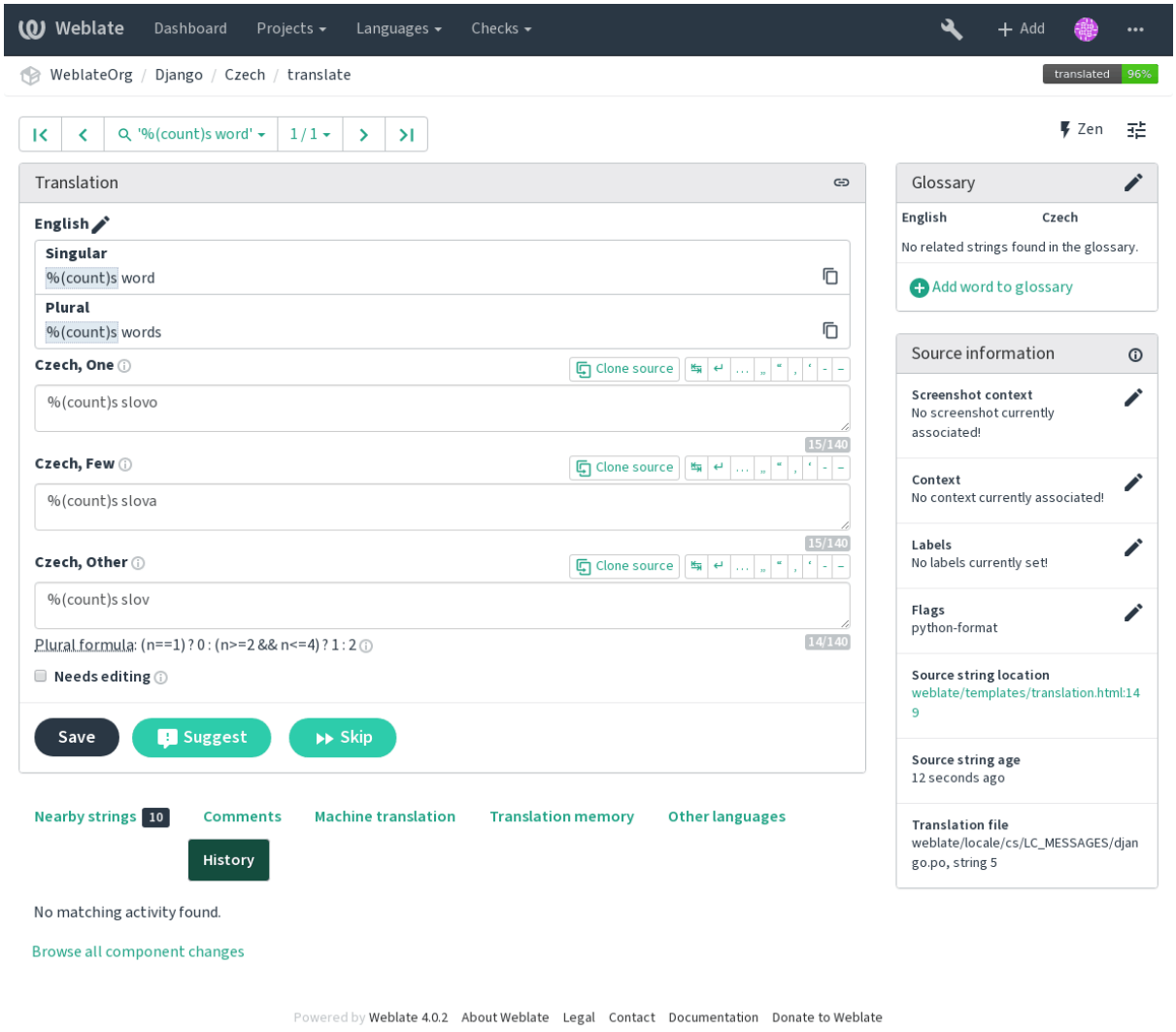
Formatted strings

Checks that formatting in strings are replicated between both source and translation. Omitting format strings in translation usually causes severe problems, so the formatting in strings should usually match the source.

Weblate supports checking format strings in several languages. The check is not enabled automatically, only if a string is flagged appropriately (e.g. *c-format* for C format). Gettext adds this automatically, but you will probably have to add it manually for other file formats or if your PO files are not generated by `xgettext`.

This can be done per unit (see *Additional info on source strings*) or in *Component configuration*. Having it defined per component is simpler, but can lead to false positives in case the string is not interpreted as a formating string, but format string syntax happens to be used.

Besides checking, this will also highligh the formatting strings to easily insert them into translated strings:



Python format

Simple format string	`There are %d apples`
Named format string	`Your balance is %(amount) %(currency)`
Flag to enable	*python-format*

See also:

Python string formatting, Python Format Strings

Python brace format

Simple format string	`There are {} apples`
Named format string	`Your balance is {amount} {currency}`
Flag to enable	*python-brace-format*

See also:

Python brace format, Python Format Strings

PHP format

Simple format string	`There are %d apples`
Position format string	`Your balance is %1$d %2$s`
Flag to enable	*php-format*

See also:

PHP sprintf documentation, PHP Format Strings

C format

Simple format string	`There are %d apples`
Position format string	`Your balance is %1$d %2$s`
Flag to enable	*c-format*

See also:

C format strings, C printf format

Perl format

Simple format string	`There are %d apples`
Position format string	`Your balance is %1$d %2$s`
Flag to enable	*perl-format*

See also:

Perl sprintf, Perl Format Strings

JavaScript format

Simple format string	`There are %d apples`
Flag to enable	*javascript-format*

See also:

JavaScript formatting strings

AngularJS interpolation string

Named format string	`Your balance is {{amount}} {{ currency }}`
Flag to enable	*angularjs-format*

See also:

AngularJS: API: $interpolate

C# format

Position format string	`There are {0} apples`
Flag to enable	*c-sharp-format*

See also:

C# String Format

i18next interpolation

New in version 4.0.

Interpolation	`There are {{number}} apples`
Nesting	`There are $t(number) apples`
Flag to enable	*i18next-interpolation*

See also:

i18next interpolation

Java format

Simple format string	`There are %d apples`
Position format string	`Your balance is %1$d %2$s`
Flag to enable	*java-format*

See also:

Java Format Strings

Java MessageFormat

Position format string	`There are {0} apples`
Flag to enable	*java-messageformat* enables the check unconditionally
	auto-java-messageformat enables check only if there is a format string in the source

See also:

Java MessageFormat

Qt format

Position format string	`There are %1 apples`
Plural format string	`There are %Ln apple(s)`
Flag to enable	*qt-format*, *qt-plural-format*

See also:

Qt QString::arg(), Qt i18n guide

Percent placeholders

New in version 4.0.

Simple format string	`There are %number% apples`
Flag to enable	*percent-placeholders*

Ruby format

Simple format string	`There are %d apples`
Position format string	`Your balance is %1$f %2$s`
Named format string	`Your balance is %+.2<amount>f %<currency>s`
Named template string	`Your balance is %{amount} %{currency}`
Flag to enable	*ruby-format*

See also:

Ruby Kernel#sprintf

Placeholders

New in version 3.9.

Translation is missing some placeholders. These are either extracted from the translation file or defined manually using `placeholders` flag, more can be separated with colon:

```
placeholders:$URL$:$TARGET$
```

Regular expression

New in version 3.9.

Translation does not match regular expression. The expression is either extracted from the translation file or defined manually using `regex` flag:

```
regex:^foo|bar$
```

Missing plurals

Checks that all plural forms of a source string have been translated. Specifics on how each plural form is used can be found in the string definition.

Failing to fill in plural forms will in some cases lead to displaying nothing when the plural form is in use.

Same plurals

Check that fails if some plural forms are duplicated in the translation. In most languages they have to be different.

Inconsistent

Weblate checks translations of the same string across all translation within a project to help you keep consistent translations.

The check fails on differing translations of one string within a project. This can also lead to inconsistencies in displayed checks. You can find other translations of this string on the *Other occurences* tab.

Note: This check also fires in case the string is translated in one component and not in another. It can be used as a quick way to manually handle strings which are not translated in some components just by clicking on the *Use this string* button displayed on each line in the *Other occurences* tab.

You can use *Automatic translation* addon to automate translating of newly added strings which are already translated in another component.

See also:

Keeping translations same across components

Has been translated

Means a string has been translated already. This can happen when the translations have been reverted in VCS or lost otherwise.

Mismatched \n

Usually escaped newlines are important for formatting program output. Check fails if the number of `\\n` literals in translation do not match the source.

Mismatched n

Usually newlines are important for formatting program output. Check fails if the number of `\n` literals in translation do not match the source.

BBcode markup

BBCode represents simple markup, like for example highlighting important parts of a message in bold font, or italics.

This check ensures they are also found in translation.

Note: The method for detecting BBcode is currently quite simple so this check might produce false positives.

Zero-width space

Zero-width space (<U+200B>) characters are used to break messages within words (word wrapping).

As they are usually inserted by mistake, this check is triggered once they are present in translation. Some programs might have problems when this character is used.

See also:

Zero width space on Wikipedia

XML syntax

New in version 2.8.

The XML markup is not valid.

XML markup

This usually means the resulting output will look different. In most cases this is not a desired result from changing the translation, but occasionally it is.

Checks that XML tags are replicated between both source and translation.

Unsafe HTML

New in version 3.9.

The translation uses unsafe HTML markup. This check has to be enabled using `safe-html` flag (see *Customizing behavior*). There is also accompanied autofixer which can automatically sanitize the markup.

See also:

The HTML check is performed by the Bleach library developed by Mozilla.

Markdown references

New in version 3.5.

Markdown link references do not match source.

See also:

Markdown links

Markdown links

New in version 3.5.

Markdown links do not match source.

See also:

Markdown links

Markdown syntax

New in version 3.5.

Markdown syntax does not match source

See also:

Markdown span elements

Kashida letter used

New in version 3.5.

The decorative Kashida letters should not be used in translation. These are also known as Tatweel.

See also:

Kashida on Wikipedia

URL

New in version 3.5.

The translation does not contain an URL. This is triggered only in case the unit is marked as containing URL. In that case the translation has to be a valid URL.

Maximum size of translation

New in version 3.7.

Translation rendered text should not exceed given size. It renders the text with line wrapping and checks if it fits into given boundaries.

This check needs one or two parameters - maximal width and maximal number of lines. In case the number of lines is not provided, one line text is considered.

You can also configure used font by `font-*` directives (see *Customizing behavior*), for example following translation flags say that the text rendered with ubuntu font size 22 should fit into two lines and 500 pixels:

```
max-size:500:2, font-family:ubuntu, font-size:22
```

Hint: You might want to set `font-*` directives in *Component configuration* to have the same font configured for all strings within a component. You can override those values per string in case you need to customize it per string.

See also:

Managing fonts, *Customizing behavior*

1.5.4 Source checks

Source checks can help developers improve the quality of source strings.

Unpluralised

The string is used as a plural, but does not use plural forms. In case your translation system supports this, you should use the plural aware variant of it.

For example with Gettext in Python it could be:

```
from gettext import ngettext

print ngettext('Selected %d file', 'Selected %d files', files) % files
```

Ellipsis

This fails when the string uses three dots (...) when it should use an ellipsis character (…).

Using the Unicode character is in most cases the better approach and looks better rendered, and may sound better with text-to-speech.

See also:

Ellipsis on Wikipedia

Multiple failing checks

Numerous translations of this string have failing quality checks. This is usually an indication that something could be done to improve the source string.

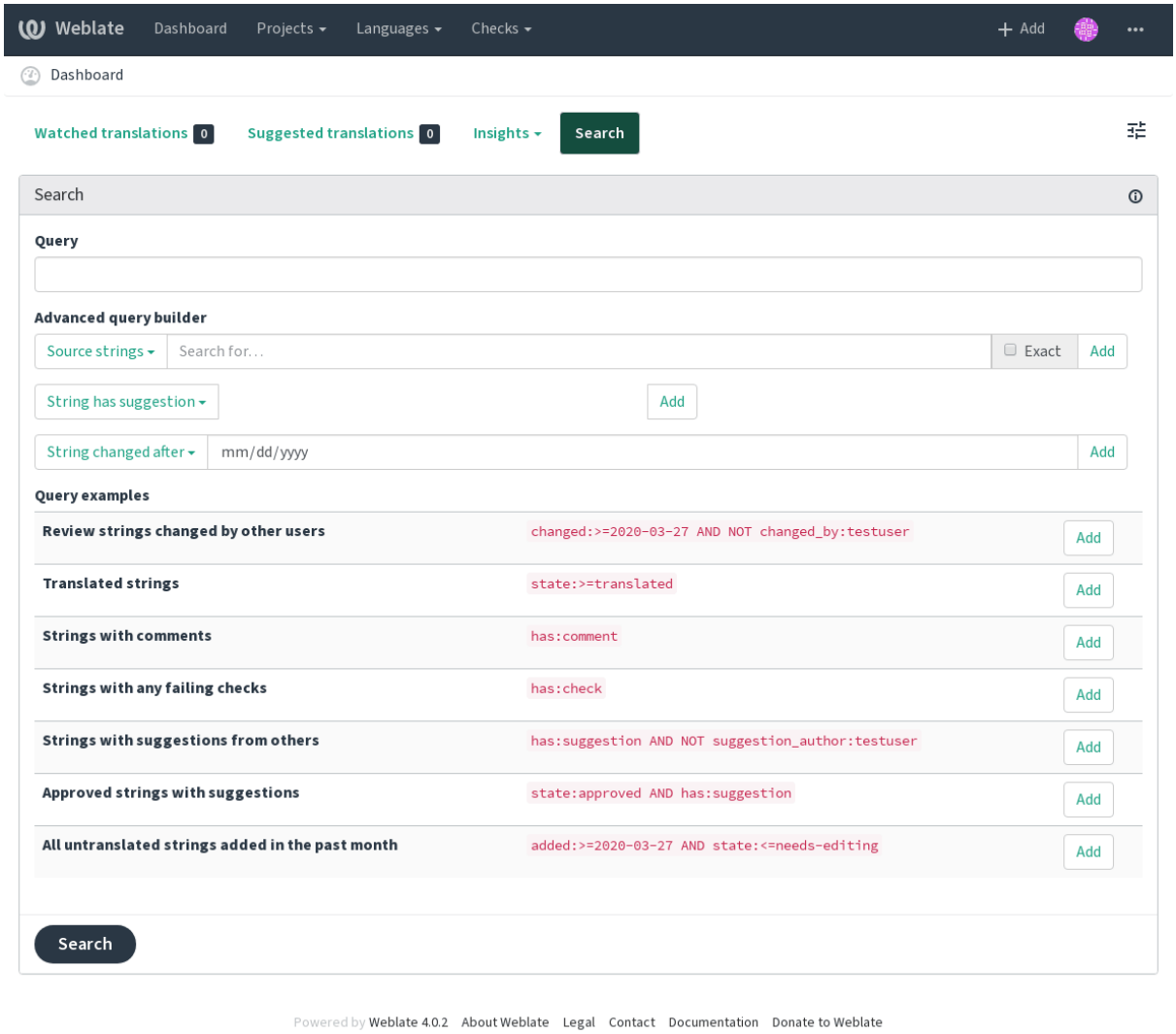
This check failing can quite often be caused by a missing full stop at the end of a sentence, or similar minor issues which translators tend to fix in translation, while it would be better to fix it in the source string.

1.6 Searching

New in version 3.9.

Advanced queries using boolean operations, parentheses, or field specific lookup can be used to find the strings you want.

When not defining any field, the lookup happens on *Source*, *Target* and *Context* fields.



1.6.1 Simple search

Any phrase typed into the search box is split into words. Strings containing any of them are are shown. To look for an exact phrase, put “the searchphrase” into quotes (both single (‘) and double (“) quotes

will work).

1.6.2 Fields

`source:TEXT` Source string case insensitive search.

`target:TEXT` Target string case insensitive search.

`context:TEXT` Context string case insensitive search.

`note:TEXT` Comment string case insensitive search.

`location:TEXT` Location string case insensitive search.

`priority:NUMBER` String priority.

`added:DATETIME` Timestamp when string was added to Weblate.

`state:TEXT` State search (`approved`, `translated`, `needs-editing`, `empty`, `read-only`), supports *Field operators*.

`pending:BOOLEAN` String pending for flushing to VCS.

`has:TEXT` Search for string having attributes (`plural`, `context`, `suggestion`, `comment`, `check`, `ignored-check`, `translation`, `shaping`).

`is:TEXT` Search for string states (`pending`, `translated`, `untranslated`).

`language:TEXT` String target language.

`changed_by:TEXT` String was changed by author with given username.

`changed:DATETIME` String was changed on date, supports *Field operators*.

`check:TEXT` String has failing check.

`ignored_check:TEXT` String has ignored check.

`comment:TEXT` Search in user comments.

`comment_author:TEXT` Filter by comment author.

`suggestion:TEXT` Search in suggestions.

`suggestion_author:TEXT` Filter by suggestion author.

1.6.3 Boolean operators

You can combine lookups using `AND`, `OR`, `NOT` and parentheses to form complex queries. For example: `state:translated AND (source:hello OR source:bar)`

1.6.4 Field operators

You can specify operators, ranges or partial lookups for date or numeric searches:

`state:>=translated` State is `translated` or better (`approved`).

`changed:2019` Changed in year 2019.

`changed:[2019-03-01 to 2019-04-01]` Changed between two given dates.

1.6.5 Exact operators

You can do an exact match query on different string fields using `=` operator. For example, to search for all source strings exactly matching `hello world`, use: `source:="hello world"`. For searching single word expressions, you can skip quotes. For example, to search for all source strings matching `hello`, you can use: `source:=hello`.

1.6.6 Regular expressions

Anywhere text is accepted you can also specify a regular expression as `r"regexp"`. For instance, to search for all source strings which contain any digit between 2 and 5, use: `source:r"[2-5]"`

1.7 Application developer guide

Using Weblate is a process that brings your users closer to you, by bringing you closer to your translators. It up to you to decide how many of its features you want to make use of.

1.7.1 Starting with internationalization

You have a project and want to to translate it into several languages? This guide will help you to do so. We will showcase several typical situations, but most of the examples are generic and can be applied to other scenarios as well.

Before translating any software, you should realize that languages around the world are really different and you should not make any assumption based on your experience. For most of languages it will look weird if you try to concatenate a sentence out of translated segments. You also should properly handle plural forms because many languages have complex rules for that and the internationalization framework you end up using should support this.

Last but not least, sometimes it might be necessary to add some context to the translated string. Imagine a translator would get string `Sun` to translate. Without context most people would translate that as our closest star, but it might be actually used as an abbreviation for Sunday.

Choosing internationalization framework

Choose whatever is standard on your platform, try to avoid reinventing the wheel by creating your own framework to handle localizations. Weblate supports most of the widely used frameworks, see *Supported file formats* for more information (especially *Translation types capabilities*).

Our personal recommendation for some plaforms is in the following table. This is based on our experience, but that can not cover all use cases, so always consider your environment when doing the choice.

Platform	Recommended format
Android	*Android string resources*
iOS	*Apple iOS strings*
Qt	*Qt Linguist .ts*
Python	*GNU gettext*
PHP	*GNU gettext*[1]
C/C++	*GNU gettext*
C#	*.XML resource files*
Perl	*GNU gettext*
Ruby	*Ruby YAML files*
Web extensions	*WebExtension JSON*
Java	*XLIFF*[2]
JavaScript	*JSON i18next files*[3]

Following chapters describe two use cases - GNU Gettext and Sphinx, but many of the steps are quite generic and apply to the other frameworks as well.

Translating software using GNU Gettext

GNU Gettext is one of the most widely used tool for internationalization of free software. It provides a simple yet flexible way to localize the software. It has great support for plurals, it can add further context to the translated string and there are quite a lot of tools built around it. Of course it has great support in Weblate (see *GNU gettext* file format description).

Note: If you are about to use it in proprietary software, please consult licensing first, it might not be suitable for you.

GNU Gettext can be used from a variety of languages (C, Python, PHP, Ruby, JavaScript and many more) and usually the UI frameworks already come with some support for it. The standard usage is through the *gettext()* function call, which is often aliased to *_()* to make the code simpler and easier to read.

Additionally it provides *pgettext()* call to provide additional context to translators and *ngettext()* which can handle plural types as defined for target language.

As a widely spread tool, it has many wrappers which make its usage really simple, instead of manual invoking of Gettext described below, you might want to try one of them, for example intltool.

Sample program

The simple program in C using Gettext might look like following:

```
#include <libintl.h>
#include <locale.h>
#include <stdio.h>
#include <stdlib.h>

int main(void)
{
    int count = 1;
    setlocale(LC_ALL, "");
    bindtextdomain("hello", "/usr/share/locale");
    textdomain("hello");
    printf(
        ngettext(
            "Orangutan has %d banana.\n",
            "Orangutan has %d bananas.\n",
            count
        ),
        count
    );
    printf("%s\n", gettext("Thank you for using Weblate."));
    exit(0);
}
```

[1] The native Gettext support in PHP is buggy and often missing on Windows builds, it is recommended to use third party library motranslator instead.
[2] You can also use *Java properties* if plurals are not needed.
[3] You can also use plain *JSON files* if plurals are not needed.

Extracting translatable strings

Once you have code using the gettext calls, you can use **xgettext** to extract messages from it and store them into a .pot:

```
$ xgettext main.c -o po/hello.pot
```

Note: There are alternative programs to extract strings from the code, for example pybabel.

This creates a template file, which you can use for starting new translations (using **msginit**) or updating existing ones after code change (you would use **msgmerge** for that). The resulting file is simply a structured text file:

```
# SOME DESCRIPTIVE TITLE.
# Copyright (C) YEAR THE PACKAGE'S COPYRIGHT HOLDER
# This file is distributed under the same license as the PACKAGE package.
# FIRST AUTHOR <EMAIL@ADDRESS>, YEAR.
#
#, fuzzy
msgid ""
msgstr ""
"Project-Id-Version: PACKAGE VERSION\n"
"Report-Msgid-Bugs-To: \n"
"POT-Creation-Date: 2015-10-23 11:02+0200\n"
"PO-Revision-Date: YEAR-MO-DA HO:MI+ZONE\n"
"Last-Translator: FULL NAME <EMAIL@ADDRESS>\n"
"Language-Team: LANGUAGE <LL@li.org>\n"
"Language: \n"
"MIME-Version: 1.0\n"
"Content-Type: text/plain; charset=CHARSET\n"
"Content-Transfer-Encoding: 8bit\n"
"Plural-Forms: nplurals=INTEGER; plural=EXPRESSION;\n"

#: main.c:14
#, c-format
msgid "Orangutan has %d banana.\n"
msgid_plural "Orangutan has %d bananas.\n"
msgstr[0] ""
msgstr[1] ""

#: main.c:20
msgid "Thank you for using Weblate."
msgstr ""
```

Each `msgid` line defines a string to translate, the special empty string in the beginning is the file header containing metadata about the translation.

Starting new translation

With the template in place, we can start our first translation:

```
$ msginit -i po/hello.pot -l cs --no-translator -o po/cs.po
Created cs.po.
```

The just created `cs.po` already has some information filled in. Most importantly it got the proper plural forms definition for chosen language and you can see number of plurals have changed according to that:

```
# Czech translations for PACKAGE package.
# Copyright (C) 2015 THE PACKAGE'S COPYRIGHT HOLDER
# This file is distributed under the same license as the PACKAGE package.
# Automatically generated, 2015.
#
msgid ""
msgstr ""
"Project-Id-Version: PACKAGE VERSION\n"
"Report-Msgid-Bugs-To: \n"
"POT-Creation-Date: 2015-10-23 11:02+0200\n"
"PO-Revision-Date: 2015-10-23 11:02+0200\n"
"Last-Translator: Automatically generated\n"
"Language-Team: none\n"
"Language: cs\n"
"MIME-Version: 1.0\n"
"Content-Type: text/plain; charset=ASCII\n"
"Content-Transfer-Encoding: 8bit\n"
"Plural-Forms: nplurals=3; plural=(n==1) ? 0 : (n>=2 && n<=4) ? 1 : 2;\n"

#: main.c:14
#, c-format
msgid "Orangutan has %d banana.\n"
msgid_plural "Orangutan has %d bananas.\n"
msgstr[0] ""
msgstr[1] ""
msgstr[2] ""

#: main.c:20
msgid "Thank you for using Weblate."
msgstr ""
```

This file is compiled into an optimized binary form, the .mo file used by the GNU Gettext functions at runtime.

Updating strings

Once you add more strings or change some strings in your program, you execute again **xgettext** which regenerates the template file:

```
$ xgettext main.c -o po/hello.pot
```

Then you can update individual translation files to match newly created templates (this includes reordering the strings to match new template):

```
$ msgmerge --previous --update po/cs.po po/hello.pot
```

Importing to Weblate

To import such translation into Weblate, all you need to define are the following fields when creating component (see *Component configuration* for detailed description of the fields):

Field	Value
Source code repository	URL of the VCS repository with your project
File mask	`po/*.po`
Template for new translations	`po/hello.pot`
File format	Choose *Gettext PO file*
New language	Choose *Create new language file*

And that's it, you're now ready to start translating your software!

See also:

You can find a Gettext example with many languages in the Weblate Hello project on GitHub: <https://github.com/WeblateOrg/hello>.

Translating documentation using Sphinx

Sphinx is a tool for creating beautiful documentation. It uses simple reStructuredText syntax and can generate output in many formats. If you're looking for an example, this documentation is also built using it. The very useful companion for using Sphinx is the Read the Docs service, which will build and publish your documentation for free.

I will not focus on writing documentation itself, if you need guidance with that, just follow instructions on the Sphinx website. Once you have documentation ready, translating it is quite easy as Sphinx comes with support for this and it is quite nicely covered in their Internationalization. It's matter of few configuration directives and invoking of the `sphinx-intl` tool.

If you are using Read the Docs service, you can start building translated documentation on the Read the Docs. Their Localization of Documentation covers pretty much everything you need - creating another project, set its language and link it from master project as a translation.

Now all you need is translating the documentation content. As Sphinx splits the translation files per source file, you might end up with dozen of files, which might be challenging to import using the Weblate's web interface. For that reason, there is the *`import_project`* management command.

Depending on exact setup, importing of the translation might look like:

```
$ weblate import_project --name-template 'Documentation: %s' \
    --file-format po \
    project https://github.com/project/docs.git master \
    'docs/locale/*/LC_MESSAGES/**.po'
```

If you have more complex document structure, importing different folders is not directly supported; you currently have to list them separately:

```
$ weblate import_project --name-template 'Directory 1: %s' \
    --file-format po \
    project https://github.com/project/docs.git master \
    'docs/locale/*/LC_MESSAGES/dir1/**.po'
$ weblate import_project --name-template 'Directory 2: %s' \
    --file-format po \
    project https://github.com/project/docs.git master \
    'docs/locale/*/LC_MESSAGES/dir2/**.po'
```

See also:

The Odorik python module documentation is built using Sphinx, Read the Docs and translated using Weblate.

Integrating with Weblate

Getting translations updates from Weblate

To fetch updated strings from Weblate you can simply fetch the underlying repository (either from filesystem or it can be made available through *Git exporter*). Prior to this, you might want to commit any pending changes (see *Lazy commits*). This can be achieved in the user interface (in the *Repository maintenance*) or from command line using *Weblate Client*.

This can be automated if you grant Weblate push access to your repository and configure *Push URL* in the *Component configuration*.

See also:

Continuous localization

Pushing string changes to Weblate

To push newly updated strings to Weblate, just let it pull from the upstream repository. This can be achieved in the user interface (in the *Repository maintenance*) or from command line using *Weblate Client*.

This can be automated by installing a webhook on your repository to trigger Weblate whenever there is a new commit, see *Updating repositories* for more details.

See also:

Continuous localization

1.7.2 Translation component alerts

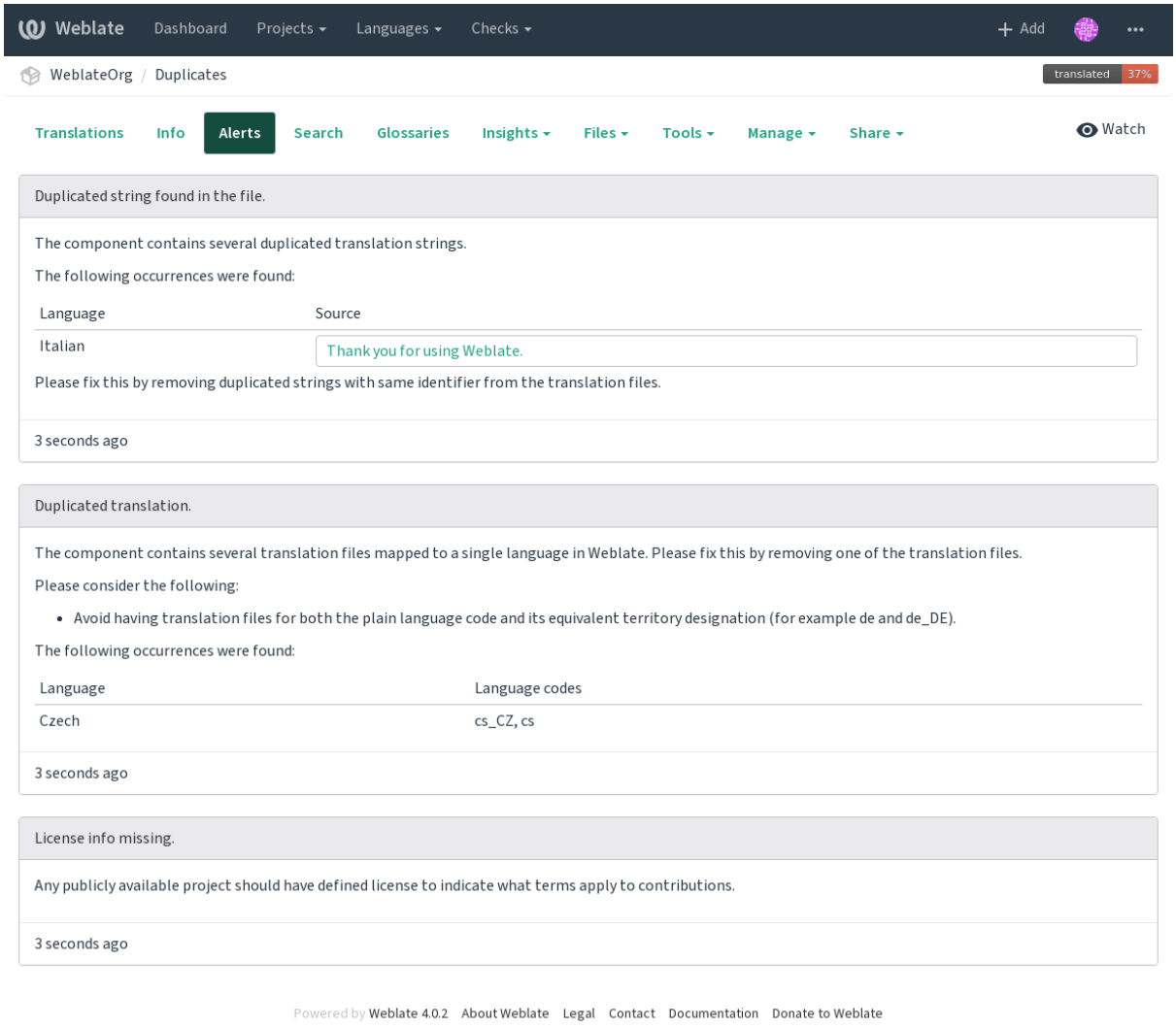
Shows errors in the Weblate configuration or the translation project for any given translation component. Guidance on how to address found issues is also offered.

Currently the following is covered:

- Duplicated source strings in translation files
- Duplicated languages within translations
- Merge or update failures in the source repository
- Unused new base in component settings
- Parse errors in the translation files
- Duplicate filemask used for linked components

Alerts are listed on each respective component page as *Alerts*. If it is missing, the component clears all current checks. Alerts can not be ignored, but will disappear once the underlying problem has been fixed.

A component with both duplicated strings and languages looks like this:

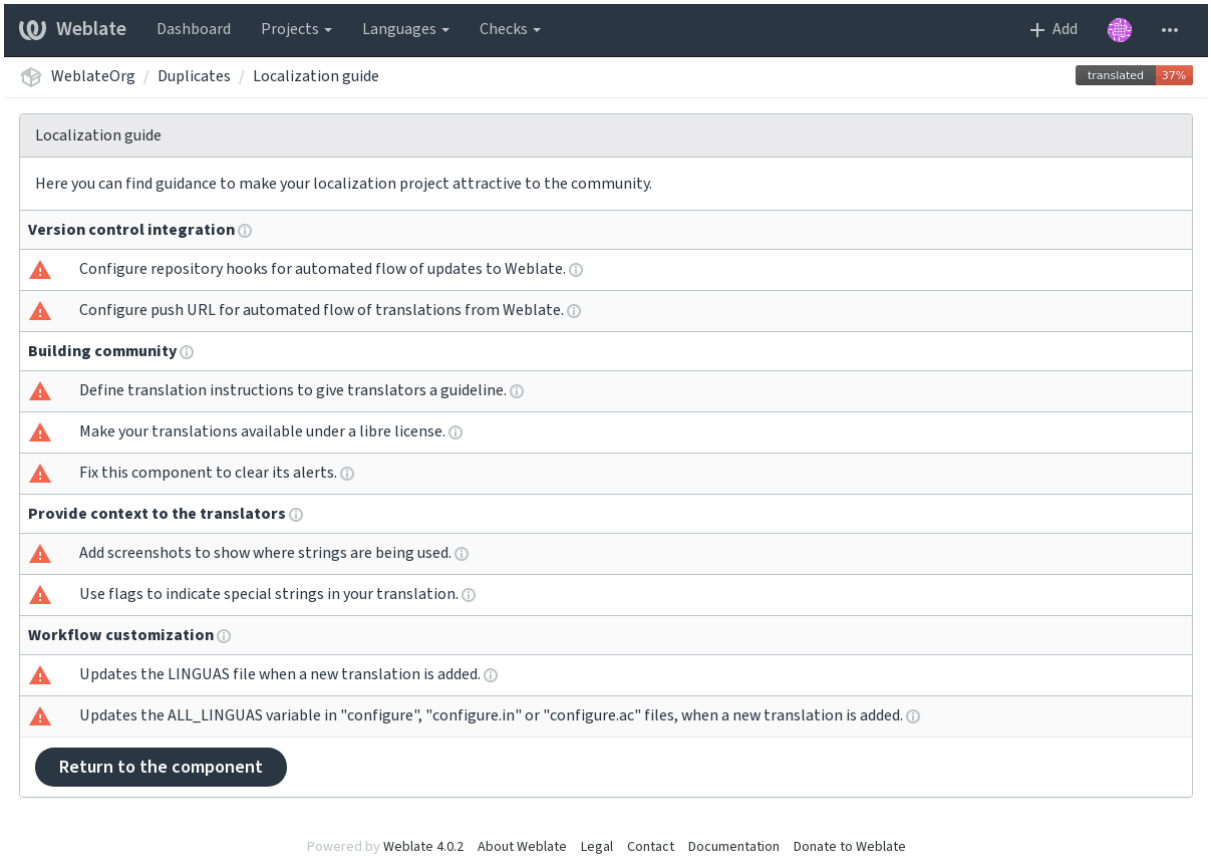


1.7.3 Building translators community

Localization guide

New in version 3.9.

The *Localization guide* which can be found in the *Insights* menu of each component can give you guidance to make your localization process easy for translators.



1.7.4 Managing translations

Adding new translations

New strings can be made available for translation when they appear in the base file, called *Template for new translations* (see *Component configuration*). If your file format doesn't require such a file, as is the case with most monolingual translation flows, you can start with blank files).

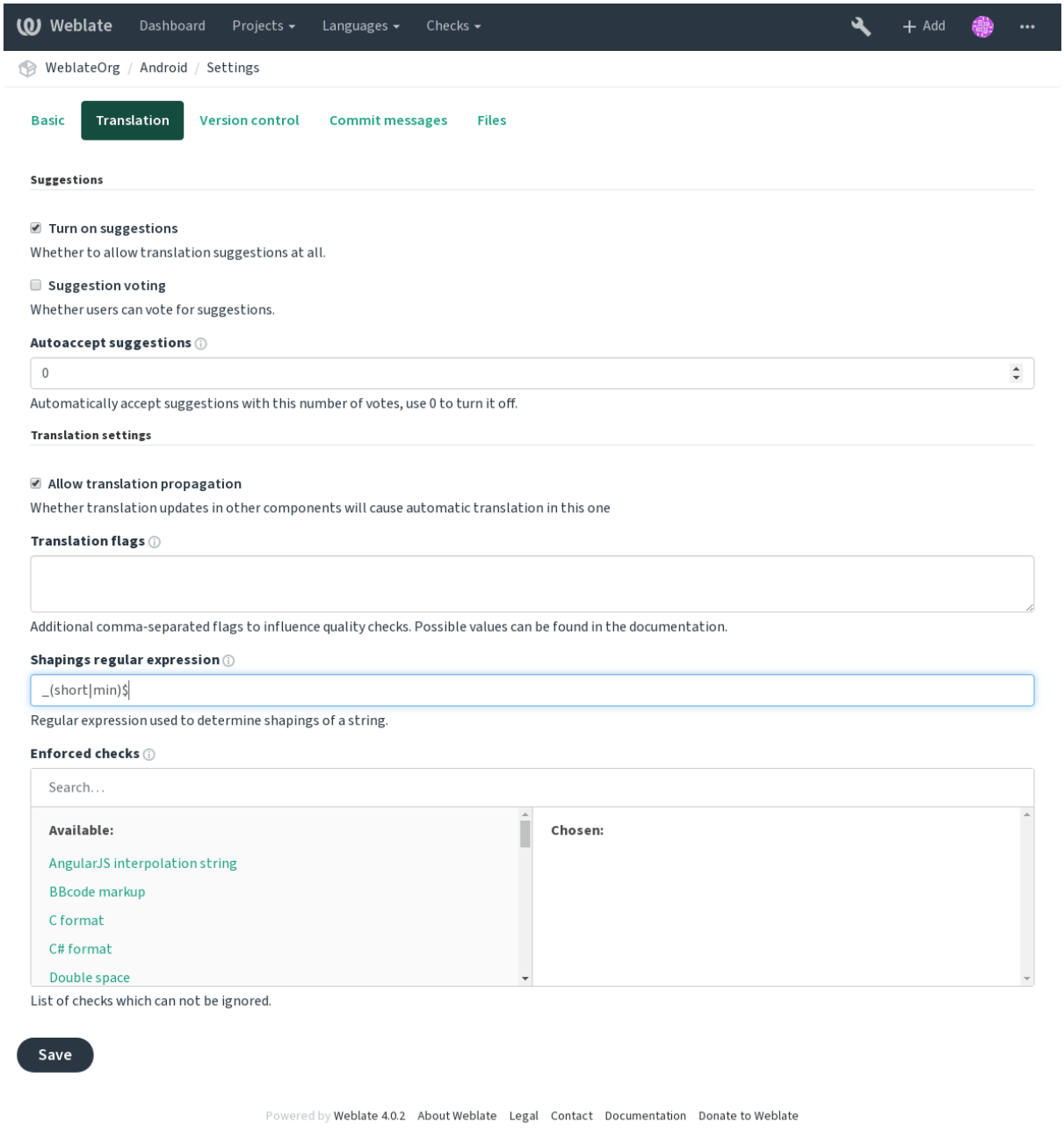
New languages can be added right away when requested by a user in Weblate, or a notification will be sent to project admins for approval and manual addition. This can be done using *Start new translation* in *Component configuration*.

Note: Project admins can always start translation within Weblate directly.

Language files added manually to the VCS are added to the component when Weblate updates the repository. About repository update settings, see *Updating repositories*).

String shapings

Shapings are useful to group several strings together so that translators can see all variants of the string at one place. You can define regular expression to group the strings in the *Component configuration*:

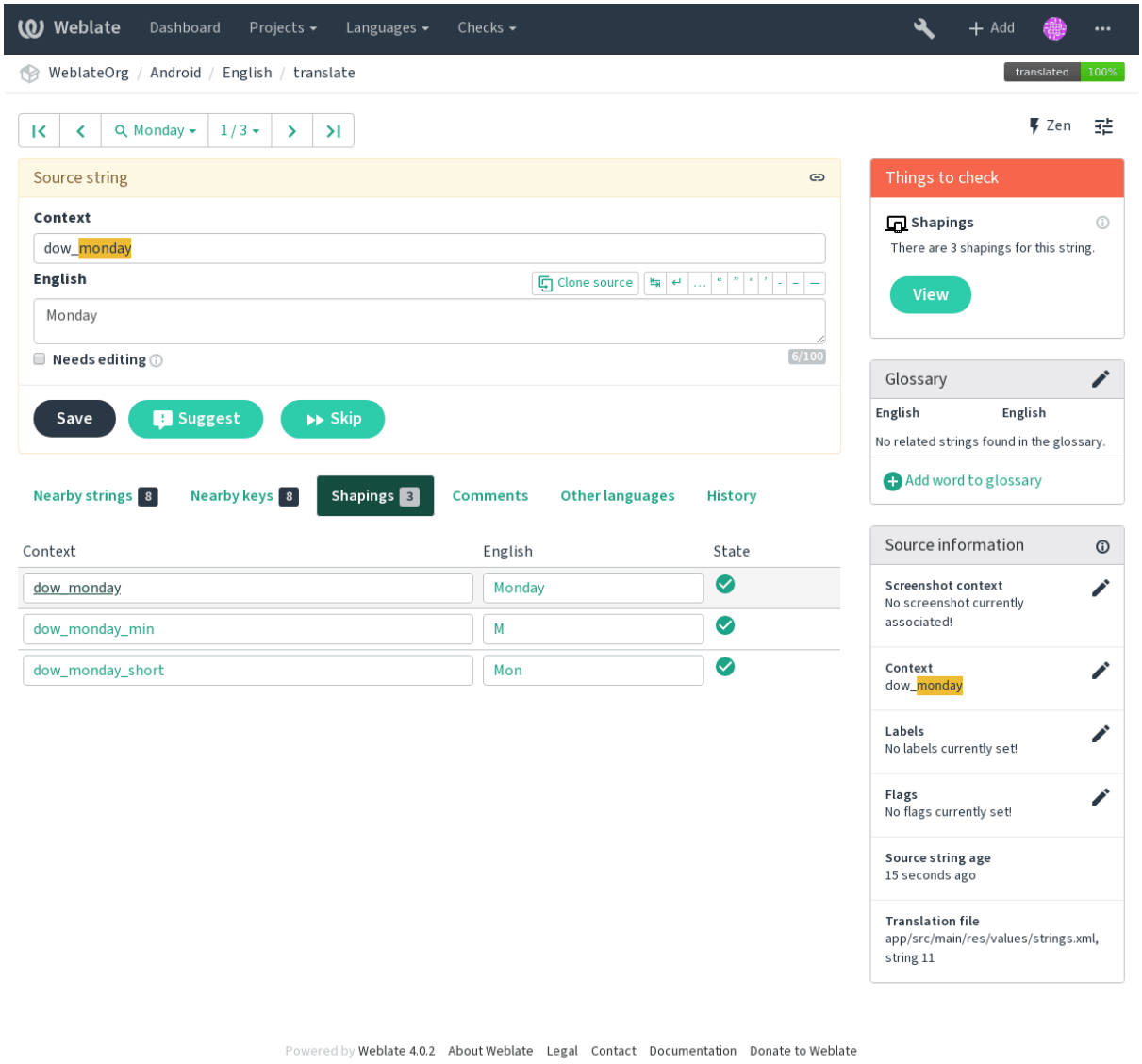


The expression is matched against *Context* to generate root key of the shaping. All matching strings are then part of single shapings group, including the translation exactly matching the root key, even if that is not matched by the regular expression.

The following table lists some usage examples:

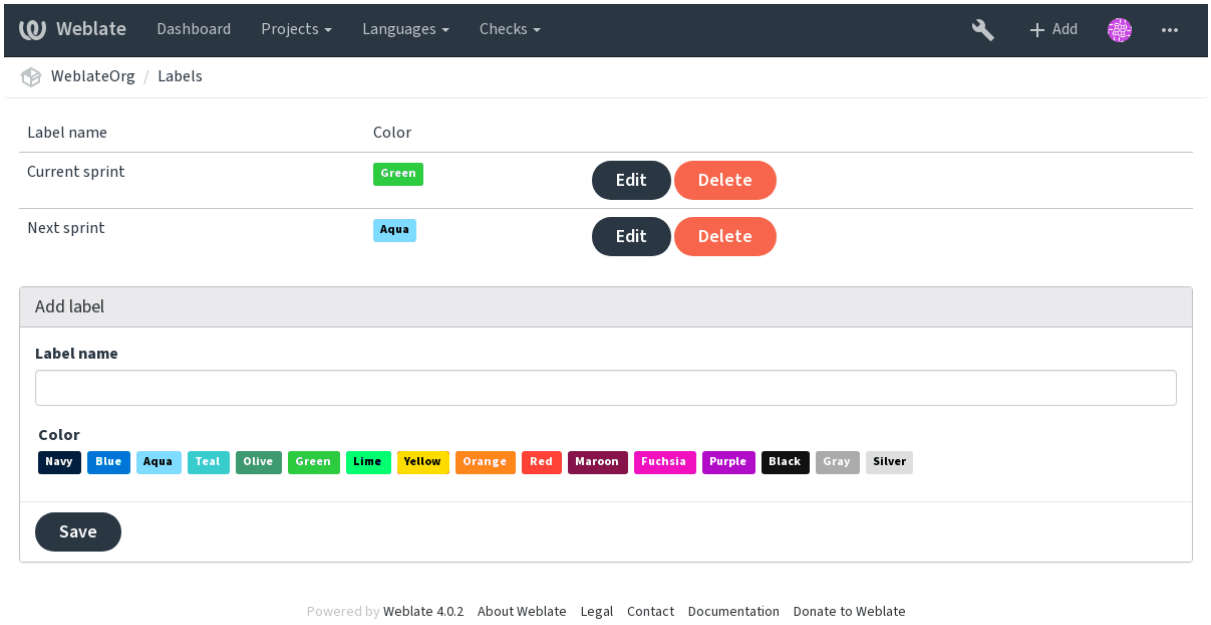
Use case	Regular expression shaping	Matched translation keys
Suffix identification	`(Short|Min)$`	`monthShort`, `monthMin`, `month`
Inline identification	`#[SML]`	`dial#S.key`, `dial#M.key`, `dial.key`

The shaping is later grouped when translating:



String labels

Split component translation strings into categories by text and colour in the project configuration.



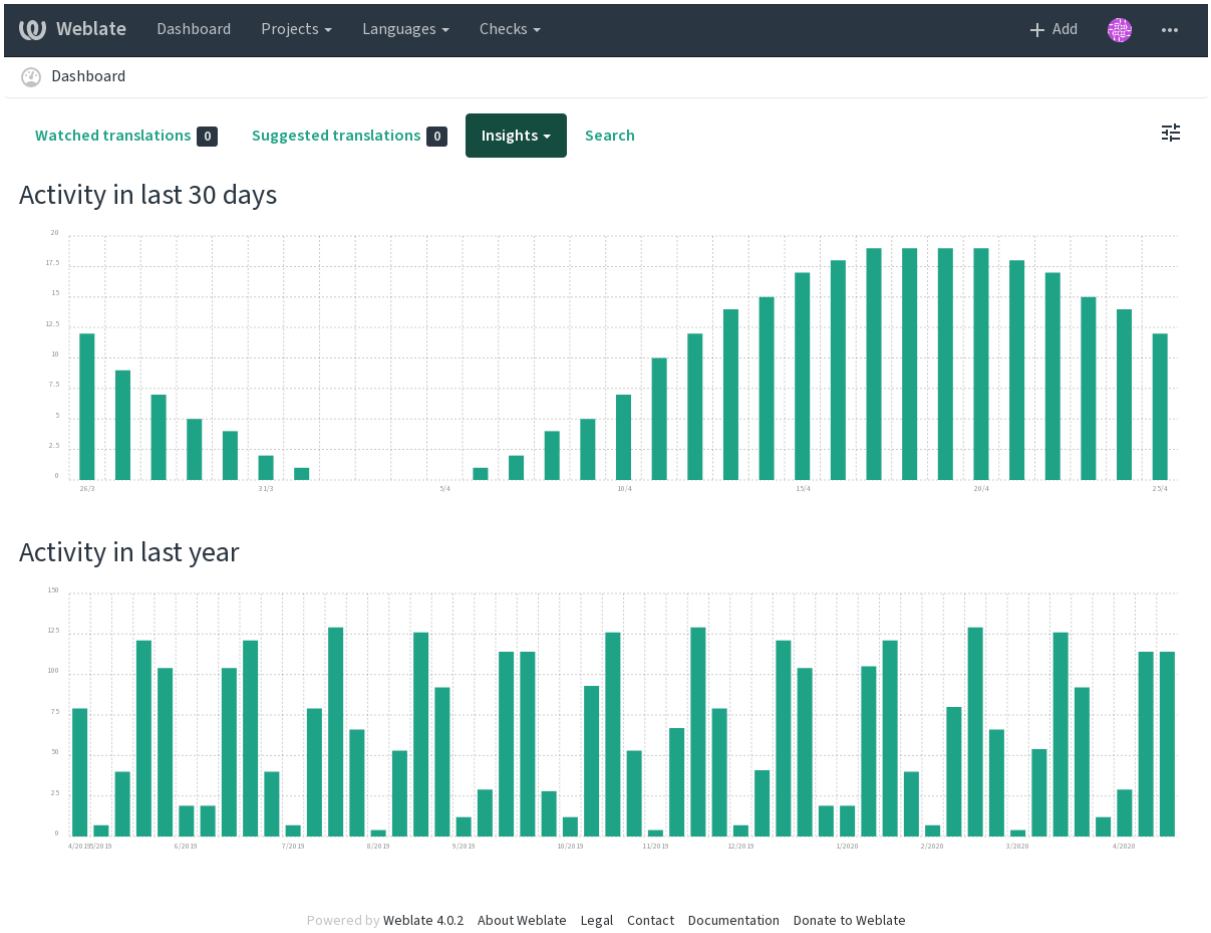
Hint: Labels can be assigned to units in *Additional info on source strings* by bulk editing, or using the *Bulk edit* addon.

1.7.5 Reviewing strings

Activity reports

Activity reports check changes of translations, for projects, components or individual users.

The activity reports for a project or component is accessible from its dashboard, on the *Insights* tab, selecting *Activity*.



More reports are accessible on the *Insights* tab, selecting *Translation reports*.

The activity of the currently signed in user can be seen by clicking on *Profile* from the user menu on the top right.

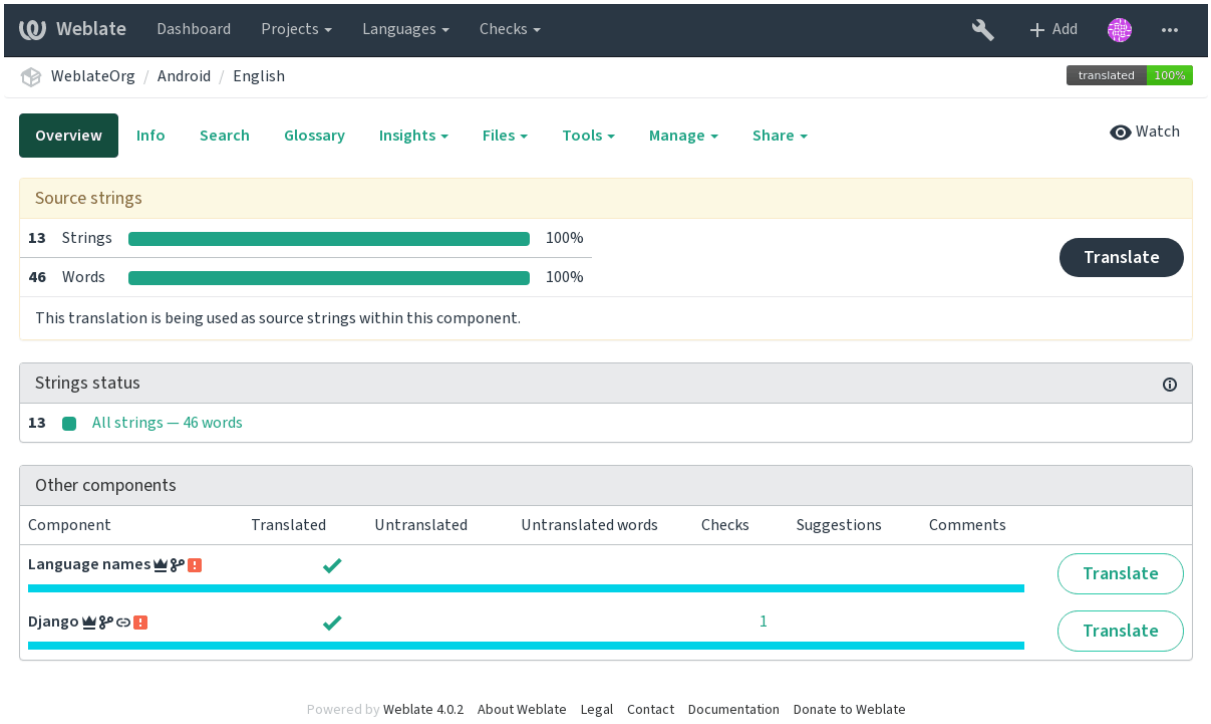
Source strings checks

There are many *Quality checks*, some of them focus on improving the quality of source strings. Many failing checks suggest a hint to make source strings easier to translate. All types of failing source checks are displayed on the *Source* tab of every component.

Translation string checks

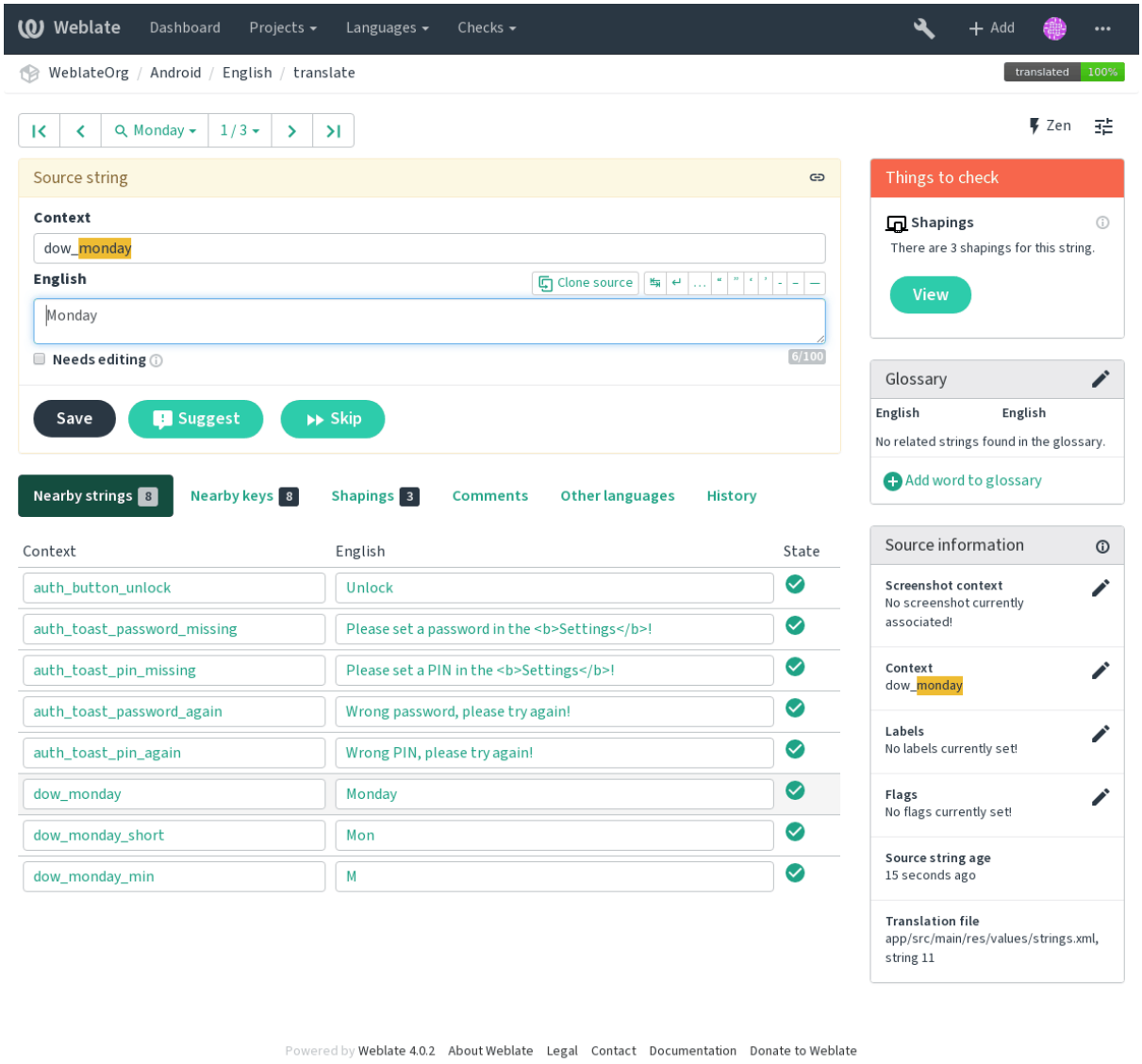
Erroneous failing translation string checks indicate the problem is with the source string. Translators sometimes fix mistakes in the translation instead of reporting it - a typical example is a missing full stop at the end of a sentence.

Reviewing all failing checks can provide valuable feedback to improve its source strings. To make source strings review easier, Weblate automatically creates a translation for the source language and shows you source level checks there:



One of the most interesting checks here is the *Multiple failing checks* - it is triggered whenever there is failure on multiple translations of a given string. Usually this is something to look for, as this is a string which translators have problems translating properly.

The detailed listing is a per language overview:

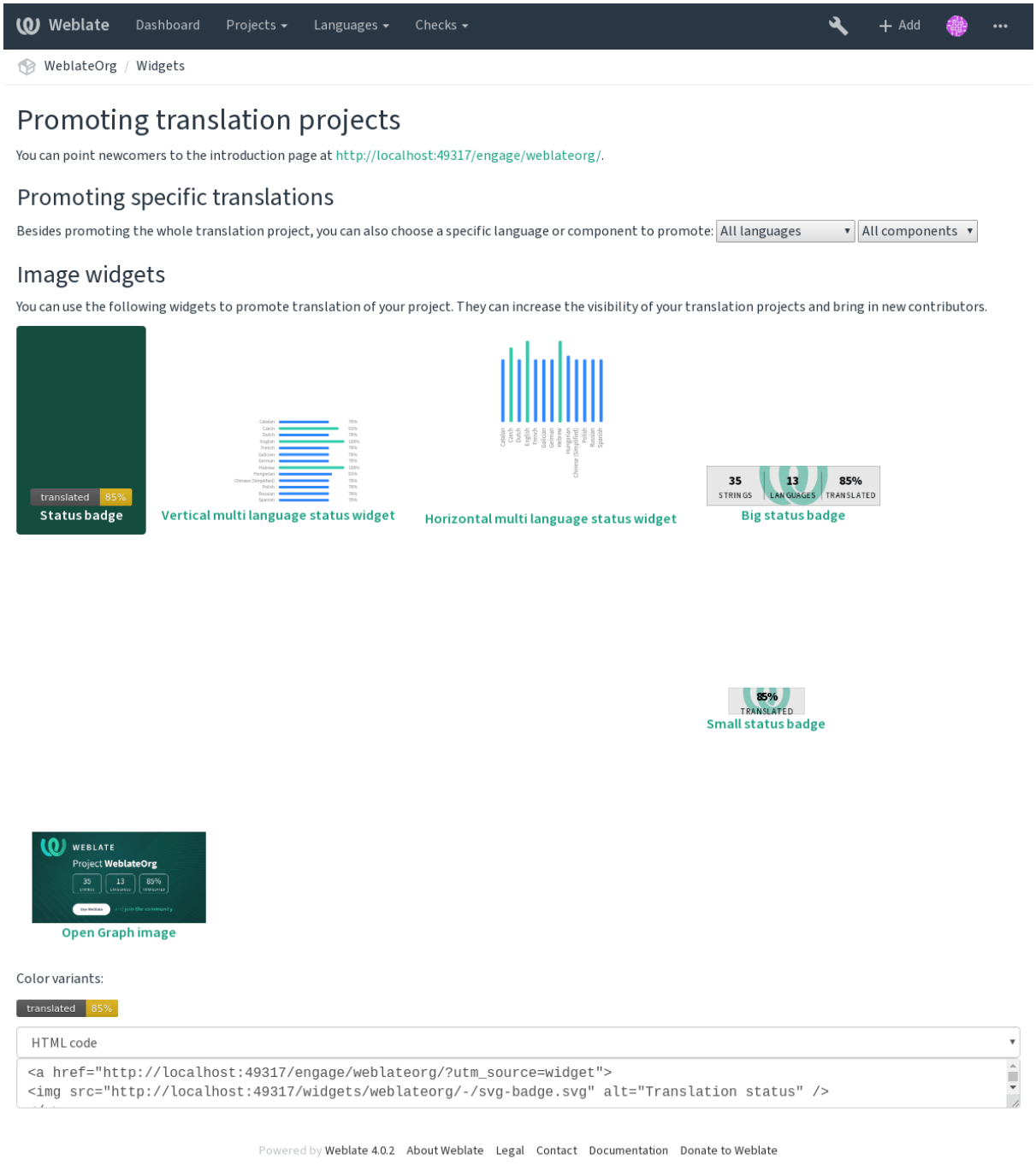


String comments

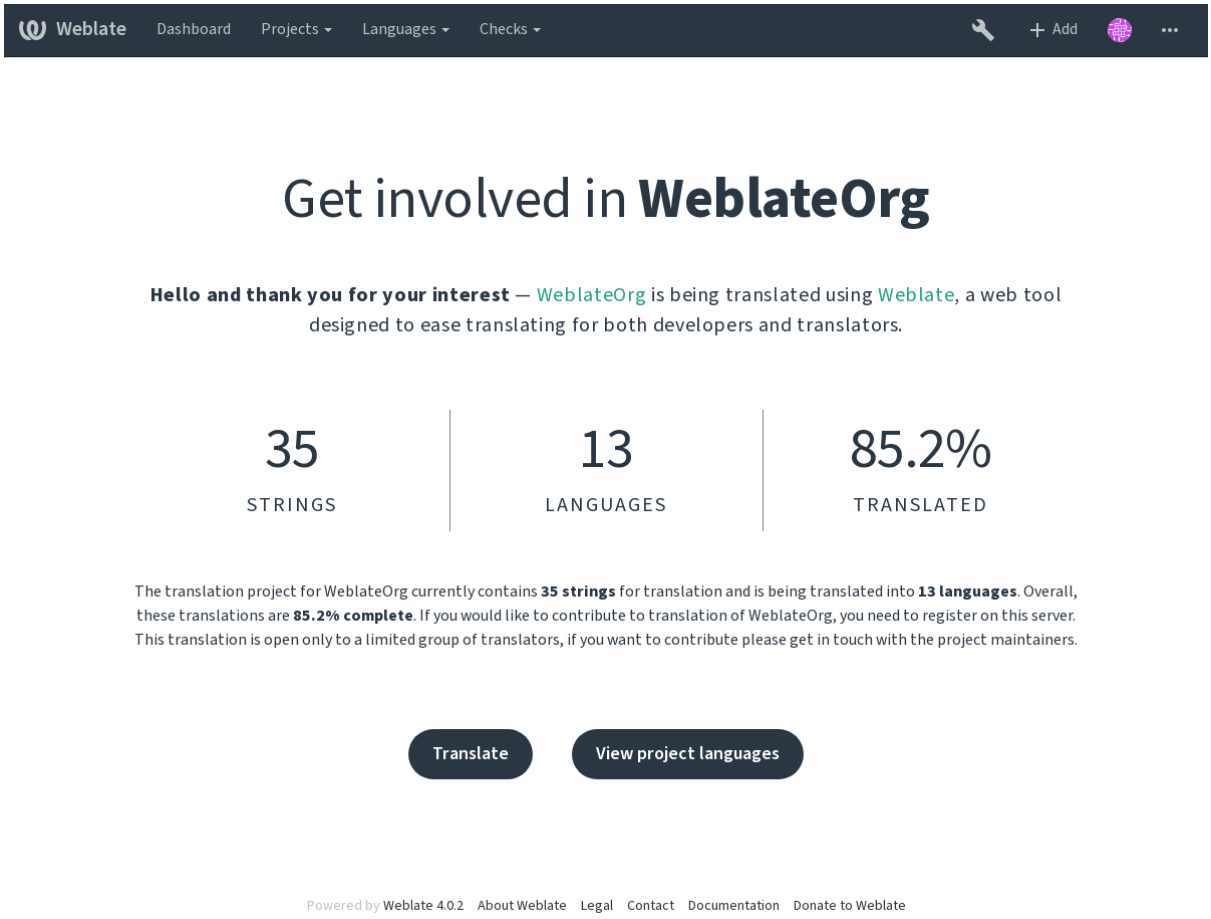
Translators can comment on both translation and source strings. Each *Component configuration* can be configured to receive such comments to an e-mail address, and using the developers mailing list is usually the best approach. This way you can keep an eye on when problems arise in translation, take care of them, and fix them quickly.

1.7.6 Promoting the translation

Weblate provides you widgets to share on your website or other sources to promote the translation project. It also has a nice welcome page for new contributors to give them basic information about the translation. Additionally you can share information about translation using Facebook or Twitter. All these possibilities can be found on the *Share* tab:

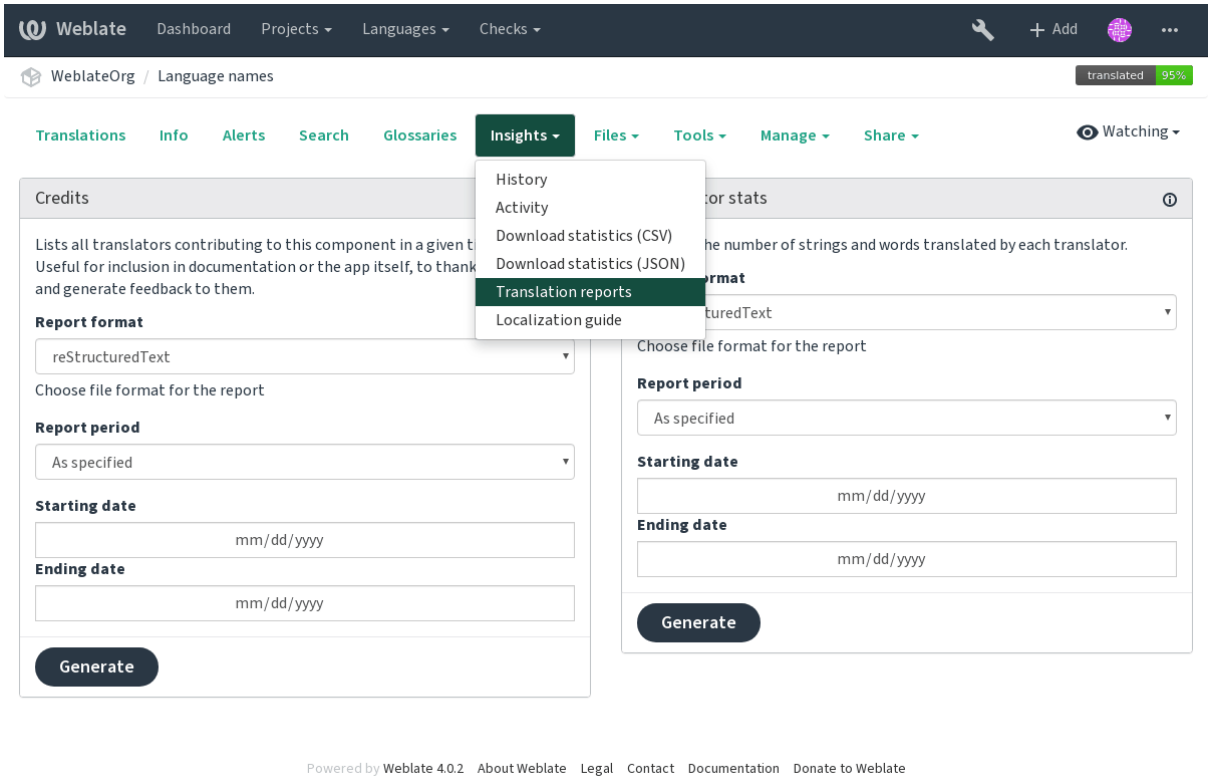


All these badges are provided with the link to simple page which explains users how to translate using Weblate:



1.7.7 Translation progress reporting

Reporting features give insight into how a translation progresses over a given period. A summary of contributions to any given component over time is provided. The reporting tool is found in the *Insights* menu of any translation component, project or on the dashboard:



Several reporting tools are available on this page and all can produce output in HTML, reStructuredText or JSON. The first two formats are suitable for embedding statistics into existing documentation, while JSON is useful for further processing of the data.

Translator credits

Generates a document usable for crediting translators - sorted by language and lists all contributors to a given language:

```
* Czech

    * Michal Čihař <michal@cihar.com>
    * John Doe <john@example.com>

* Dutch

    * Jane Doe <jane@example.com>
```

It will render as:

- Czech
  - Michal Čihař <michal@cihar.com>
  - John Doe <john@example.com>
- Dutch
  - Jae Doe <jane@example.com>

Contributor stats

Generates the number of translated words and strings by translator name:

```
======================================== ========================================
======================== ======================== ========================
======================== ======================== ========================
======================== ======================== ========================
======================== ======================== ========================
======================== ======================== ========================
======================== ========================
Name                                     Email
Count total              Source words total       Source chars total       Target
words total       Target chars total       Count new                Source words
new         Source chars new         Target words new         Target chars new
   Count approved           Source words approved    Source chars approved
Target words approved    Target chars approved    Count edited             Source
words edited      Source chars edited      Target words edited      Target chars
edited
======================================== ========================================
======================== ======================== ========================
======================== ======================== ========================
======================== ======================== ========================
======================== ======================== ========================
======================== ======================== ========================
======================== ========================
Michal Čihař                             michal@cihar.com
                    1                        3                       24
          3                       21                       1
 3                       24                       3                       21
                  0                        0                       0
        0                       0                       0
0                       0                       0                       0
Allan Nordhøy                            allan@example.com
                    2                        5                       25
          4                       28                       2
 3                       24                       3                       21
                  0                        0                       0
        0                       0                       0
0                       0                       0                       0
======================================== ========================================
======================== ======================== ========================
======================== ======================== ========================
======================== ======================== ========================
======================== ======================== ========================
======================== ======================== ========================
======================== ========================
```

And it will get rendered as:

Name	Email	Count total	Source words total	Source chars total	Target words total	Target chars total	Count new	Source words new	Source chars new	Target words new	Target chars new	Count approved	Source words approved	Source chars approved	Target words approved	Target chars approved	Count edited	Source words edited	Source chars edited	Target words edited	Target chars edited
Michal Čihař	michal@cihar.com	1	3	24	3	21	1	3	24	3	21	0	0	0	0	0	0	0	0	0	0
Allan Nordhøy	allan@example.com	2	5	25	4	28	2	3	24	3	21	0	0	0	0	0	0	0	0	0	0

It can be useful if you pay your translators based on amount of work, it gives you various stats on translators work.

All stats are available in three variants:

Total Overall number of edited strings.

New Newly translated strings which didn't have translation before.

Approved Count for string approvals in review workflow (see *Dedicated reviewers*).

Edited Edited strings which had translation before.

The following metrics are available for each:

Count Number of strings.

Edits Number of edits in the string, measured in Damerau–Levenshtein distance.

Source words Number of words in the source string.

Source characters Number of characters in the source string.

Target words Number of words in the translated string.

Target characters Number of characters in the translated string.

1.8 Translation workflows

Several translation workflows are supported.

The following is not a complete list of ways to configure Weblate. You can base other workflows on the most usual examples listed here.

1.8.1 Translation access

The *Access control* is not much discussed in the workflows as each access control option can be applied to any workflow. Please consult that documentation for information on how to manage access to translations.

In the following chapters, *any user* means a user who has access to the translation. It can be any authenticated user if the project is public, or a user that has a *Translate* permission for the project.

1.8.2 Translation states

Each translated string can be in one of following states:

Untranslated Translation is empty, it might or not be stored in the file, depending on the file format.

Needs editing Translation needs editing, this is usually the result of a source string change. The translation is stored in the file, depending on the file format it might be marked as needing edit (for example as it gets a fuzzy flag).

Waiting for review Translation is made, but not reviewed. It is stored in the file as a valid translation.

Approved Translation has been approved in the review. It can no longer be changed by translators, but only by reviewers. Translators can only add suggestions to it.

Suggestions Suggestions are stored in Weblate only and not in the translation file.

1.8.3 Direct translation

This is most usual setup for smaller teams, anybody can directly translate. This is also the default setup in Weblate.

- *Any user* can edit translations.
- Suggestions are optional ways to suggest changes, when translators are not sure about the change.

Setting	Value	Note
Enable reviews	Off	Configured at project level.
Enable suggestions	On	It is useful for users to be able to suggest when they are not sure.
Suggestion voting	Off	
Autoaccept suggestions	0	
Translators group	Users	Or Translate with access control.
Reviewers group	N/A	Not used.

1.8.4 Peer review

With this workflow, anybody can add suggestions, and need approval from additional member(s) before it is accepted as a translation.

- *Any user* can add suggestions.
- *Any user* can vote for suggestions.
- Suggestions become translations when given a predetermined number of votes.

Setting	Value	Note
Enable reviews	off	Configured at project level.
Enable suggestions	on	
Suggestion voting	on	
Autoaccept suggestions	1	You can set higher value to require more peer reviews.
Translators group	Users	Or Translate with access control.
Reviewers group	N/A	Not used, all translators review.

1.8.5 Dedicated reviewers

New in version 2.18: The proper review workflow is supported since Weblate 2.18.

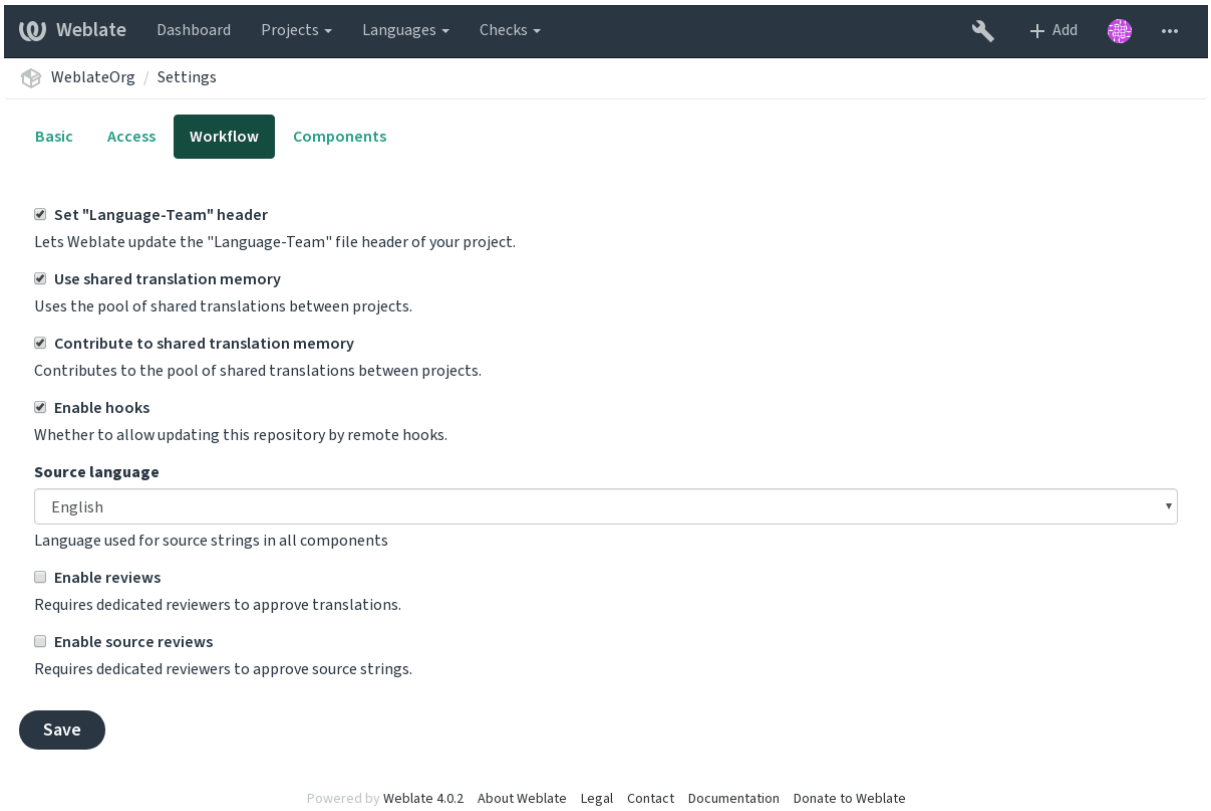
With dedicated reviewers you have two groups of users, one able to submit translations, and one able to review them to ensure translations are consistent and that the quality is good.

- *Any user* can edit unapproved translations.
- *Reviewer* can approve / unapproved strings.
- *Reviewer* can edit all translations (including approved ones).
- Suggestions can also be used to suggest changes for approved strings.

Setting	Value	Note
Enable reviews	on	Configured at project level.
Enable suggestions	off	It is useful for users to be able to suggest when they are not sure.
Suggestion voting	off	
Autoaccept suggestions	0	
Translators group	Users	Or Translate with access control.
Reviewers group	Reviewers	Or Review with access control.

1.8.6 Turning on reviews

Reviews can be turned on in the project configuration, from the *Workflow* subpage of project settings (to be found in the *Manage* → *Settings* menu):



Note: Depending on Weblate configuration, the setting might not be available to you. For example on Hosted Weblate this is not available for projects hosted for free.

1.8.7 Source strings reviews

With *Enable source reviews* enabled, the review process can be applied on the source strings. Once enabled, users can report issues in the source strings. The actual process depends on whether you use bilingual or monolingual formats.

For monolingual formats, the source string review behaves similarly as with *Dedicated reviewers* - once issue is reported on the source string, it is marked as *Needs editing*.

The bilingual formats do not allow direct editing of the source strings (these are typically extracted directly from the source code). In this case *Source needs review* label is attached to strings reported by translators. You should review such strings and either edit them in the source or remove the label.

See also:

Bilingual and monolingual formats, *Dedicated reviewers*, *String labels*

1.9 Frequently Asked Questions

1.9.1 Configuration

How to create an automated workflow?

Weblate can handle all the translation things semi-automatically for you. If you give it push access to your repository, the translations can happen without interaction, unless some merge conflict occurs.

1. Set up your Git repository to tell Weblate when there is any change, see *Notification hooks* for info on how to do it.
2. Set a push URL at your *Component configuration* in Weblate, this allows Weblate to push changes to your repository.
3. Turn on push-on-commit on your *Project configuration* in Weblate, this will make Weblate push changes to your repository whenever they happen at Weblate.

See also:

Continuous localization, *Avoiding merge conflicts*

How to access repositories over SSH?

Please see *Accessing repositories* for info on setting up SSH keys.

How to fix merge conflicts in translations?

Merge conflicts happen from time to time when the translation file is changed in both Weblate and the upstream repository concurrently. You can usually avoid this by merging Weblate translations prior to making changes in the translation files (e.g. before running msgmerge). Just tell Weblate to commit all pending translations (you can do it in *Repository maintenance* in the *Manage* menu) and merge the repository (if automatic push is not on).

If you've already ran into a merge conflict, the easiest way is to solve all conflicts locally at your workstation - is to simply add Weblate as a remote repository, merge it into upstream and fix any conflicts. Once you push changes back, Weblate will be able to use the merged version without any other special actions.

Note: Depending on your setup, access to the Weblte repository might require authentication. When using the built in *Git exporter* in Weblate, you authenticate with your username and the API key.

```
# Commit all pending changes in Weblate, you can do this in the UI as well:
wlc commit
# Lock the translation in Weblate, again this can be done in the UI as well:
wlc lock
# Add Weblate as remote:
git remote add weblate https://hosted.weblate.org/git/project/component/
```

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```
# You might need to include credentials in some cases:
git remote add weblate https://username:APIKEY@hosted.weblate.org/git/project/
↪component/

# Update weblate remote:
git remote update weblate

# Merge Weblate changes:
git merge weblate/master

# Resolve conflicts:
edit …
git add …
…
git commit

# Push changes to upstream repository, Weblate will fetch merge from there:
git push

# Open Weblate for translation:
wlc unlock
```

If you're using multiple branches in Weblate, you can do the same to all of them:

```
# Add and update Weblate remotes
git remote add weblate-one https://hosted.weblate.org/git/project/one/
git remote add weblate-second https://hosted.weblate.org/git/project/second/
git remote update weblate-one weblate-second

# Merge QA_4_7 branch:
git checkout QA_4_7
git merge weblate-one/QA_4_7
... # Resolve conflicts
git commit

# Merge master branch:
git checkout master
git merge weblates-second/master
... # Resolve conflicts
git commit

# Push changes to the upstream repository, Weblate will fetch the merge from there:
git push
```

In case of gettext PO files, there is a way to merge conflicts in a semi-automatic way:

Fetch and keep a local clone of the Weblate Git repository. Also get a second fresh local clone of the upstream Git repository (i. e. you need two copies of the upstream Git repository: An intact and a working copy):

```
# Add remote:
git remote add weblate /path/to/weblate/snapshot/

# Update Weblate remote:
git remote update weblate

# Merge Weblate changes:
```

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```
git merge weblate/master

# Resolve conflicts in the PO files:
for PO in `find . -name '*.po'` ; do
    msgcat --use-first /path/to/weblate/snapshot/$PO\
               /path/to/upstream/snapshot/$PO -o $PO.merge
    msgmerge --previous --lang=${PO%.po} $PO.merge domain.pot -o $PO
    rm $PO.merge
    git add $PO
done
git commit

# Push changes to the upstream repository, Weblate will fetch merge from there:
git push
```

See also:

How to export the Git repository that Weblate uses?, *Continuous localization*, *Avoiding merge conflicts*

How do I translate several branches at once?

Weblate supports pushing translation changes within one *Project configuration*. For every *Component configuration* which has it turned on (the default behavior), the change made is automatically propagated to others. This way translations are kept synchronized even if the branches themselves have already diverged quite a lot, and it is not possible to simply merge translation changes between them.

Once you merge changes from Weblate, you might have to merge these branches (depending on your development workflow) discarding differences:

```
git merge -s ours origin/maintenance
```

See also:

Keeping translations same across components

How to translate multi-platform projects?

Weblate supports a wide range of file formats (see *Supported file formats*) and the easiest approach is to use the native format for each platform.

Once you have added all platform translation files as components in one project (see *Adding translation projects and components*), you can utilize the translation propagation feature (turned on by default, and can be turned off in the *Component configuration*) to translate strings for all platforms at once.

See also:

Keeping translations same across components

How to export the Git repository that Weblate uses?

There is nothing special about the repository, it lives under the *DATA_DIR* directory and is named `vcs/<project>/<component>/`. If you have SSH access to this machine, you can use the repository directly.

For anonymous access, you might want to run a Git server and let it serve the repository to the outside world.

Alternatively, you can use *Git exporter* inside Weblate to automate this.

What are the options for pushing changes back upstream?

This heavily depends on your setup, Weblate is quite flexible in this area. Here are examples of some workflows used with Weblate:

- Weblate automatically pushes and merges changes (see *How to create an automated workflow?*).
- You manually tell Weblate to push (it needs push access to the upstream repository).
- Somebody manually merges changes from the Weblate git repository into the upstream repository.
- Somebody rewrites history produced by Weblate (e.g. by eliminating merge commits), merges changes, and tells Weblate to reset the content in the upstream repository.

Of course you are free to mix all of these as you wish.

How can I limit Weblate access to only translations, without exposing source code to it?

You can use git submodule for separating translations from source code while still having them under version control.

1. Create a repository with your translation files.
2. Add this as a submodule to your code:

```
git submodule add git@example.com:project-translations.git path/to/translations
```

3. Link Weblate to this repository, it no longer needs access to the repository containing your source code.
4. You can update the main repository with translations from Weblate by:

```
git submodule update --remote path/to/translations
```

Please consult the git submodule documentation for more details.

How can I check whether my Weblate is set up properly?

Weblate includes a set of configuration checks which you can see in the admin interface, just follow the *Performance report* link in the admin interface, or open the `/manage/performance/` URL directly.

Why do links contain example.com as the domain?

Weblate uses Django's sites framework and defines the sitename inside the database. You need to set the domain name to match your installation.

See also:

Set correct site domain

Why are all commits committed by Weblate <noreply@weblate.org>?

This is the default committer name, configured when you create a translation component. You can change it in the administration at any time.

The author of every commit (if the underlying VCS supports it) is still recorded correctly as the user that made the translation.

See also:

Component configuration

1.9.2 Usage

How do I review the translations of others?

- You can subscribe to any changes made in *Notifications* and then check others contributions as they come in by e-mail.
- There is a review tool available at the bottom of the translation view, where you can choose to browse translations made by others since a given date.

How do I provide feedback on a source string?

On context tabs below translation, you can use the *Source* tab to provide feedback on a source string, or discuss it with other translators.

How can I use existing translations while translating?

- Use the import functionality to load compendium as translations, suggestions or translations needing review. This is the best approach for a one-time translation using a compendium or a similar translation database.
- You can set up *tmserver* with all databases you have and let Weblate use it. This is good when you want to use it several times during translation.
- Another option is to translate all related projects in a single Weblate instance, which will make it automatically pick up translations from other projects as well.

See also:

Machine translation, *Machine translation*

Does Weblate update translation files besides translations?

Weblate tries to limit changes in translation files to a minimum. For some file formats it might unfortunately lead to reformatting the file. If you want to keep the file formatted your way, please use a pre-commit hook for that.

For monolingual files (see *Supported file formats*) Weblate might add new translation strings not present in the *template*, and not in actual translations. It does not however perform any automatic cleanup of stale strings as that might have unexpected outcomes. If you want to do this, please install a pre-commit hook which will handle the cleanup according to your requirements.

Weblate also will not try to update bilingual files in any way, so if you need `po` files being updated from `pot`, you need to do it yourself.

See also:

Processing repository with scripts

Where do language definitions come from and how can I add my own?

The basic set of language definitions is included within Weblate and Translate-toolkit. This covers more than 150 languages and includes info about plural forms or text direction.

You are free to define your own languages in the administrative interface, you just need to provide info about it.

Can Weblate highlight changes in a fuzzy string?

Weblate supports this, however it needs the data to show the difference.

For Gettext PO files, you have to pass the parameter `--previous` to **msgmerge** when updating PO files, for example:

```
msgmerge --previous -U po/cs.po po/phpmyadmin.pot
```

For monolingual translations, Weblate can find the previous string by ID, so it shows the differences automatically.

Why does Weblate still show old translation strings when I've updated the template?

Weblate does not try to manipulate the translation files in any way other than allowing translators to translate. So it also does not update the translatable files when the template or source code have been changed. You simply have to do this manually and push changes to the repository, Weblate will then pick up the changes automatically.

Note: It is usually a good idea to merge changes done in Weblate before updating translation files, as otherwise you will usually end up with some conflicts to merge.

For example with gettext PO files, you can update the translation files using the **msgmerge** tool:

```
msgmerge -U locale/cs/LC_MESSAGES/django.mo locale/django.pot
```

In case you want to do the update automatically, you can install addon *Update PO files to match POT (msgmerge)*.

1.9.3 Troubleshooting

Requests sometimes fail with "too many open files" error

This happens sometimes when your Git repository grows too much and you have many of them. Compressing the Git repositories will improve this situation.

The easiest way to do this is to run:

```
# Go to DATA_DIR directory
cd data/vcs
# Compress all Git repositories
for d in */* ; do
    pushd $d
    git gc
    popd
done
```

See also:

DATA_DIR

When accessing the site I get a "Bad Request (400)" error

This is most likely caused by an improperly configured *ALLOWED_HOSTS*. It needs to contain all hostnames you want to access on your Weblate. For example:

```
ALLOWED_HOSTS = ['weblate.example.com', 'weblate', 'localhost']
```

See also:

Allowed hosts setup

1.9.4 Features

Does Weblate support other VCSes than Git and Mercurial?

Weblate currently does not have native support for anything other than *Git* (with extended support for *GitHub*, *Gerrit* and *Subversion*) and ref:*vcs-mercurial*, but it is possible to write backends for other VCSes.

You can also use *Git remote helpers* in Git to access other VCSes.

Weblate also supports VCS less operation, see *Local files*.

Note: For native support of other VCSes, Weblate requires using distributed VCS, and could probably be adjusted to work with anything other than Git and Mercurial, but somebody has to implement this support.

See also:

Version control integration

How does Weblate credit translators?

Every change made in Weblate is committed into VCS under the translators name. This way every single change has proper authorship, and you can track it down using the standard VCS tools you use for code.

Additionally, when the translation file format supports it, the file headers are updated to include the translator's name.

See also:

list_translators

Why does Weblate force showing all PO files in a single tree?

Weblate was designed in a way that every PO file is represented as a single component. This is beneficial for translators, so they know what they are actually translating. If you feel your project should be translated as one, consider merging these po files. It will make life easier even for translators not using Weblate.

Note: In case there is great demand for this feature, it might be implemented in future versions.

Why does Weblate use language codes such sr_Latn or zh_Hant?

These are language codes defined by **RFC 4646** to better indicate that they are really different languages instead previously wrongly used modifiers (for `@latin` variants) or country codes (for Chinese).

Weblate still understands legacy language codes and will map them to current one - for example `sr@latin` will be handled as `sr_Latn` or `zh@CN` as `sr_Hans`.

1.10 Supported file formats

Weblate supports most translation format understood by translate-toolkit, however each format being slightly different, some issues with formats that are not well tested can arise.

See also:

Translation Related File Formats

Note: When choosing a file format for your application, it's better to stick some well established format in the toolkit/platform you use. This way your translators can additionally use whatever tools they are used to, and will more likely contribute to your project.

1.10.1 Bilingual and monolingual formats

Both monolingual and bilingual formats are supported. Bilingual formats store two languages in single file—source and translation (typical examples are *GNU gettext*, *XLIFF* or *Apple iOS strings*). On the other side, monolingual formats identify the string by ID, and each language file contains only the mapping of those to any given language (typically *Android string resources*). Some file formats are used in both variants, see the detailed description below.

For correct use of monolingual files, Weblate requires access to a file containing complete list of strings to translate with their source—this file is called *Monolingual base language file* within Weblate, though the naming might vary in your paradigm.

Additionally this workflow can be extended by utilizing *Intermediate language file* to include strings provided by developers, but not to be used as is in the final strings.

1.10.2 Automatic detection

Weblate can automatically detect several widespread file formats, but this detection can harm your performance and will limit features specific to given file format (for example automatic addition of new translations).

1.10.3 Translation types capabilities

Capabilities of all supported formats:

Format	Linguality[1]	Plurals[2]	Comments[3]	Context[4]	Location[5]	Flags[8]	Additional states[6]
GNU gettext	bilingual	yes	yes	yes	yes	yes[9]	needs editing
Monolingual gettext	mono	yes	yes	yes	yes	yes[9]	needs editing
XLIFF	both	yes	yes	yes	yes	yes[10]	needs editing, approved
Java properties	both	no	yes	no	no	no	
Joomla translations	mono	no	yes	no	yes	no	
Qt Linguist .ts	both	yes	yes	no	yes	yes[10]	needs editing
Android string resources	mono	yes	yes[7]	no	no	yes[10]	
Apple iOS strings	bilingual	no	yes	no	no	no	
PHP strings	mono	no	yes	no	no	no	
JSON files	mono	no	no	no	no	no	
JSON i18next files	mono	yes	no	no	no	no	
WebExtension JSON	mono	yes	yes	no	no	no	
.XML resource files	mono	no	yes	no	no	yes[10]	
CSV files	mono	no	yes	yes	yes	no	needs editing
YAML files	mono	no	yes	no	no	no	
Ruby YAML files	mono	yes	yes	no	no	no	
DTD files	mono	no	no	no	no	no	
Flat XML	mono	no	no	no	no	yes[10]	
Windows RC files	mono	no	yes	no	no	no	
Excel Open XML	mono	no	yes	yes	yes	no	needs editing
App store metadata files	mono	no	no	no	no	no	
Subtitle files	mono	no	no	no	yes	no	

1.10.4 GNU gettext

Most widely used format for translating libre software. This was first format supported by Weblate and still has the best support.

Contextual info stored in the file is supported by adjusting its headers or linking to corresponding source files.

The bilingual gettext PO file typically looks like this:

```
#: weblate/media/js/bootstrap-datepicker.js:1421
msgid "Monday"
msgstr "Pondělí"
```

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[1] See *Bilingual and monolingual formats*
[2] Plurals are necessary to properly localize strings with variable count.
[3] Comments can be used to pass additional info about the string to translate.
[4] Context is used to differentiate identical strings used in different scopes (for example *Sun* can be used as an abbreviated name of the day "Sunday" or as the name of our closest star).
[5] Location of a string in source code might help proficient translators figure out how the string is used.
[8] See *Customizing behavior*
[6] Additional states supported by the file format in addition to "Not translated" and "Translated".
[9] The gettext type comments are used as flags.
[10] The flags are extracted from the non-standard attibute `weblate-flags` for all XML based formats. Additionally `max-length:N` is supported through the `maxwidth` attribute as defined in the XLIFF standard, see *Specifying translation flags*.
[7] XML comment placed before the `<string>` element, parsed as a developer comment.

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```
#: weblate/media/js/bootstrap-datepicker.js:1421
msgid "Tuesday"
msgstr "Úterý"

#: weblate/accounts/avatar.py:163
msgctxt "No known user"
msgid "None"
msgstr "Žádný"
```

Typical Weblate *Component configuration*	
Filemask	`po/*.po`
Monolingual base language file	*Empty*
Template for new translations	`po/messages.pot`
File format	*Gettext PO file*

See also:

Gettext on Wikipedia, PO Files, *Update ALL_LINGUAS variable in the "configure" file*, *Customize gettext output*, *Update LINGUAS file*, *Generate MO files*, *Update PO files to match POT (msgmerge)*,

Monolingual gettext

Some projects decide to use gettext as monolingual formats—they code just the IDs in their source code and the string then needs to be translated to all languages, including English. This is supported, though you have to choose this file format explicitly when importing components into Weblate.

The monolingual gettext PO file typically looks like this:

```
#: weblate/media/js/bootstrap-datepicker.js:1421
msgid "day-monday"
msgstr "Pondělí"

#: weblate/media/js/bootstrap-datepicker.js:1421
msgid "day-tuesday"
msgstr "Úterý"

#: weblate/accounts/avatar.py:163
msgid "none-user"
msgstr "Žádný"
```

While the base language file will be:

```
#: weblate/media/js/bootstrap-datepicker.js:1421
msgid "day-monday"
msgstr "Monday"

#: weblate/media/js/bootstrap-datepicker.js:1421
msgid "day-tuesday"
msgstr "Tuesday"

#: weblate/accounts/avatar.py:163
msgid "none-user"
msgstr "None"
```

Typical Weblate *Component configuration*	
Filemask	`po/*.po`
Monolingual base language file	`po/en.po`
Template for new translations	`po/messages.pot`
File format	*Gettext PO file (monolingual)*

1.10.5 XLIFF

XML-based format created to standardize translation files, but in the end it is one of many standards, in this area.

XML Localization Interchange File Format (XLIFF) is usually used as bilingual, but Weblate supports it as monolingual as well.

See also:

XML Localization Interchange File Format (XLIFF) specification

Translation states

Changed in version 3.3: Weblate ignored the state attribute prior to the 3.3 release.

The `state` attribute in the file is partially processed and mapped to the "Needs edit" state in Weblate (the following states are used to flag the string as needing edit if there is a target present: `new`, `needs-translation`, `needs-adaptation`, `needs-l10n`). Should the `state` attribute be missing, a string is considered translated as soon as a `<target>` element exists.

If the translation string has `approved="yes"`, it will also be imported into Weblate as "Approved", anything else will be imported as "Waiting for review" (which matches the XLIFF specification).

While saving, Weblate doesn't add those attributes unless necessary:

- The `state` attribute is only added in case string is marked as needing edit.
- The `approved` attribute is only added in case string has been reviewed.
- In other cases the attributes are not added, but they are updated in case they are present.

That means that when using the XLIFF format, it is strongly recommended to turn on the Weblate review process, in order to see and change the approved state of strings.

See *Dedicated reviewers*.

Similarly upon importing such files (in the upload form), you should choose *Import as translated* under *Processing of strings needing review*.

Whitespace and newlines in XLIFF

Generally types or amounts of whitespace is not differentiated between in XML formats. If you want to keep it, you have to add the `xml:space="preserve"` flag to the string.

For example:

```
    <trans-unit id="10" approved="yes">
        <source xml:space="preserve">hello</source>
        <target xml:space="preserve">Hello, world!
</target>
    </trans-unit>
```

Specifying translation flags

You can specify additional translation flags (see *Customizing behavior*) by using the `weblate-flags` attribute. Weblate also understands `maxwidth` and `font` attributes from the XLIFF specification:

```
<trans-unit id="10" maxwidth="100" size-unit="pixel" font="ubuntu;22;bold">
   <source>Hello %s</source>
</trans-unit>
<trans-unit id="20" maxwidth="100" size-unit="char" weblate-flags="c-format">
   <source>Hello %s</source>
</trans-unit>
```

The `font` attribute is parsed for font family, size and weight, the above example shows all of that, though only font family is required. Any whitespace in the font family is converted to underscore, so `Source Sans Pro` becomes `Source_Sans_Pro`, please keep that in mind when naming the font group (see *Managing fonts*).

Typical Weblate *Component configuration* for bilingual XLIFF	
Filemask	`localizations/*.xliff`
Monolingual base language file	*Empty*
Template for new translations	`localizations/en-US.xliff`
File format	*XLIFF Translation File*

Typical Weblate *Component configuration* for monolingual XLIFF	
File mask	`localizations/*.xliff`
Monolingual base language file	`localizations/en-US.xliff`
Template for new translations	`localizations/en-US.xliff`
File format	*XLIFF Translation File*

See also:

XLIFF on Wikipedia, XLIFF, font attribute in XLIFF 1.2, maxwidth attribute in XLIFF 1.2

1.10.6 Java properties

Native Java format for translations.

Java properties are usually used as monolingual translations.

Weblate supports ISO-8859-1, UTF-8 and UTF-16 variants of this format. All of them support storing all Unicode characters, it is just differently encoded. In the ISO-8859-1, the Unicode escape sequences are used (for example `zkou\u0161ka`), all others encode characters directly either in UTF-8 or UTF-16.

Note: Loading escape sequences works in UTF-8 mode as well, so please be careful choosing the correct enconding set to match your application needs.

Typical Weblate *Component configuration*	
Filemask	`src/app/Bundle_*.properties`
Monolingual base language file	`src/app/Bundle.properties`
Template for new translations	*Empty*
File format	*Java Properties (ISO-8859-1)*

See also:

Java properties on Wikipedia, Mozilla and Java properties files, *Formats the Java properties file*, *Cleanup translation files*,

1.10.7 Joomla translations

New in version 2.12.

Native Joomla format for translations.

Joomla translations are usually used as monolingual translations.

Typical Weblate *Component configuration*	
Filemask	`language/*/com_foobar.ini`
Monolingual base language file	`language/en-GB/com_foobar.ini`
Template for new translations	*Empty*
File format	*Joomla Language File*

See also:

Specification of Joomla language files, Mozilla and Java properties files

1.10.8 Qt Linguist .ts

Translation format used in Qt based applications.

Qt Linguist files are used as both bilingual and monolingual translations.

Typical Weblate *Component configuration* when using as bilingual	
Filemask	`i18n/app.*.ts`
Monolingual base language file	*Empty*
Template for new translations	`i18n/app.de.ts`
File format	*Qt Linguist Translation File*

Typical Weblate *Component configuration* when using as monolingual	
Filemask	`i18n/app.*.ts`
Monolingual base language file	`i18n/app.en.ts`
Template for new translations	`i18n/app.en.ts`
File format	*Qt Linguist Translation File*

See also:

Qt Linguist manual, Qt .ts, *Bilingual and monolingual formats*

1.10.9 Android string resources

Android specific file format for translating applications.

Android string resources are monolingual, the *Monolingual base language file* file is stored in a different location from the others `res/values/strings.xml`.

Typical Weblate *Component configuration*	
Filemask	`res/values-*/strings.xml`
Monolingual base language file	`res/values/strings.xml`
Template for new translations	*Empty*
File format	*Android String Resource*

See also:

Android string resources documentation, Android string resources

Note: Android *string-array* structures are not currently supported. To work around this, you can break your string arrays apart:

```
<string-array name="several_strings">
    <item>First string</item>
    <item>Second string</item>
</string-array>
```

become:

```
<string-array name="several_strings">
    <item>@string/several_strings_0</item>
    <item>@string/several_strings_1</item>
</string-array>
<string name="several_strings_0">First string</string>
<string name="several_strings_1">Second string</string>
```

The *string-array* that points to the *string* elements should be stored in a different file, and not be made available for translation.

This script may help pre-process your existing strings.xml files and translations: https://gist.github.com/paour/11291062

1.10.10 Apple iOS strings

Apple specific file format for translating applications, used for both iOS and iPhone/iPad application translations.

Apple iOS strings are usually used as bilingual translations.

Typical Weblate *Component configuration*	
Filemask	`Resources/*.lproj/Localizable.strings`
Monolingual base language file	`Resources/en.lproj/Localizable.strings`
Template for new translations	*Empty*
File format	*iOS Strings (UTF-8)*

See also:

Apple "strings files" documentation, Mac OSX strings

1.10.11 PHP strings

PHP translations are usually monolingual, so it is recommended to specify a base file with (what is most often the) English strings.

Example file:

```
<?php
$LANG['foo'] = 'bar';
$LANG['foo1'] = 'foo bar';
$LANG['foo2'] = 'foo bar baz';
$LANG['foo3'] = 'foo bar baz bag';
```

Typical Weblate *Component configuration*	
Filemask	`lang/*/texts.php`
Monolingual base language file	`lang/en/texts.php`
Template for new translations	`lang/en/texts.php`
File format	*PHP strings*

Note: Translate-toolkit currently has some limitations in processing PHP files, so please double check that your files will not get corrupted before using Weblate in a production setup.

Following things are known to be broken:

- Addition of new strings to a translation, every translation has to contain all strings (even if empty).
- Handling of special characters like newlines.

See also:

PHP

1.10.12 JSON files

New in version 2.0.

Changed in version 2.16: Since Weblate 2.16 and with translate-toolkit at-least 2.2.4, nested structure JSON files are supported as well.

JSON format is used mostly for translating applications implemented in JavaScript.

Weblate currently supports several variants of JSON translations:

- Simple key / value files.
- Files with nested keys.
- *JSON i18next files*
- *WebExtension JSON*

JSON translations are usually monolingual, so it is recommended to specify a base file with (what is most often the) English strings.

Example file:

```
{
    "Hello, world!\n": "Ahoj světe!\n",
    "Orangutan has %d banana.\n": "",
    "Try Weblate at https://demo.weblate.org/!\n": "",
    "Thank you for using Weblate.": ""
}
```

Nested files are supported as well (see above for requirements), such a file can look like:

```
{
    "weblate": {
        "hello": "Ahoj světe!\n",
        "orangutan": "",
        "try": "",
        "thanks": ""
    }
}
```

Typical Weblate *Component configuration*	
Filemask	`langs/translation-*.json`
Monolingual base language file	`langs/translation-en.json`
Template for new translations	*Empty*
File format	*JSON nested structure file*

See also:

JSON, *Customize JSON output*, *Cleanup translation files*,

1.10.13 JSON i18next files

Changed in version 2.17: Since Weblate 2.17 and with translate-toolkit at-least 2.2.5, i18next JSON files with plurals are supported as well.

i18next is an internationalization framework written in and for JavaScript. Weblate supports its localization files with features such as plurals.

i18next translations are monolingual, so it is recommended to specify a base file with (what is most often the) English strings.

Note: Weblate supports the i18next JSON v3 format. The v2 and v1 variants are mostly compatible, with exception of how plurals are handled.

Example file:

```
{
  "hello": "Hello",
  "apple": "I have an apple",
  "apple_plural": "I have {{count}} apples",
  "apple_negative": "I have no apples"
}
```

Typical Weblate *Component configuration*	
Filemask	`langs/*.json`
Monolingual base language file	`langs/en.json`
Template for new translations	*Empty*
File format	*i18next JSON file*

See also:

JSON, i18next JSON Format, *Customize JSON output*, *Cleanup translation files*,

1.10.14 WebExtension JSON

New in version 2.16: This is supported since Weblate 2.16 and with translate-toolkit at-least 2.2.4.

File format used when translating extensions for Mozilla Firefox or Google Chromium.

Example file:

```
{
    "hello": {
        "message": "Ahoj světe!\n",
        "description": "Description",
        "placeholders": {
```

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```
            "url" : {
              "content" : "$1",
              "example" : "https://developer.mozilla.org"
            }
        }
    },
    "orangutan": {
        "message": "",
        "description": "Description"
    },
    "try": {
        "message": "",
        "description": "Description"
    },
    "thanks": {
        "message": "",
        "description": "Description"
    }
}
```

Typical Weblate *Component configuration*	
Filemask	`_locales/*/messages.json`
Monolingual base language file	`_locales/en/messages.json`
Template for new translations	*Empty*
File format	*WebExtension JSON file*

See also:

JSON, Google chrome.i18n, Mozilla Extensions Internationalization

1.10.15 .XML resource files

New in version 2.3.

A .XML resource (.resx) file employs a monolingual XML file format used in Microsoft .NET applications. It is [interchangeable with .resw, when using identical syntax to .resx](https://lingohub.com/developers/resource-files/resw-resx-localization).

Typical Weblate *Component configuration*	
Filemask	`Resources/Language.*.resx`
Monolingual base language file	`Resources/Language.resx`
Template for new translations	*Empty*
File format	*.XML resource file*

See also:

.NET Resource files (.resx), *Cleanup translation files*,

1.10.16 CSV files

New in version 2.4.

CSV files can contain a simple list of source and translation. Weblate supports the following files:

- Files with header defining fields (source, translation, location, …). This is the recommended approach, as it is the least error prone.

- Files with two fields—source and translation (in this order), choose *Simple CSV file* as file format
- Files with fields as defined by translate-toolkit: location, source, target, ID, fuzzy, context, translator_comments, developer_comments

Warning: The CSV format currently automatically detects the dialect of the CSV file. In some cases the automatic detection might fail and you will get mixed results. This is especially true for CSV files with newlines in the values. As a workaround it is recommended to omit quoting characters.

Example file:

```
Thank you for using Weblate.,Děkujeme za použití Weblate.
```

Typical Weblate *Component configuration*	
Filemask	`locale/*.csv`
Monolingual base language file	*Empty*
Template for new translations	`locale/en.csv`
File format	*CSV file*

See also:

CSV

1.10.17 YAML files

New in version 2.9.

The plain YAML files with string keys and values.

Example of a YAML file:

```
weblate:
  hello: ""
  orangutan": ""
  try": ""
  thanks": ""
```

Typical Weblate *Component configuration*	
Filemask	`translations/messages.*.yml`
Monolingual base language file	`translations/messages.en.yml`
Template for new translations	*Empty*
File format	*YAML file*

See also:

YAML, *Ruby YAML files*

1.10.18 Ruby YAML files

New in version 2.9.

Ruby i18n YAML files with language as root node.

Example Ruby i18n YAML file:

```
cs:
  weblate:
    hello: ""
    orangutan: ""
    try: ""
    thanks: ""
```

Typical Weblate *Component configuration*	
Filemask	`translations/messages.*.yml`
Monolingual base language file	`translations/messages.en.yml`
Template for new translations	*Empty*
File format	*Ruby YAML file*

See also:

YAML, *YAML files*

1.10.19 DTD files

New in version 2.18.

Example DTD file:

```
<!ENTITY hello "">
<!ENTITY orangutan "">
<!ENTITY try "">
<!ENTITY thanks "">
```

Typical Weblate *Component configuration*	
Filemask	`locale/*.dtd`
Monolingual base language file	`locale/en.dtd`
Template for new translations	*Empty*
File format	*DTD file*

See also:

Mozilla DTD format

1.10.20 Flat XML files

New in version 3.9.

Example of a flat XML file:

```
<?xml version='1.0' encoding='UTF-8'?>
<root>
  <str key="hello_world">Hello World!</str>
  <str key="resource_key">Translated value.</str>
</root>
```

Typical Weblate *Component configuration*	
Filemask	`locale/*.xml`
Monolingual base language file	`locale/en.xml`
Template for new translations	*Empty*
File format	*Flat XML file*

See also:

Flat XML

1.10.21 Windows RC files

New in version 3.0: Experimental support has been added in Weblate 3.0, and is not supported in Python 3.

Warning: This format is still not supported on Python 3 due to bugs in underlying library, see <https://github.com/translate/translate/issues/3204>.

Example Windows RC file:

```
LANGUAGE LANG_CZECH, SUBLANG_DEFAULT

STRINGTABLE DISCARDABLE
BEGIN

IDS_MSG1 "Hello, world!\n"
IDS_MSG2 "Orangutan has %d banana.\n"
IDS_MSG3 "Try Weblate at http://demo.weblate.org/!\n"
IDS_MSG4 "Thank you for using Weblate."
END
```

Typical Weblate *Component configuration*	
Filemask	`lang/*.rc`
Monolingual base language file	`lang/en-US.rc`
Template for new translations	`lang/en-US.rc`
File format	*RC file*

See also:

Windows RC files

1.10.22 App store metadata files

New in version 3.5.

Metadata used for publishing apps in various app stores can be translated. Currently the following tools are compatible:

- Triple-T gradle-play-publisher
- Fastlane
- F-Droid

The metadata consists of several textfiles, which Weblate will present as separate strings to translate.

Typical Weblate *Component configuration*	
Filemask	`fastlane/android/metadata/*`
Monolingual base language file	`fastlane/android/metadata/en-US`
Template for new translations	`fastlane/android/metadata/en-US`
File format	*App store metadata files*

1.10.23 Subtitle files

New in version 3.7.

Weblate can translate various subtile files:

- SubRip subtitle file (`*.srt`)
- MicroDVD subtitle file (`*.sub`)
- Advanced Substation Alpha subtitles file (`*.ass`)
- Substation Alpha subtitle file (`*.ssa`)

Typical Weblate *Component configuration*	
Filemask	`path/*.srt`
Monolingual base language file	`path/en.srt`
Template for new translations	`path/en.srt`
File format	*SubRip subtitle file*

See also:

Subtitles

1.10.24 Excel Open XML

New in version 3.2.

Excel Open XML (.xlsx) files can be imported and exported.

When uploading XLSX files for translation, be aware that only the active worksheet is considered, and there must be at least a column called `source` (which contains the source string) and a column called `target` (which contains the translation). Additionally there should be the column called `context` (which contains the context path of the translation string). If you use the XLSX download for exporting the translations into an Excel workbook, you already get a file with the correct file format.

1.10.25 Others

Most formats supported by translate-toolkit which support serializing can be easily supported, but they did not (yet) receive any testing. In most cases some thin layer is needed in Weblate to hide differences in behavior of different translate-toolkit storages.

See also:

Translation Related File Formats

1.10.26 Adding new translations

Changed in version 2.18: In versions prior to 2.18 the behaviour of adding new translations was file format specific.

Weblate can automatically start new translation for all of the file formats.

Some formats expect to start with an empty file and only translated strings to be included (for example *Android string resources*), while others expect to have all keys present (for example *GNU gettext*). In some situations this really doesn't depend on the format, but rather on the framework you use to handle the translation (for example with *JSON files*).

When you specify *Template for new translations* in *Component configuration*, Weblate will use this file to start new translations. Any exiting translations will be removed from the file when doing so.

When *Template for new translations* is empty and the file format supports it, an empty file is created where new strings will be added once they are translated.

The *Language code style* allows you to customize language code used in generated filenames:

Default based on the file format Dependent on file format, for most of them POSIX is used.

POSIX style using underscore as a separator Typically used by gettext and related tools, produces language codes like *pt_BR*.

BCP style using hyphen as a separator Typically used on web platforms, produces language codes like *pt-BR*.

Android style Only used in Android apps, produces language codes like *pt-rBR*.

Java style User by Java—mostly BCP with legacy codes for Chinese.

Note: Weblate recognizes any of these when parsing translation files, the above settings only influences how new files are created.

1.10.27 Read only strings

New in version 3.10.

Read-only strings from translation files will be included, but can not be edited in Weblate. This feature is natively supported by few formats (*XLIFF* and *Android string resources*), but can be emulated in others by adding a `read-only` flag, see *Customizing behavior*.

1.11 Version control integration

Weblate currently supports *Git* (with extended support for *GitHub*, *Gerrit* and *Subversion*) and *Mercurial* as version control backends.

1.11.1 Accessing repositories

The VCS repository you want to use has to be accessible to Weblate. With a publicly available repository you just need to enter the correct URL (for example `https://github.com/WeblateOrg/weblate.git`), but for private repositories or for push URLs the setup is more complex and requires authentication.

Accessing repositories from Hosted Weblate

For Hosted Weblate there is a dedicated push user registered on GitHub, Bitbucket and GitLab (with username *weblate* named *Weblate push user*). You need to add this user as a collaborator and give it appropriate permission to your repository (read only is okay for cloning, write is required for pushing). Depending on service and your organization settings, this happens immediately or requires confirmation from Weblate side. The invitations on GitHub are accepted automatically within five minutes, on other services manual processing is needed, so please be patient.

Once the *weblate* user is added, you can configure *Source code repository* and *Repository push URL* using SSH protocol (for example `git@github.com:WeblateOrg/weblate.git`).

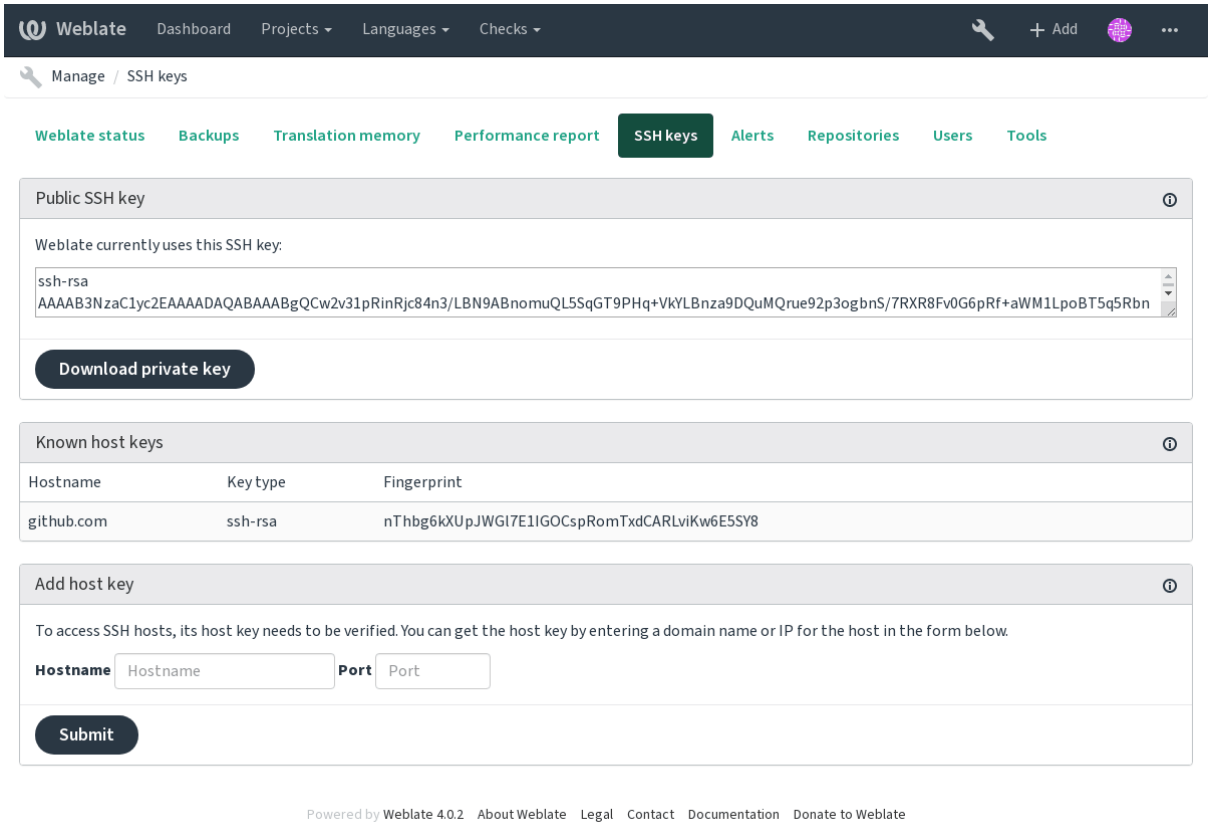
SSH repositories

The most frequently used method to access private repositories is based on SSH. Authorize the public Weblate SSH key (see *Weblate SSH key*) to access the upstream repository this way.

Warning: On GitHub, each key can be added to only one repository, see *GitHub repositories* and *Accessing repositories from Hosted Weblate*.

Weblate also stores the host key fingerprint upon first connection, and fails to connect to the host should it be changed later (see *Verifying SSH host keys*).

In case adjustment is needed, do so from the Weblate admin interface:



Weblate SSH key

The Weblate public key is visible to all users browsing the *About* page.

Admins can generate or display the public key currently used by Weblate in the (from *SSH keys*) on the admin interface landing page.

Note: The corresponding private SSH key can not currently have a password, so make sure it is well protected.

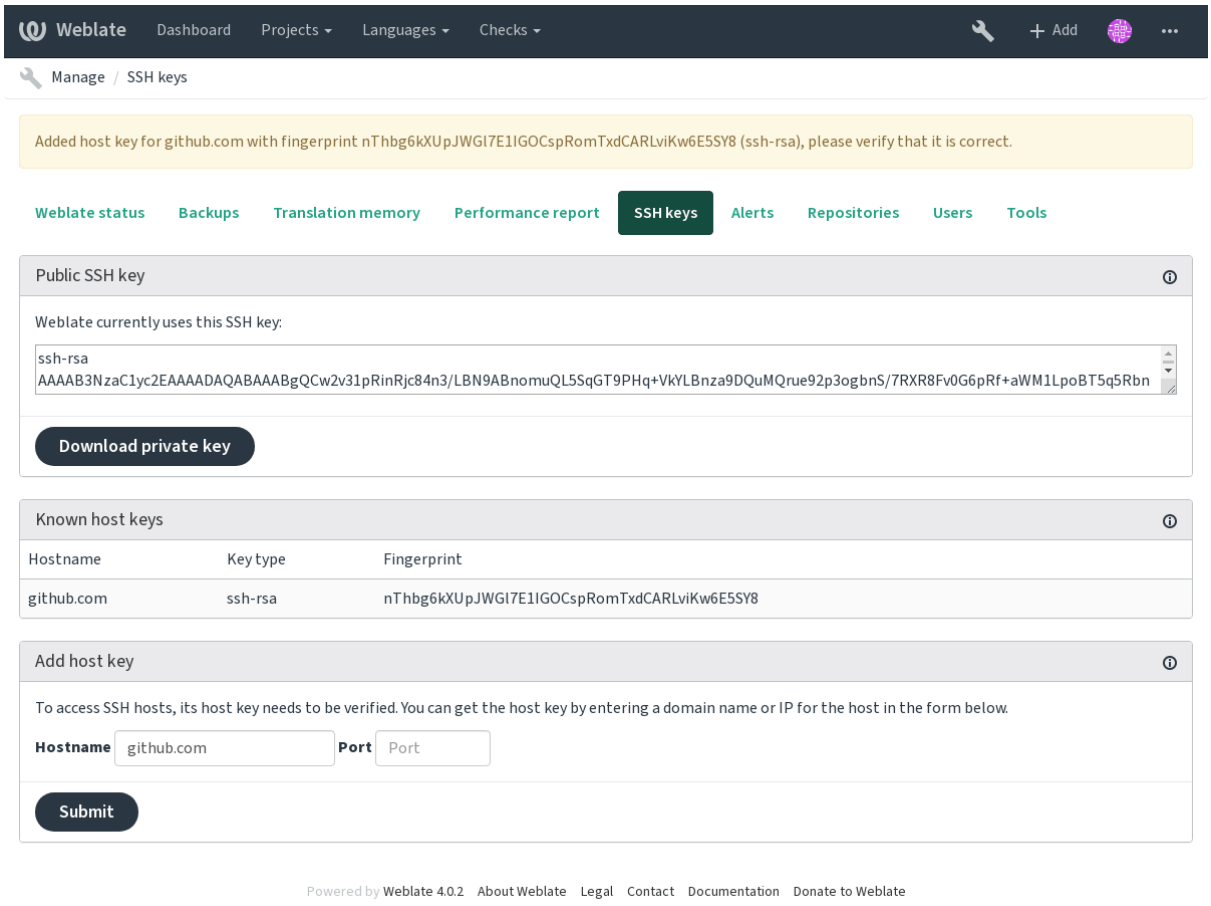
Hint: Make a backup of the generated private Weblate SSH key.

Verifying SSH host keys

Weblate automatically remembers the SSH host keys on first access and remembers them for further use.

In case you want to verify them before connecting to the repository, verify the SSH host keys of the servers you are going to access in *Add host key*, from the same section of the admin interface. Enter the

hostname you are going to access (e.g. `gitlab.com`), and press *Submit*. Verify its fingerprint matches the server you added. They are shown in the confirmation message:



GitHub repositories

Access via SSH is possible (see *SSH repositories*), but in case you need to access more than one repository, you will hit a GitHub limitation on allowed SSH key usage (since one key can be used only for one repository).

For smaller deployments, use HTTPS authentication with a personal access token and your GitHub account, see Creating an access token for command-line use.

For bigger setups, it is usually better to create a dedicated user for Weblate, assign it the public SSH key generated in Weblate (see *Weblate SSH key*) and grant it access to all the repositories you want to translate. This approach is also used for Hosted Weblate, there is dedicated *weblate* user for that.

See also:

Accessing repositories from Hosted Weblate

Weblate internal URLs

To share one repository between different components you can use a special URL like `weblate://project/component`. This way, the component will share the VCS repository configuration with the referenced component, and the VCS repository will be stored just once on the disk.

HTTPS repositories

To access protected HTTPS repositories, include the username and password in the URL. Don't worry, Weblate will strip this info when the URL is shown to users (if even allowed to see the repository URL at all).

For example the GitHub URL with authentication added might look like: `https://user:your_access_token@github.com/WeblateOrg/weblate.git`.

Note: If you username or password contains special characters, those have to be URL encoded, for example `https://user%40example.com:%24password%23@bitbucket.org/…`.

Using proxy

If you need to access HTTP/HTTPS VCS repositories using a proxy server, configure the VCS to use it.

This can be done using the `http_proxy`, `https_proxy`, and `all_proxy` environment variables, (as described in the cURL documentation) or by enforcing it in the VCS configuration, for example:

```
git config --global http.proxy http://user:password@proxy.example.com:80
```

Note: The proxy configuration needs to be done under user running Weblate (see also *Filesystem permissions*) and with `HOME=$DATA_DIR/home` (see *DATA_DIR*), otherwise Git executed by Weblate will not use it.

See also:

The cURL manpage, Git config documentation

1.11.2 Git

See also:

See *Accessing repositories* for info on how to access different kinds of repositories.

Git with force push

This behaves exactly like Git itself, the only difference being that it always force pushes. This is intended only in the case of using a seperate repository for translations.

Warning: Use with caution, as this easily leads to lost commits in your upstream repository.

Customizing Git configuration

Weblate invokes all VCS commands with `HOME=$DATA_DIR/home` (see *DATA_DIR*), therefore editing the user configuration needs to be done in `DATA_DIR/home/.git`.

Git remote helpers

You can also use Git remote helpers for additionally supporting other version control systems, but be prepared to debug problems this may lead to.

At this time, helpers for Bazaar and Mercurial are available within separate repositories on GitHub: git-remote-hg and git-remote-bzr. Download them manually and put somewhere in your search path (for example `~/bin`). Make sure you have the corresponding version control systems installed.

Once you have these installed, such remotes can be used to specify a repository in Weblate.

To clone the `gnuhello` project from Launchpad using Bazaar:

```
bzr::lp:gnuhello
```

For the `hello` repository from selenic.com using Mercurial:

```
hg::http://selenic.com/repo/hello
```

Warning: The inconvenience of using Git remote helpers is for example with Mercurial, the remote helper sometimes creates a new tip when pushing changes back.

1.11.3 GitHub

New in version 2.3.

This adds a thin layer atop *Git* using the hub tool to allow pushing translation changes as pull requests, instead of pushing directly to the repository.

Git pushes changes directly to a repository, while *GitHub* creates pull requests. The latter is not needed for merely accessing Git repositories.

Pushing changes to GitHub as pull requests

If not wanting to push translations to a GitHub repository, they can be sent as either one or many pull requests instead.

Configure the hub command line tool and set *GITHUB_USERNAME* for this to work.

See also:

GITHUB_USERNAME, *Setting up hub* for configuration instructions

Setting up hub

Pushing changes to GitHub as pull requests requires a configured hub installation on your server. Follow the installation instructions at https://hub.github.com/ use hub to finish the configuration, for example:

```
# Use DATA_DIR as configured in Weblate settings.py, it is /app/data in the Docker
HOME=${DATA_DIR}/home hub clone octocat/Spoon-Knife
```

The hub will ask you for your GitHub credentials, retrieve a token and store it in `~/.config/hub`. This file has to be readable by the user running Weblate.

Note: Use the username you configured *hub* with, as *GITHUB_USERNAME* (*WEBLATE_GITHUB_USERNAME* for the Docker image).

1.11.4 GitLab

New in version 3.9.

This just adds a thin layer atop *Git* using the lab tool to allow pushing translation changes as merge requests instead of pushing directly to the repository.

There is no need to use this access Git repositories, ordinary *Git* works the same, the only difference is how pushing to a repository is handled. With *Git* changes are pushed directly to the repository, while *GitLab* creates merge request.

Pushing changes to GitLab as merge requests

If not wanting to push translations to a GitLab repository, they can be sent as either one or many merge requests instead.

Configure the lab command line tool and set *GITLAB_USERNAME* for this to work.

See also:

GITLAB_USERNAME, *Setting up Lab* for configuration instructions

Setting up Lab

Pushing changes to GitLab as merge requests requires a configured lab installation on your server. Follow the installation instructions at lab and run it without any arguments to finish the configuration, for example:

```
# Use DATA_DIR as configured in Weblate settings.py, it is /app/data in the Docker
$ HOME=${DATA_DIR}/home lab
Enter GitLab host (default: https://gitlab.com):
Create a token here: https://gitlab.com/profile/personal_access_tokens
Enter default GitLab token (scope: api):
(Config is saved to ~/.config/lab.hcl)
```

The lab will ask you for your GitLab access token, retrieve it and store it in `~/.config/lab.hcl`. The file has to be readable by the user running Weblate.

Note: Use the username you configured *lab* with, as *GITLAB_USERNAME* (*WEBLATE_GITLAB_USERNAME* for the Docker image).

1.11.5 Gerrit

New in version 2.2.

Adds a thin layer atop *Git* using the git-review tool to allow pushing translation changes as Gerrit review requests, instead of pushing a directory to the repository.

The Gerrit documentation has the details on the configuration necessary to set up such repositories.

1.11.6 Mercurial

New in version 2.1.

Mercurial is another VCS you can use directly in Weblate.

Note: It should work with any Mercurial version, but there are sometimes incompatible changes to the command-line interface which breaks Weblate integration.

See also:

See *Accessing repositories* for info on how to access different kinds of repositories.

1.11.7 Subversion

New in version 2.8.

Weblate uses git-svn to interact with subversion repositories. It is a Perl script that lets subversion be used by a Git client, enabling users to maintain a full clone of the internal repository and commit locally.

Note: Weblate tries to detect Subversion repository layout automatically - it supports both direct URLs for branch or repositories with standard layout (branches/, tags/ and trunk/). More info about this is to be foud in the git-svn documentation. If your repository does not have a standard layout and you encounter erros, try including the branch name in the repository URL and leaving branch empty.

Changed in version 2.19: Before this, there was only support for standard layout repositories.

Subversion credentials

Weblate expects you to have accepted the certificate up-front and if needed, your credentials. It will look to insert them into the DATA_DIR directory. Accept the certificate by using *svn* once with the *$HOME* environment variable set to the DATA_DIR:

```
# Use DATA_DIR as configured in Weblate settings.py, it is /app/data in the Docker
HOME=${DATA_DIR}/home svn co https://svn.example.com/example
```

See also:

DATA_DIR

1.11.8 Local files

New in version 3.8.

Weblate can also operate without a remote VCS. The initial translations are imported by uploading them. Later you can replace individual files by file upload, or add translation strings directly from Weblate (currently available only for monolingual translations).

In the background Weblate creates a Git repository for you and all changes are tracked in in. In case you later decide to use a VCS to store the translations, you already have a repo within Weblate can base your integration on.

1.12 Weblate's Web API

1.12.1 REST API

New in version 2.6: The API is available since Weblate 2.6.

The API is accessible on the `/api/` URL and it is based on Django REST framework. You can use it directly or by *Weblate Client*.

Authentication and generic parameters

The public project API is available without authentication, though unauthenticated requests are heavily throttled (by default to 100 requests per day), so it is recommended to use authentication. The authentication uses a token, which you can get in your profile. Use it in the `Authorization` header:

ANY /

Generic request behaviour for the API, the headers, status codes and parameters here apply to all endpoints as well.

Query Parameters

- **format** – Response format (overrides Accept). Possible values depends on REST framework setup, by default `json` and `api` are supported. The latter provides web browser interface for API.

Request Headers

- Accept – the response content type depends on Accept header
- Authorization – optional token to authenticate

Response Headers

- Content-Type – this depends on Accept header of request
- Allow – list of allowed HTTP methods on object

Response JSON Object

- **detail** (*string*) – verbose description of failure (for HTTP status codes other than 200 OK)
- **count** (*int*) – total item count for object lists
- **next** (*string*) – next page URL for object lists
- **previous** (*string*) – previous page URL for object lists
- **results** (*array*) – results for object lists
- **url** (*string*) – URL to access this resource using API
- **web_url** (*string*) – URL to access this resource using web browser

Status Codes

- 200 OK – when request was correctly handled
- 400 Bad Request – when form parameters are missing
- 403 Forbidden – when access is denied
- 429 Too Many Requests – when throttling is in place

Authentication examples

Example request:

```
GET /api/ HTTP/1.1
Host: example.com
Accept: application/json, text/javascript
Authorization: Token YOUR-TOKEN
```

Example response:

```
HTTP/1.0 200 OK
Date: Fri, 25 Mar 2016 09:46:12 GMT
Server: WSGIServer/0.1 Python/2.7.11+
Vary: Accept, Accept-Language, Cookie
X-Frame-Options: SAMEORIGIN
Content-Type: application/json
Content-Language: en
Allow: GET, HEAD, OPTIONS

{
    "projects":"http://example.com/api/projects/",
    "components":"http://example.com/api/components/",
    "translations":"http://example.com/api/translations/",
    "languages":"http://example.com/api/languages/"
}
```

CURL example:

```
curl \
    -H "Authorization: Token TOKEN" \
    https://example.com/api/
```

Passing Parameters Examples

For the POST method the parameters can be specified either as form submission (*application/x-www-form-urlencoded*) or as JSON (*application/json*).

Form request example:

```
POST /api/projects/hello/repository/ HTTP/1.1
Host: example.com
Accept: application/json
Content-Type: application/x-www-form-urlencoded
Authorization: Token TOKEN

operation=pull
```

JSON request example:

```
POST /api/projects/hello/repository/ HTTP/1.1
Host: example.com
Accept: application/json
Content-Type: application/json
Authorization: Token TOKEN
Content-Length: 20

{"operation":"pull"}
```

CURL example:

```
curl \
    -d operation=pull \
    -H "Authorization: Token TOKEN" \
    http://example.com/api/components/hello/weblate/repository/
```

CURL JSON example:

```
curl \
    --data-binary '{"operation":"pull"}' \
    -H "Content-Type: application/json" \
    -H "Authorization: Token TOKEN" \
    http://example.com/api/components/hello/weblate/repository/
```

Rate limiting

The API requests are rate limited; the default configuration limits it to 100 requests per day for anonymous users and 5000 requests per hour for authenticated users.

Rate limiting can be adjusted in the `settings.py`; see Throttling in Django REST framework documentation for more details how to configure it.

API Entry Point

`GET /api/`
The API root entry point.

Example request:

```
GET /api/ HTTP/1.1
Host: example.com
Accept: application/json, text/javascript
Authorization: Token YOUR-TOKEN
```

Example response:

```
HTTP/1.0 200 OK
Date: Fri, 25 Mar 2016 09:46:12 GMT
Server: WSGIServer/0.1 Python/2.7.11+
Vary: Accept, Accept-Language, Cookie
X-Frame-Options: SAMEORIGIN
Content-Type: application/json
Content-Language: en
Allow: GET, HEAD, OPTIONS

{
    "projects":"http://example.com/api/projects/",
    "components":"http://example.com/api/components/",
    "translations":"http://example.com/api/translations/",
    "languages":"http://example.com/api/languages/"
}
```

Users

New in version 4.0.

`GET /api/users/`
Returns a list of users if you have permissions to see manage users. If not, then you get to see only your own details.

See also:

Users object attributes are documented at *GET /api/users/(str:username)/*.

`GET /api/users/(str: username)/`
Returns information about users.

Parameters

- **username** (*string*) – User's username

Response JSON Object

- **username** (*string*) – username of a user
- **full_name** (*string*) – full name of a user
- **email** (*string*) – email of a user
- **is_superuser** (*boolean*) – whether the user is a super user
- **is_active** (*boolean*) – whether the user is active
- **date_joined** (*string*) – date the user is created
- **groups** (*array*) – link to associated groups; see *GET /api/groups/(int:id)/*

`PUT /api/users/(str: username)/`
Changes the user parameters.

Parameters

- **username** (*string*) – User's username

Response JSON Object

- **username** (*string*) – username of a user
- **full_name** (*string*) – full name of a user
- **email** (*string*) – email of a user
- **is_superuser** (*boolean*) – whether the user is a super user
- **is_active** (*boolean*) – whether the user is active
- **date_joined** (*string*) – date the user is created

`PATCH /api/users/(str: username)/`
Changes the user parameters.

Parameters

- **username** (*string*) – User's username

Response JSON Object

- **username** (*string*) – username of a user
- **full_name** (*string*) – full name of a user
- **email** (*string*) – email of a user
- **is_superuser** (*boolean*) – whether the user is a super user
- **is_active** (*boolean*) – whether the user is active
- **date_joined** (*string*) – date the user is created

`DELETE /api/users/(str: username)/`
Deletes all user information and mark the user inactive.

Parameters

- **username** (*string*) – User's username

`POST /api/users/(str: username)/groups/`
Associate groups with a user.

Parameters

- **username** (*string*) – User's username

Form Parameters

- **string group_id** – The unique group ID

Groups

New in version 4.0.

GET /api/groups/
Returns a list of groups if you have permissions to see manage groups. If not, then you get to see only the groups the user is a part of.

See also:

Group object attributes are documented at *GET /api/groups/(int:id)/*.

GET /api/groups/(int: *id*)/
Returns information about group.

Parameters

- **id** (*int*) – Group's ID

Response JSON Object

- **name** (*string*) – name of a group
- **project_selection** (*int*) – integer corresponding to group of projects
- **language_selection** (*int*) – integer corresponding to group of languages
- **roles** (*array*) – link to associated roles; see *GET /api/roles/(int:id)/*
- **projects** (*array*) – link to associated projects; see *GET /api/projects/(string:project)/*
- **components** (*array*) – link to associated components; see *GET /api/components/(string:project)/(string:component)/*
- **componentlist** (*array*) – link to associated componentlist; see *GET /api/component-lists/(str:slug)/*

PUT /api/groups/(int: *id*)/
Changes the group parameters.

Parameters

- **id** (*int*) – Group's ID

Response JSON Object

- **name** (*string*) – name of a group
- **project_selection** (*int*) – integer corresponding to group of projects
- **language_selection** (*int*) – integer corresponding to group of Languages

PATCH /api/groups/(int: *id*)/
Changes the group parameters.

Parameters

- **id** (*int*) – Group's ID

Response JSON Object

- **name** (*string*) – name of a group
- **project_selection** (*int*) – integer corresponding to group of projects
- **language_selection** (*int*) – integer corresponding to group of languages

`DELETE /api/groups/(int: id)/`
Deletes the group.

Parameters

- **id** (*int*) – Group's ID

`POST /api/groups/(int: id)/roles/`
Associate roles with a group.

Parameters

- **id** (*int*) – Group's ID

Form Parameters

- **string role_id** – The unique role ID

`POST /api/groups/(int: id)/components/`
Associate components with a group.

Parameters

- **id** (*int*) – Group's ID

Form Parameters

- **string component_id** – The unique component ID

`DELETE /api/groups/(int: id)/components/`
`int: component_id` Delete component from a group.

Parameters

- **id** (*int*) – Group's ID
- **component_id** (*int*) – The unique component ID

`POST /api/groups/(int: id)/projects/`
Associate projects with a group.

Parameters

- **id** (*int*) – Group's ID

Form Parameters

- **string project_id** – The unique project ID

`DELETE /api/groups/(int: id)/projects/`
`int: project_id` Delete project from a group.

Parameters

- **id** (*int*) – Group's ID
- **project_id** (*int*) – The unique project ID

`POST /api/groups/(int: id)/languages/`
Associate languages with a group.

Parameters

- **id** (*int*) – Group's ID

Form Parameters

- **string language_code** – The unique language code

`DELETE /api/groups/(int: id)/languages/`
`string: language_code` Delete language from a group.

Parameters

- **id** (*int*) – Group's ID

- **language_code** (*string*) – The unique language code

`POST /api/groups/(int: id)/componentlist/`
Associate componentlist with a group.

Parameters

- **id** (*int*) – Group's ID

Form Parameters

- **string component_list_id** – The unique componentlist ID

`DELETE /api/groups/(int: id)/componentlist/`
`int: component_list_id` Delete componentlist from a group.

Parameters

- **id** (*int*) – Group's ID
- **component_list_id** (*int*) – The unique componentlist ID

Roles

`GET /api/roles/`
Returns a list of all roles associated with user. If user is superuser, then list of all existing roles is returned.

See also:

Roles object attributes are documented at *GET /api/roles/(int:id)/*.

`GET /api/roles/(int: id)/`
Returns information about a role.

Parameters

- **id** (*int*) – Role ID

Response JSON Object

- **name** (*string*) – Role name
- **permissions** (*array*) – list of codenames of permissions

Example JSON data:

```
{
    "name": "Access repository",
    "permissions": [
        "vcs.access",
        "vcs.view"
    ],
    "url": "http://example.com/api/roles/1/",
}
```

`PUT /api/roles/(int: id)/`
Changes the role parameters.

Parameters

- **id** (*int*) – Role's ID

Response JSON Object

- **name** (*string*) – Role name
- **permissions** (*array*) – list of codenames of permissions

`PATCH /api/roles/(int: id)/`
Changes the role parameters.

Parameters

- **id** (*int*) – Role's ID

Response JSON Object

- **name** (*string*) – Role name
- **permissions** (*array*) – list of codenames of permissions

`DELETE /api/roles/(int: id)/`
Deletes the role.

Parameters

- **id** (*int*) – Role's ID

Languages

`GET /api/languages/`
Returns a list of all languages.

See also:

Language object attributes are documented at *GET /api/languages/(string:language)/*.

`GET /api/languages/(string: language)/`
Returns information about a language.

Parameters

- **language** (*string*) – Language code

Response JSON Object

- **code** (*string*) – Language code
- **direction** (*string*) – Text direction

Example JSON data:

```
{
    "code": "en",
    "direction": "ltr",
    "name": "English",
    "url": "http://example.com/api/languages/en/",
    "web_url": "http://example.com/languages/en/"
}
```

Projects

`GET /api/projects/`
Returns a list of all projects.

See also:

Project object attributes are documented at *GET /api/projects/(string:project)/*.

`POST /api/projects/`
New in version 3.9.

Creates a new project.

Parameters

- **name** (*string*) – Project name
- **slug** (*string*) – Project slug
- **web** (*string*) – Project website
- **source_language** (*string*) – Project source language code (optional)

`GET /api/projects/(string: project)/`
Returns information about a project.

Parameters

- **project** (*string*) – Project URL slug

Response JSON Object

- **name** (*string*) – project name
- **slug** (*string*) – project slug
- **source_language** (*object*) – source language object; see *GET /api/languages/(string:language)/*
- **web** (*string*) – project website
- **components_list_url** (*string*) – URL to components list; see *GET /api/projects/(string:project)/components/*
- **repository_url** (*string*) – URL to repository status; see *GET /api/projects/(string:project)/repository/*
- **changes_list_url** (*string*) – URL to changes list; see *GET /api/projects/(string:project)/changes/*

Example JSON data:

```
{
    "name": "Hello",
    "slug": "hello",
    "source_language": {
        "code": "en",
        "direction": "ltr",
        "name": "English",
        "url": "http://example.com/api/languages/en/",
        "web_url": "http://example.com/languages/en/"
    },
    "url": "http://example.com/api/projects/hello/",
    "web": "https://weblate.org/",
    "web_url": "http://example.com/projects/hello/"
}
```

`DELETE /api/projects/(string: project)/`
New in version 3.9.

Deletes a project.

Parameters

- **project** (*string*) – Project URL slug

`GET /api/projects/(string: project)/changes/`
Returns a list of project changes.

Parameters

- **project** (*string*) – Project URL slug

Response JSON Object

- **results** (*array*) – array of component objects; see *GET /api/changes/(int:id)/*

GET /api/projects/(string: *project*)/repository/

Returns information about VCS repository status. This endpoint contains only an overall summary for all repositories for the project. To get more detailed status use *GET /api/components/(string:project)/(string:component)/repository/*.

Parameters

- **project** (*string*) – Project URL slug

Response JSON Object

- **needs_commit** (*boolean*) – whether there are any pending changes to commit
- **needs_merge** (*boolean*) – whether there are any upstream changes to merge
- **needs_push** (*boolean*) – whether there are any local changes to push

Example JSON data:

```
{
    "needs_commit": true,
    "needs_merge": false,
    "needs_push": true
}
```

POST /api/projects/(string: *project*)/repository/

Performs given operation on the VCS repository.

Parameters

- **project** (*string*) – Project URL slug

Request JSON Object

- **operation** (*string*) – Operation to perform: one of `push`, `pull`, `commit`, `reset`, `cleanup`

Response JSON Object

- **result** (*boolean*) – result of the operation

CURL example:

```
curl \
    -d operation=pull \
    -H "Authorization: Token TOKEN" \
    http://example.com/api/components/hello/weblate/repository/
```

JSON request example:

```
POST /api/projects/hello/repository/ HTTP/1.1
Host: example.com
Accept: application/json
Content-Type: application/json
Authorization: Token TOKEN
Content-Length: 20

{"operation":"pull"}
```

JSON response example:

```
HTTP/1.0 200 OK
Date: Tue, 12 Apr 2016 09:32:50 GMT
Server: WSGIServer/0.1 Python/2.7.11+
Vary: Accept, Accept-Language, Cookie
X-Frame-Options: SAMEORIGIN
Content-Type: application/json
Content-Language: en
Allow: GET, POST, HEAD, OPTIONS

{"result":true}
```

GET /api/projects/(string: *project*)/components/
Returns a list of translation components in the given project.

Parameters

- **project** (*string*) – Project URL slug

Response JSON Object

- **results** (*array*) – array of component objects; see *GET /api/components/(string:project)/(string:component)/*

POST /api/projects/(string: *project*)/components/
New in version 3.9.

Creates translation components in the given project.

Parameters

- **project** (*string*) – Project URL slug

GET /api/projects/(string: *project*)/languages/
Returns paginated statistics for all languages within a project.

New in version 3.8.

Parameters

- **project** (*string*) – Project URL slug

Response JSON Object

- **results** (*array*) – array of translation statistics objects
- **language** (*string*) – language name
- **code** (*string*) – language code
- **total** (*int*) – total number of strings
- **translated** (*int*) – number of translated strings
- **translated_percent** (*float*) – percentage of translated strings
- **total_words** (*int*) – total number of words
- **translated_words** (*int*) – number of translated words
- **words_percent** (*float*) – percentage of translated words

GET /api/projects/(string: *project*)/statistics/
Returns statistics for a project.

New in version 3.8.

Parameters

- **project** (*string*) – Project URL slug

Response JSON Object

- **total** (*int*) – total number of strings
- **translated** (*int*) – number of translated strings
- **translated_percent** (*float*) – percentage of translated strings
- **total_words** (*int*) – total number of words
- **translated_words** (*int*) – number of translated words
- **words_percent** (*float*) – percentage of translated words

Components

GET /api/components/
Returns a list of translation components.

See also:

Component object attributes are documented at *GET /api/components/(string:project)/(string:component)/*.

GET /api/components/(string: *project*)**/**
string: *component***/** Returns information about translation component.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

Response JSON Object

- **branch** (*string*) – VCS repository branch
- **file_format** (*string*) – file format of translations
- **filemask** (*string*) – mask of translation files in the repository
- **git_export** (*string*) – URL of the exported VCS repository with translations
- **license** (*string*) – license for translations
- **license_url** (*string*) – URL of license for translations
- **name** (*string*) – name of component
- **slug** (*string*) – slug of component
- **project** (*object*) – the translation project; see *GET /api/projects/(string:project)/*
- **repo** (*string*) – VCS repository URL
- **template** (*string*) – base file for monolingual translations
- **new_base** (*string*) – base file for adding new translations
- **vcs** (*string*) – version control system
- **repository_url** (*string*) – URL to repository status; see *GET /api/components/(string:project)/(string:component)/repository/*
- **translations_url** (*string*) – URL to translations list; see *GET /api/components/(string:project)/(string:component)/translations/*
- **lock_url** (*string*) – URL to lock status; see *GET /api/components/(string:project)/(string:component)/lock/*
- **changes_list_url** (*string*) – URL to changes list; see *GET /api/components/(string:project)/(string:component)/changes/*

- **push** (*string*) – URL of a push repository

Example JSON data:


```
{
    "branch": "master",
    "file_format": "po",
    "filemask": "po/*.po",
    "git_export": "",
    "license": "",
    "license_url": "",
    "name": "Weblate",
    "slug": "weblate",
    "project": {
        "name": "Hello",
        "slug": "hello",
        "source_language": {
            "code": "en",
            "direction": "ltr",
            "name": "English",
            "url": "http://example.com/api/languages/en/",
            "web_url": "http://example.com/languages/en/"
        },
        "url": "http://example.com/api/projects/hello/",
        "web": "https://weblate.org/",
        "web_url": "http://example.com/projects/hello/"
    },
    "repo": "file:///home/nijel/work/weblate-hello",
    "template": "",
    "new_base": "",
    "url": "http://example.com/api/components/hello/weblate/",
    "vcs": "git",
    "web_url": "http://example.com/projects/hello/weblate/"
}
```


`DELETE /api/components/(string: project)/`
`string: component/` New in version 3.9.

Deletes a component.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

`GET /api/components/(string: project)/`
`string: component/changes/` Returns a list of component changes.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

Response JSON Object

- **results** (*array*) – array of component objects; see *GET /api/changes/(int:id)/*

`GET /api/components/(string: project)/`
`string: component/screenshots/` Returns a list of component screenshots.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

Response JSON Object

- **results** (*array*) – array of component screenshots; see *GET /api/screenshots/(int:id)/*

`GET /api/components/(string: project)/`
`string: component/lock/` Returns component lock status.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

Response JSON Object

- **locked** (*boolean*) – whether component is locked for updates

Example JSON data:

```
{
    "locked": false
}
```

`POST /api/components/(string: project)/`
`string: component/lock/` Sets component lock status.

Response is same as *GET /api/components/(string:project)/(string:component)/lock/*.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

Request JSON Object

- **lock** – Boolean whether to lock or not.

`GET /api/components/(string: project)/`
`string: component/repository/` Returns information about VCS repository status.

The response is same as for *GET /api/projects/(string:project)/repository/*.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

Response JSON Object

- **needs_commit** (*boolean*) – whether there are any pending changes to commit
- **needs_merge** (*boolean*) – whether there are any upstream changes to merge
- **needs_push** (*boolean*) – whether there are any local changes to push
- **remote_commit** (*string*) – Remote commit information
- **status** (*string*) – VCS repository status as reported by VCS
- **merge_failure** – Text describing merge failure or null if there is none

`POST /api/components/(string: project)/`
`string: component/repository/` Performs the given operation on a VCS repository.

See *POST /api/projects/(string:project)/repository/* for documentation.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

Request JSON Object

- **operation** (*string*) – Operation to perform: one of `push`, `pull`, `commit`, `reset`, `cleanup`

Response JSON Object

- **result** (*boolean*) – result of the operation

`GET /api/components/(string: project)/`
`string: component/monolingual_base/` Downloads base file for monolingual translations.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

`GET /api/components/(string: project)/`
`string: component/new_template/` Downloads template file for new translations.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

`GET /api/components/(string: project)/`
`string: component/translations/` Returns a list of translation objects in the given component.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

Response JSON Object

- **results** (*array*) – array of translation objects; see *GET /api/translations/(string:project)/(string:component)/(string:language)/*

`POST /api/components/(string: project)/`
`string: component/translations/` Creates new translation in the given component.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

Response JSON Object

- **language_code** (*string*) – translation language code; see *GET /api/languages/(string:language)/*

`GET /api/components/(string: project)/`
`string: component/statistics/` Returns paginated statistics for all translations within component.

New in version 2.7.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug

Response JSON Object

- **results** (*array*) – array of translation statistics objects; see *GET /api/translations/(string:project)/(string:component)/(string:language)/statistics/*

Translations

GET /api/translations/
Returns a list of translations.

See also:

Translation object attributes are documented at *GET /api/translations/(string:project)/(string:component)/(string:language)/*.

GET /api/translations/(string: *project*)**/**
string: *component*/**string:** *language*/ Returns information about a translation.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug
- **language** (*string*) – Translation language code

Response JSON Object

- **component** (*object*) – component object; see *GET /api/components/(string:project)/(string:component)/*
- **failing_checks** (*int*) – number of strings failing check
- **failing_checks_percent** (*float*) – percentage of strings failing check
- **failing_checks_words** (*int*) – number of words with failing check
- **filename** (*string*) – translation filename
- **fuzzy** (*int*) – number of strings marked for review
- **fuzzy_percent** (*float*) – percentage of strings marked for review
- **fuzzy_words** (*int*) – number of words marked for review
- **have_comment** (*int*) – number of strings with comment
- **have_suggestion** (*int*) – number of strings with suggestion
- **is_template** (*boolean*) – whether translation is monolingual base
- **language** (*object*) – source language object; see *GET /api/languages/(string:language)/*
- **language_code** (*string*) – language code used in the repository; this can be different from language code in the language object
- **last_author** (*string*) – name of last author
- **last_change** (*timestamp*) – last change timestamp
- **revision** (*string*) – hash revision of the file
- **share_url** (*string*) – URL for sharing leading to engage page
- **total** (*int*) – total number of strings
- **total_words** (*int*) – total number of words
- **translate_url** (*string*) – URL for translating
- **translated** (*int*) – number of translated strings

- **translated_percent** (*float*) – percentage of translated strings
- **translated_words** (*int*) – number of translated words
- **repository_url** (*string*) – URL to repository status; see *GET /api/translations/(string:project)/(string:component)/(string:language)/repository/*
- **file_url** (*string*) – URL to file object; see *GET /api/translations/(string:project)/(string:component)/(string:language)/file/*
- **changes_list_url** (*string*) – URL to changes list; see *GET /api/translations/(string:project)/(string:component)/(string:language)/changes/*
- **units_list_url** (*string*) – URL to strings list; see *GET /api/translations/(string:project)/(string:component)/(string:language)/units/*

Example JSON data:


```
{
    "component": {
        "branch": "master",
        "file_format": "po",
        "filemask": "po/*.po",
        "git_export": "",
        "license": "",
        "license_url": "",
        "name": "Weblate",
        "new_base": "",
        "project": {
            "name": "Hello",
            "slug": "hello",
            "source_language": {
                "code": "en",
                "direction": "ltr",
                "name": "English",
                "url": "http://example.com/api/languages/en/",
                "web_url": "http://example.com/languages/en/"
            },
            "url": "http://example.com/api/projects/hello/",
            "web": "https://weblate.org/",
            "web_url": "http://example.com/projects/hello/"
        },
        "repo": "file:///home/nijel/work/weblate-hello",
        "slug": "weblate",
        "template": "",
        "url": "http://example.com/api/components/hello/weblate/",
        "vcs": "git",
        "web_url": "http://example.com/projects/hello/weblate/"
    },
    "failing_checks": 3,
    "failing_checks_percent": 75.0,
    "failing_checks_words": 11,
    "filename": "po/cs.po",
    "fuzzy": 0,
    "fuzzy_percent": 0.0,
    "fuzzy_words": 0,
    "have_comment": 0,
    "have_suggestion": 0,
```


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```
    "is_template": false,
    "language": {
        "code": "cs",
        "direction": "ltr",
        "name": "Czech",
        "url": "http://example.com/api/languages/cs/",
        "web_url": "http://example.com/languages/cs/"
    },
    "language_code": "cs",
    "last_author": "Weblate Admin",
    "last_change": "2016-03-07T10:20:05.499",
    "revision": "7ddfafe6daaf57fc8654cc852ea6be212b015792",
    "share_url": "http://example.com/engage/hello/cs/",
    "total": 4,
    "total_words": 15,
    "translate_url": "http://example.com/translate/hello/weblate/cs/",
    "translated": 4,
    "translated_percent": 100.0,
    "translated_words": 15,
    "url": "http://example.com/api/translations/hello/weblate/cs/",
    "web_url": "http://example.com/projects/hello/weblate/cs/"
}
```


`DELETE /api/translations/(string: project)/`
`string: component/string: language/` New in version 3.9.

Deletes a translation.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug
- **language** (*string*) – Translation language code

`GET /api/translations/(string: project)/`
`string: component/string: language/changes/` Returns a list of translation changes.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug
- **language** (*string*) – Translation language code

Response JSON Object

- **results** (*array*) – array of component objects; see *GET /api/changes/(int:id)/*

`GET /api/translations/(string: project)/`
`string: component/string: language/units/` Returns a list of translation units.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug
- **language** (*string*) – Translation language code

Response JSON Object

- **results** (*array*) – array of component objects; see *GET /api/units/(int:id)/*

`GET /api/translations/(string: project)/`
`string: component/string: language/file/` Download current translation file as stored in VCS (without `format` parameter) or as converted to a standard format (currently supported: Gettext PO, MO, XLIFF and TBX).

Note: This API endpoint uses different logic for output than rest of API as it operates on whole file rather than on data. Set of accepted `format` parameter differs and without such parameter you get translation file as stored in VCS.

Query Parameters

- **format** – File format to use; if not specified no format conversion happens; supported file formats: `po`, `mo`, `xliff`, `xliff11`, `tbx`

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug
- **language** (*string*) – Translation language code

`POST /api/translations/(string: project)/`
`string: component/string: language/file/` Upload new file with translations.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug
- **language** (*string*) – Translation language code

Form Parameters

- **boolean overwrite** – Whether to overwrite existing translations (defaults to no)
- **file file** – Uploaded file
- **string email** – Author e-mail
- **string author** – Author name
- **string method** – Upload method (`translate`, `approve`, `suggest`, `fuzzy`, `replace`, `source`)
- **string fuzzy** – Fuzzy strings processing (*empty*, `process`, `approve`)

CURL example:

```
curl -X POST \
    -F file=@strings.xml \
    -H "Authorization: Token TOKEN" \
    http://example.com/api/translations/hello/android/cs/file/
```

`GET /api/translations/(string: project)/`
`string: component/string: language/repository/` Returns information about VCS repository status.

The response is same as for *GET /api/components/(string:project)/(string:component)/repository/*.

Parameters

- **project** (*string*) – Project URL slug

- **component** (*string*) – Component URL slug
- **language** (*string*) – Translation language code

`POST /api/translations/(string: project)/string: component/string: language/repository/` Performs given operation on the VCS repository.

See *POST /api/projects/(string:project)/repository/* for documentation.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug
- **language** (*string*) – Translation language code

Request JSON Object

- **operation** (*string*) – Operation to perform: one of `push`, `pull`, `commit`, `reset`, `cleanup`

Response JSON Object

- **result** (*boolean*) – result of the operation

`GET /api/translations/(string: project)/string: component/string: language/statistics/` Returns detailed translation statistics.

New in version 2.7.

Parameters

- **project** (*string*) – Project URL slug
- **component** (*string*) – Component URL slug
- **language** (*string*) – Translation language code

Response JSON Object

- **code** (*string*) – language code
- **failing** (*int*) – number of failing checks
- **failing_percent** (*float*) – percentage of failing checks
- **fuzzy** (*int*) – number of strings needing review
- **fuzzy_percent** (*float*) – percentage of strings needing review
- **total_words** (*int*) – total number of words
- **translated_words** (*int*) – number of translated words
- **last_author** (*string*) – name of last author
- **last_change** (*timestamp*) – date of last change
- **name** (*string*) – language name
- **total** (*int*) – total number of strings
- **translated** (*int*) – number of translated strings
- **translated_percent** (*float*) – percentage of translated strings
- **url** (*string*) – URL to access the translation (engagement URL)
- **url_translate** (*string*) – URL to access the translation (real translation URL)

Units

New in version 2.10.

`GET /api/units/`
Returns list of translation units.

See also:

Unit object attributes are documented at *GET /api/units/(int:id)/*.

`GET /api/units/(int: id)/`
Returns information about translation unit.

Parameters

- **id** (*int*) – Unit ID

Response JSON Object

- **translation** (*string*) – URL of a related translation object
- **source** (*string*) – source string
- **previous_source** (*string*) – previous source string used for fuzzy matching
- **target** (*string*) – target string
- **id_hash** (*string*) – unique identifier of the unit
- **content_hash** (*string*) – unique identifier of the source string
- **location** (*string*) – location of the unit in source code
- **context** (*string*) – translation unit context
- **note** (*string*) – translation unit note
- **flags** (*string*) – translation unit flags
- **fuzzy** (*boolean*) – whether unit is fuzzy or marked for review
- **translated** (*boolean*) – whether unit is translated
- **approved** (*boolean*) – whether translation is approved
- **position** (*int*) – unit position in translation file
- **has_suggestion** (*boolean*) – whether unit has suggestions
- **has_comment** (*boolean*) – whether unit has comments
- **has_failing_check** (*boolean*) – whether unit has failing checks
- **num_words** (*int*) – number of source words
- **priority** (*int*) – translation priority; 100 is default
- **id** (*int*) – unit identifier
- **web_url** (*string*) – URL where unit can be edited
- **souce_info** (*string*) – Source string information link; see *GET /api/units/(int:id)/*

Changes

New in version 2.10.

`GET /api/changes/`
Returns a list of translation changes.

See also:

Change object attributes are documented at *GET /api/changes/(int:id)/*.

`GET /api/changes/(int: id)/`
Returns information about translation change.

Parameters

- **id** (*int*) – Change ID

Response JSON Object

- **unit** (*string*) – URL of a related unit object
- **translation** (*string*) – URL of a related translation object
- **component** (*string*) – URL of a related component object
- **dictionary** (*string*) – URL of a related dictionary object
- **user** (*string*) – URL of a related user object
- **author** (*string*) – URL of a related author object
- **timestamp** (*timestamp*) – event timestamp
- **action** (*int*) – numeric identification of action
- **action_name** (*string*) – text description of action
- **target** (*string*) – event changed text or detail
- **id** (*int*) – change identifier

Screenshots

New in version 2.14.

`GET /api/screenshots/`
Returns a list of screenshot string information.

See also:

Screenshot object attributes are documented at *GET /api/screenshots/(int:id)/*.

`GET /api/screenshots/(int: id)/`
Returns information about screenshot information.

Parameters

- **id** (*int*) – Screenshot ID

Response JSON Object

- **name** (*string*) – name of a screenshot
- **component** (*string*) – URL of a related component object
- **file_url** (*string*) – URL to download a file; see *GET /api/screenshots/(int:id)/file/*
- **units** (*array*) – link to associated source string information; see *GET /api/units/(int:id)/*

`GET /api/screenshots/(int: id)/file/`
Download the screenshot image.

Parameters

- **id** (*int*) – Screenshot ID

POST /api/screenshots/(int: *id*)/file/
Replace screenshot image.

Parameters

- **id** (*int*) – Screenshot ID

Form Parameters

- **file image** – Uploaded file

CURL example:

```
curl -X POST \
    -F image=@image.png \
    -H "Authorization: Token TOKEN" \
    http://example.com/api/screenshots/1/file/
```

POST /api/screenshots/(int: *id*)/units/
Associate source string with screenshot.

Parameters

- **id** (*int*) – Screenshot ID

Form Parameters

- **string unit_id** – Unit ID

Response JSON Object

- **name** (*string*) – name of a screenshot
- **component** (*string*) – URL of a related component object
- **file_url** (*string*) – URL to download a file; see *GET /api/screenshots/(int:id)/file/*
- **units** (*array*) – link to associated source string information; see *GET /api/units/(int:id)/*

POST /api/screenshots/
Creates a new screenshot.

Form Parameters

- **file image** – Uploaded file
- **string name** – Screenshot name
- **string project_slug** – Project Slug
- **string component_slug** – Component Slug

Response JSON Object

- **name** (*string*) – name of a screenshot
- **component** (*string*) – URL of a related component object
- **file_url** (*string*) – URL to download a file; see *GET /api/screenshots/(int:id)/file/*
- **units** (*array*) – link to associated source string information; see *GET /api/units/(int:id)/*

Component lists

New in version 4.0.

`GET /api/component-lists/`
Returns a list of component lists.

See also:

Component list object attributes are documented at *GET /api/component-lists/(str:slug)/*.

`GET /api/component-lists/(str: slug)/`
Returns information about component list.

Parameters

- **slug** (*string*) – Component list slug

Response JSON Object

- **name** (*string*) – name of a component list
- **slug** (*string*) – slug of a component list
- **show_dashboard** (*boolean*) – whether to show it on a dashboard
- **components** (*array*) – link to associated components; see *GET /api/components/(string:project)/(string:component)/*
- **auto_assign** (*array*) – automatic assignment rules

`PUT /api/component-lists/(str: slug)/`
Changes the component list parameters.

Parameters

- **slug** (*string*) – Component list slug

Request JSON Object

- **name** (*string*) – name of a component list
- **slug** (*string*) – slug of a component list
- **show_dashboard** (*boolean*) – whether to show it on a dashboard

`PATCH /api/component-lists/(str: slug)/`
Changes the component list parameters.

Parameters

- **slug** (*string*) – Component list slug

Request JSON Object

- **name** (*string*) – name of a component list
- **slug** (*string*) – slug of a component list
- **show_dashboard** (*boolean*) – whether to show it on a dashboard

`DELETE /api/component-lists/(str: slug)/`
Deletes the component list.

Parameters

- **slug** (*string*) – Component list slug

`PUT /api/component-lists/(str: slug)/components/`
Associate component with a component list.

Parameters

- **slug** (*string*) – Component list slug

Form Parameters

- **string component_id** – Component ID

1.12.2 Notification hooks

Notification hooks allow external applications to notify Weblate that the VCS repository has been updated.

You can use repository endpoints for projects, components and translations to update individual repositories; see *POST /api/projects/(string:project)/repository/* for documentation.

GET /hooks/update/(string: *project*)**/**
string: *component*/ Deprecated since version 2.6: Please use *POST /api/components/(string:project)/(string:component)/repository/* instead which works properly with authentication for ACL limited projects.

Triggers update of a component (pulling from VCS and scanning for translation changes).

GET /hooks/update/(string: *project*)**/**
Deprecated since version 2.6: Please use *POST /api/projects/(string:project)/repository/* instead which works properly with authentication for ACL limited projects.

Triggers update of all components in a project (pulling from VCS and scanning for translation changes).

POST /hooks/github/
Special hook for handling GitHub notifications and automatically updating matching components.

Note: GitHub includes direct support for notifying Weblate: enable Weblate service hook in repository settings and set the URL to the URL of your Weblate installation.

See also:

Automatically receiving changes from GitHub For instruction on setting up GitHub integration

https://help.github.com/en/github/extending-github/about-webhooks Generic information about GitHub Webhooks

ENABLE_HOOKS For enabling hooks for whole Weblate

POST /hooks/gitlab/
Special hook for handling GitLab notifications and automatically updating matching components.

See also:

Automatically receiving changes from GitLab For instruction on setting up GitLab integration

https://docs.gitlab.com/ce/user/project/integrations/webhooks.html Generic information about GitLab Webhooks

ENABLE_HOOKS For enabling hooks for whole Weblate

POST /hooks/bitbucket/
Special hook for handling Bitbucket notifications and automatically updating matching components.

See also:

Automatically receiving changes from Bitbucket For instruction on setting up Bitbucket integration

https://confluence.atlassian.com/bitbucket/manage-webhooks-735643732.html
Generic information about Bitbucket Webhooks

ENABLE_HOOKS For enabling hooks for whole Weblate

`POST /hooks/pagure/`
New in version 3.3.

Special hook for handling Pagure notifications and automatically updating matching components.

See also:

Automatically receiving changes from Pagure For instruction on setting up Pagure integration

https://docs.pagure.org/pagure/usage/using_webhooks.html Generic information about Pagure Webhooks

ENABLE_HOOKS For enabling hooks for whole Weblate

`POST /hooks/azure/`
New in version 3.8.

Special hook for handling Azure Repos notifications and automatically updating matching components.

See also:

Automatically receiving changes from Azure Repos For instruction on setting up Azure integration

https://docs.microsoft.com/en-us/azure/devops/service-hooks/services/webhooks
Generic information about Azure Repos Web Hooks

ENABLE_HOOKS For enabling hooks for whole Weblate

`POST /hooks/gitea/`
New in version 3.9.

Special hook for handling Gitea Webhook notifications and automatically updating matching components.

See also:

Automatically receiving changes from Gitea Repos For instruction on setting up Gitea integration

https://docs.gitea.io/en-us/webhooks/ Generic information about Gitea Webhooks

ENABLE_HOOKS For enabling hooks for whole Weblate

`POST /hooks/gitee/`
New in version 3.9.

Special hook for handling Gitee Webhook notifications and automatically updating matching components.

See also:

Automatically receiving changes from Gitee Repos For instruction on setting up Gitee integration

https://gitee.com/help/categories/40 Generic information about Gitee Webhooks

ENABLE_HOOKS For enabling hooks for whole Weblate

1.12.3 Exports

Weblate provides various exports to allow you to further process the data.

GET /exports/stats/(string: *project*)/
string: *component*/

Query Parameters

- **format** (*string*) – Output format: either `json` or `csv`

Deprecated since version 2.6: Please use *GET /api/components/(string:project)/(string:component)/statistics/* and *GET /api/translations/(string:project)/(string:component)/(string:language)/statistics/* instead; it allows access to ACL controlled projects as well.

Retrieves statistics for given component in given format.

Example request:

```
GET /exports/stats/weblate/master/ HTTP/1.1
Host: example.com
Accept: application/json, text/javascript
```

Example response:

```
HTTP/1.1 200 OK
Vary: Accept
Content-Type: application/json

[
    {
        "code": "cs",
        "failing": 0,
        "failing_percent": 0.0,
        "fuzzy": 0,
        "fuzzy_percent": 0.0,
        "last_author": "Michal \u010diha\u0159",
        "last_change": "2012-03-28T15:07:38+00:00",
        "name": "Czech",
        "total": 436,
        "total_words": 15271,
        "translated": 436,
        "translated_percent": 100.0,
        "translated_words": 3201,
        "url": "http://hosted.weblate.org/engage/weblate/cs/",
        "url_translate": "http://hosted.weblate.org/projects/weblate/master/cs/"
    },
    {
        "code": "nl",
        "failing": 21,
        "failing_percent": 4.8,
        "fuzzy": 11,
        "fuzzy_percent": 2.5,
        "last_author": null,
        "last_change": null,
        "name": "Dutch",
        "total": 436,
        "total_words": 15271,
        "translated": 319,
        "translated_percent": 73.2,
```

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```
        "translated_words": 3201,
        "url": "http://hosted.weblate.org/engage/weblate/nl/",
        "url_translate": "http://hosted.weblate.org/projects/weblate/master/nl/"
    },
    {
        "code": "el",
        "failing": 11,
        "failing_percent": 2.5,
        "fuzzy": 21,
        "fuzzy_percent": 4.8,
        "last_author": null,
        "last_change": null,
        "name": "Greek",
        "total": 436,
        "total_words": 15271,
        "translated": 312,
        "translated_percent": 71.6,
        "translated_words": 3201,
        "url": "http://hosted.weblate.org/engage/weblate/el/",
        "url_translate": "http://hosted.weblate.org/projects/weblate/master/el/"
    },
]
```


1.12.4 RSS feeds

Changes in translations are exported in RSS feeds.

GET /exports/rss/(string: *project*)**/**
string: *component*/**string:** *language*/ Retrieves RSS feed with recent changes for a translation.

GET /exports/rss/(string: *project*)**/**
string: *component*/ Retrieves RSS feed with recent changes for a component.

GET /exports/rss/(string: *project*)**/**
Retrieves RSS feed with recent changes for a project.

GET /exports/rss/language/(string: *language*)**/**
Retrieves RSS feed with recent changes for a language.

GET /exports/rss/
Retrieves RSS feed with recent changes for Weblate instance.

See also:

RSS on wikipedia

1.13 Weblate Client

New in version 2.7: There has been full wlc utility support ever since Weblate 2.7. If you are using an older version some incompatibilities with the API might occur.

1.13.1 Installation

The Weblate Client is shipped separately and includes the Python module. You need to install *wlc*:, wlc to use these.

```
pip3 install wlc
```

1.13.2 Getting started

Configuration is stored in `~/.config/weblate`:

```
[weblate]
url = https://hosted.weblate.org/api/

[keys]
https://hosted.weblate.org/api/ = APIKEY
```

You can then invoke commands on the default server:

```
wlc ls
wlc commit sandbox/hello-world
```

See also:

Configuration files

1.13.3 Synopsis

```
wlc [parameter] <command> [options]
```

Commands actually indicate which operation should be performed.

1.13.4 Description

Weblate Client is a Python library and command-line utility to manage Weblate remotely using *Weblate's Web API*. The command-line utility can be invoked as **wlc** and is built on *wlc*.

Instance wide options

The program accepts the following options for a whole instance, which must be entered before any subcommand.

--format {csv,json,text,html}
: Specify the output format.

--url URL
: Specify the API URL. Overrides any value found in the configuration file, see *Configuration files*. The URL should end with `/api/`, for example `https://hosted.weblate.org/api/`.

--key KEY
: Specify the API user key to use. Overrides any value found in the configuration file, see *Configuration files*. You can find your key in your profile on Weblate.

--config PATH
: Overrides the configuration file path, see *Configuration files*.

--config-section SECTION
: Overrides configuration file section in use, see *Configuration files*.

Subcommands

The following subcommands are available:

`version`
: Prints the current version.

`list-languages`
: Lists used languages in Weblate.

`list-projects`
: Lists projects in Weblate.

`list-components`
: Lists components in Weblate.

`list-translations`
: Lists translations in Weblate.

`show`
: Shows Weblate object (translation, component or project).

`ls`
: Lists Weblate object (translation, component or project).

`commit`
: Commits changes made in a Weblate object (translation, component or project).

`pull`
: Pulls remote repository changes into Weblate object (translation, component or project).

`push`
: Pushes Weblate object changes into remote repository (translation, component or project).

`reset`
: New in version 0.7: Supported since wlc 0.7.

  Resets changes in Weblate object to match remote repository (translation, component or project).

`cleanup`
: New in version 0.9: Supported since wlc 0.9.

  Removes any untracked changes in a Weblate object to match the remote repository (translation, component or project).

`repo`
: Displays repository status for a given Weblate object (translation, component or project).

`statistics`
: Displays detailed statistics for a given Weblate object (translation, component or project).

`lock-status`
: New in version 0.5: Supported since wlc 0.5.

  Displays lock status.

`lock`
: New in version 0.5: Supported since wlc 0.5.

  Locks component from further translation in Weblate.

`unlock`
: New in version 0.5: Supported since wlc 0.5.

  Unlocks translation of Weblate component.

`changes`
: New in version 0.7: Supported since wlc 0.7 and Weblate 2.10.

  Displays changes for a given object.

download
New in version 0.7: Supported since wlc 0.7.

Downloads a translation file.

--convert
Converts file format, if unspecified no conversion happens on the server and the file is downloaded as is to the repository.

--output
Specifies file to save output in, if left unspecified it is printed to stdout.

upload
New in version 0.9: Supported since wlc 0.9.

Uploads a translation file.

--overwrite
Overwrite existing translations upon uploading.

--input
File from which content is read, if left unspecified it is read from stdin.

1.13.5 Configuration files

.weblate Per project configuration file

~/.config/weblate User configuration file

/etc/xdg/weblate System wide configuration file

The program follows the XDG specification, so you can adjust placement of config files by environment variables `XDG_CONFIG_HOME` or `XDG_CONFIG_DIRS`.

Following settings can be configured in the `[weblate]` section (you can customize this by *--config-section*):

key
API KEY to access Weblate.

url
API server URL, defaults to `http://127.0.0.1:8000/api/`.

translation
Path to the default translation - component or project.

The configuration file is an INI file, for example:

```
[weblate]
url = https://hosted.weblate.org/api/
key = APIKEY
translation = weblate/master
```

Additionally API keys can be stored in the `[keys]` section:

```
[keys]
https://hosted.weblate.org/api/ = APIKEY
```

This allows you to store keys in your personal settings, while using the `.weblate` configuration in the VCS repository so that wlc knows which server it should talk to.

1.13.6 Examples

Print current program version:

```
$ wlc version
version: 0.1
```

List all projects:

```
$ wlc list-projects
name: Hello
slug: hello
source_language: en
url: http://example.com/api/projects/hello/
web: https://weblate.org/
web_url: http://example.com/projects/hello/
```

You can also designate what project wlc should work on:

```
$ cat .weblate
[weblate]
url = https://hosted.weblate.org/api/
translation = weblate/master

$ wlc show
branch: master
file_format: po
filemask: weblate/locale/*/LC_MESSAGES/django.po
git_export: https://hosted.weblate.org/git/weblate/master/
license: GPL-3.0+
license_url: https://spdx.org/licenses/GPL-3.0+
name: master
new_base: weblate/locale/django.pot
project: weblate
repo: git://github.com/WeblateOrg/weblate.git
slug: master
template:
url: https://hosted.weblate.org/api/components/weblate/master/
vcs: git
web_url: https://hosted.weblate.org/projects/weblate/master/
```

With this setup it is easy to commit pending changes in the current project:

```
$ wlc commit
```

1.14 Weblate's Python API

1.14.1 Installation

The Python API is shipped separately, you need to install the *Weblate Client*: (wlc) to have it.

```
pip install wlc
```

1.14.2 wlc

WeblateException

exception wlc.**WeblateException**
Base class for all exceptions.

Weblate

class wlc.Weblate(*key=''*, *url=None*, *config=None*)

Parameters

- **key** (*str*) – User key
- **url** (*str*) – API server URL, if not specified default is used
- **config** (wlc.config.WeblateConfig) – Configuration object, overrides any other parameters.

Access class to the API, define API key and optionally API URL.

get(*path*)

Parameters **path** (*str*) – Request path

Return type object

Performs a single API GET call.

post(*path*, ***kwargs*)

Parameters **path** (*str*) – Request path

Return type object

Performs a single API GET call.

1.14.3 wlc.config

WeblateConfig

class wlc.config.WeblateConfig(*section='wlc'*)

Parameters **section** (*str*) – Configuration section to use

Configuration file parser following XDG specification.

load(*path=None*)

Parameters **path** (*str*) – Path from which to load configuration.

Loads configuration from a file, if none is specified, it loads from the *wlc* configuration file (`~/.config/wlc`) placed in your XDG configuration path (`/etc/xdg/wlc`).

1.14.4 wlc.main

wlc.main.main(*settings=None*, *stdout=None*, *args=None*)

Parameters

- **settings** (*list*) – Settings to override as list of tuples
- **stdout** (*object*) – stdout file object for printing output, uses `sys.stdout` as default
- **args** (*list*) – Command-line arguments to process, uses `sys.args` as default

Main entry point for command-line interface.

@wlc.main.register_command(*command*)
Decorator to register *Command* class in main parser used by *main()*.

Command

class wlc.main.**Command**(*args*, *config*, *stdout=None*)
Main class for invoking commands.

CHAPTER 2

Administrator docs

2.1 Configuration instructions

2.1.1 Installing Weblate

Installing using Docker

With dockerized Weblate deployment you can get your personal Weblate instance up and running in seconds. All of Weblate's dependencies are already included. PostgreSQL is set up as the default database.

Hardware requirements

Weblate should run on all contemporary hardware without problems, the following is the minimal configuration required to run Weblate on a single host (Weblate, database and webserver):

- 2 GB of RAM
- 2 CPU cores
- 1 GB of storage space

The more memory the better - it is used for caching on all levels (filesystem, database and Weblate).

Many concurrent users increases the amount of needed CPU cores. For hundreds of translation components at least 4 GB of RAM is recommended.

Note: Actual requirements for your installation of Weblate vary heavily based on the size of the translations managed in it.

Installation

The following examples assume you have a working Docker environment, with `docker-compose` installed. Please check the Docker documentation for instructions.

1. Clone the weblate-docker repo:

```
git clone https://github.com/WeblateOrg/docker-compose.git weblate-docker
cd weblate-docker
```

2. Create a `docker-compose.override.yml` file with your settings. See *Docker environment variables* for full list of environment variables.

```
version: '3'
services:
  weblate:
    ports:
      - 80:8080
    environment:
      WEBLATE_EMAIL_HOST: smtp.example.com
      WEBLATE_EMAIL_HOST_USER: user
      WEBLATE_EMAIL_HOST_PASSWORD: pass
      WEBLATE_SERVER_EMAIL: weblate@example.com
      WEBLATE_DEFAULT_FROM_EMAIL: weblate@example.com
      WEBLATE_ALLOWED_HOSTS: weblate.example.com,localhost
      WEBLATE_ADMIN_PASSWORD: password for the admin user
      WEBLATE_ADMIN_EMAIL: weblate.admin@example.com
```

Note: If *WEBLATE_ADMIN_PASSWORD* is not set, the admin user is created with a random password shown on first startup.

Append ',localhost' to *WEBLATE_ALLOWED_HOSTS* to be able to access locally for testing.

You may also need to edit the *docker-compose.yml* file and change the default port from 80 if you already have a web server running on your local machine.

---

3. Start Weblate containers:

```
docker-compose up
```

Enjoy your Weblate deployment, it's accessible on port 80 of the `weblate` container.

Changed in version 2.15-2: The setup has changed recently, priorly there was separate web server container, since 2.15-2 the web server is embedded in the Weblate container.

Changed in version 3.7.1-6: In July 2019 (starting with the 3.7.1-6 tag), the containers is not running as a root user. This has lead to changed exposed port from 80 to 8080.

See also:

Invoking management commands

Docker container with HTTPS support

Please see *Installation* for generic deployment instructions, this section only mentions differences compared to it.

Using own SSL certificates

New in version 3.8-3.

In case you have own SSL certificate you want to use, simply place the files into the Weblate data volume (see *Docker container volumes*):

- `ssl/fullchain.pem` containing the certificate including any needed CA certificates
- `ssl/privkey.pem` containing the private key

Additionally, Weblate container will now accept SSL connections on port 4443, you will want to include the port forwarding for HTTPS in docker compose override:

```
version: '3'
services:
  weblate:
    ports:
      - 80:8080
      - 443:4443
```

Automatic SSL certificates using Let's Encrypt

In case you want to use Let's Encrypt automatically generated SSL certificates on public installation, you need to add a reverse HTTPS proxy an additional Docker container, https-portal will be used for that. This is made use of in the `docker-compose-https.yml` file. Then create a `docker-compose-https.override.yml` file with your settings:

```
version: '3'
services:
  weblate:
    environment:
      WEBLATE_EMAIL_HOST: smtp.example.com
      WEBLATE_EMAIL_HOST_USER: user
      WEBLATE_EMAIL_HOST_PASSWORD: pass
      WEBLATE_ALLOWED_HOSTS: weblate.example.com
      WEBLATE_ADMIN_PASSWORD: password for admin user
  https-portal:
    environment:
      DOMAINS: 'weblate.example.com -> http://weblate:8080'
```

Whenever invoking **`docker-compose`** you need to pass both files to it, and then do:

```
docker-compose -f docker-compose-https.yml -f docker-compose-https.override.yml build
docker-compose -f docker-compose-https.yml -f docker-compose-https.override.yml up
```

Upgrading the Docker container

Usually it is good idea to only update the Weblate container and keep the PostgreSQL container at the version you have, as upgrading PostgreSQL is quite painful and in most cases does not bring many benefits.

You can do this by sticking with the existing docker-compose and just pull the latest images and then restart:

```
docker-compose stop
docker-compose pull
docker-compose up
```

The Weblate database should be automatically migrated on first startup, and there should be no need for additional manual actions.

Note: Upgrades across 3.0 are not supported by Weblate. If you are on 2.x series and want to upgrade to 3.x, first upgrade to the latest 3.0.1-x (at time of writing this it is the `3.0.1-7`) image, which will do

the migration and then continue upgrading to newer versions.

You might also want to update the `docker-compose` repository, though it's not needed in most case. Please beware of PostgreSQL version changes in this case as it's not straightforward to upgrade the database, see GitHub issue for more info.

Admin login

After container setup, you can sign in as *admin* user with password provided in *WEBLATE_ADMIN_PASSWORD*, or a random password generated on first start if that was not set.

To reset *admin* password, restart the container with *WEBLATE_ADMIN_PASSWORD* set to new password.

See also:

WEBLATE_ADMIN_PASSWORD, *WEBLATE_ADMIN_NAME*, *WEBLATE_ADMIN_EMAIL*

Docker environment variables

Many of Weblate's *Configuration* can be set in the Docker container using environment variables:

Generic settings

`WEBLATE_DEBUG`
Configures Django debug mode using *DEBUG*.

Example:

```
environment:
  WEBLATE_DEBUG: 1
```

See also:

Disable debug mode.

`WEBLATE_LOGLEVEL`
Configures the logging verbosity.

`WEBLATE_SITE_TITLE`
Configures the site-title shown on the heading of all pages.

`WEBLATE_ADMIN_NAME`

`WEBLATE_ADMIN_EMAIL`
Configures the site-admin's name and e-mail. It is used for both *ADMINS* setting and creating *admin* user (see *WEBLATE_ADMIN_PASSWORD* for more info on that).

Example:

```
environment:
  WEBLATE_ADMIN_NAME: Weblate admin
  WEBLATE_ADMIN_EMAIL: noreply@example.com
```

See also:

Admin login, *Properly configure admins*, *ADMINS*

`WEBLATE_ADMIN_PASSWORD`
Sets the password for the *admin* user.

- If not set and *admin* user does not exist, it is created with a random password shown on first container startup.

- If not set and *admin* user exists, no action is performed.
- If set the *admin* user is adjusted on every container startup to match *WEBLATE_ADMIN_PASSWORD*, *WEBLATE_ADMIN_NAME* and *WEBLATE_ADMIN_EMAIL*.

Warning: It might be a security risk to store password in the configuration file. Consider using this variable only for initial setup (or let Weblate generate random password on initial startup) or for password recovery.

See also:

Admin login, *WEBLATE_ADMIN_PASSWORD*, *WEBLATE_ADMIN_NAME*, *WEBLATE_ADMIN_EMAIL*

`WEBLATE_SERVER_EMAIL`

`WEBLATE_DEFAULT_FROM_EMAIL`
Configures the address for outgoing e-mails.

See also:

Configure e-mail addresses

`WEBLATE_ALLOWED_HOSTS`
Configures allowed HTTP hostnames using *ALLOWED_HOSTS* and sets sitename to the first one.

Example:

```
environment:
  WEBLATE_ALLOWED_HOSTS: weblate.example.com,example.com
```

See also:

Allowed hosts setup, *Set correct site domain*

`WEBLATE_SECRET_KEY`
Configures the secret used by Django for cookie signing.

Deprecated since version 2.9: The secret is now generated automatically on first startup, there is no need to set it manually.

See also:

Django secret key

`WEBLATE_REGISTRATION_OPEN`
Configures whether registrations are open by toggling *REGISTRATION_OPEN*.

Example:

```
environment:
  WEBLATE_REGISTRATION_OPEN: 0
```

`WEBLATE_TIME_ZONE`
Configures the used time zone in Weblate, see `TIME_ZONE`.

Note: To change the time zone of the Docker container itself, use the `TZ` environment variable.

Example:

```
environment:
  WEBLATE_TIME_ZONE: Europe/Prague
```

WEBLATE_ENABLE_HTTPS
: Makes Weblate assume it is operated behind a reverse HTTPS proxy, it makes Weblate use HTTPS in e-mail and API links or set secure flags on cookies.

Note: This does not make the Weblate container accept HTTPS connections, you need to configure that as well, see *Docker container with HTTPS support* for examples.

Example:

```
environment:
  WEBLATE_ENABLE_HTTPS: 1
```

See also:

Set correct site domain

WEBLATE_IP_PROXY_HEADER
: Lets Weblate fetch the IP address from any given HTTP header. Use this when using a reverse proxy in front of the Weblate container.

Enables *IP_BEHIND_REVERSE_PROXY* and sets *IP_PROXY_HEADER*.

Note: The format must conform to Django's expectations. Django transforms raw HTTP header names as follows:

- converts all characters to uppercase
- replaces any hyphens with underscores
- prepends `HTTP_` prefix

So `X-Forwarded-For` would be mapped to `HTTP_X_FORWARDED_FOR`.

Example:

```
environment:
  WEBLATE_IP_PROXY_HEADER: HTTP_X_FORWARDED_FOR
```

WEBLATE_REQUIRE_LOGIN
: Configures login required for the whole of the Weblate installation using *LOGIN_REQUIRED_URLS*.

Example:

```
environment:
  WEBLATE_REQUIRE_LOGIN: 1
```

WEBLATE_LOGIN_REQUIRED_URLS_EXCEPTIONS

WEBLATE_ADD_LOGIN_REQUIRED_URLS_EXCEPTIONS

WEBLATE_REMOVE_LOGIN_REQUIRED_URLS_EXCEPTIONS
: Adds URL exceptions for login required for the whole Weblate installation using *LOGIN_REQUIRED_URLS_EXCEPTIONS*.

You can either replace whole settings, or modify default value using `ADD` and `REMOVE` variables.

WEBLATE_GOOGLE_ANALYTICS_ID
: Configures ID for Google Analytics by changing *GOOGLE_ANALYTICS_ID*.

WEBLATE_GITHUB_USERNAME
: Configures GitHub username for GitHub pull-requests by changing *GITHUB_USERNAME*.

See also:

Pushing changes to GitHub as pull requests, *Setting up hub*

`WEBLATE_GITLAB_USERNAME`
Configures GitLab username for GitLab merge-requests by changing *GITLAB_USERNAME*

See also:

Pushing changes to GitLab as merge requests Setting up Lab

`WEBLATE_GITLAB_HOST`
Configures GitLab Host for GitLab merge-requests

See also:

Pushing changes to GitLab as merge requests Setting up Lab

`WEBLATE_GITLAB_TOKEN`
Configures GitLab access token for GitLab merge-requests

See also:

Pushing changes to GitLab as merge requests Setting up Lab

`WEBLATE_SIMPLIFY_LANGUAGES`
Configures the language simplification policy, see *SIMPLIFY_LANGUAGES*.

`WEBLATE_AKISMET_API_KEY`
Configures the Akismet API key, see *AKISMET_API_KEY*.

`WEBLATE_GPG_IDENTITY`
Configures GPG signing of commits, see *WEBLATE_GPG_IDENTITY*.

See also:

Signing Git commits by GnuPG

`WEBLATE_URL_PREFIX`
Configures URL prefix where Weblate is running, see *URL_PREFIX*.

`WEBLATE_SILENCED_SYSTEM_CHECKS`
Configures checks which you do not want to be displayed, see `SILENCED_SYSTEM_CHECKS`.

Machine translation settings

`WEBLATE_MT_AWS_REGION`

`WEBLATE_MT_AWS_ACCESS_KEY_ID`

`WEBLATE_MT_AWS_SECRET_ACCESS_KEY`
Configures *AWS* machine translation.

```
environment:
  WEBLATE_MT_AWS_REGION: us-east-1
  WEBLATE_MT_AWS_ACCESS_KEY_ID: AKIAIOSFODNN7EXAMPLE
  WEBLATE_MT_AWS_SECRET_ACCESS_KEY: wJalrXUtnFEMI/K7MDENG/bPxRfiCYEXAMPLEKEY
```

`WEBLATE_MT_DEEPL_KEY`
Enables *DeepL* machine translation and sets *MT_DEEPL_KEY*

`WEBLATE_MT_GOOGLE_KEY`
Enables *Google Translate* and sets *MT_GOOGLE_KEY*

`WEBLATE_MT_MICROSOFT_COGNITIVE_KEY`
Enables *Microsoft Cognitive Services Translator* and sets *MT_MICROSOFT_COGNITIVE_KEY*

`WEBLATE_MT_MYMEMORY_ENABLED`

Enables *MyMemory* machine translation and sets *MT_MYMEMORY_EMAIL* to *WEBLATE_ADMIN_EMAIL*.

Example:

```
environment:
  WEBLATE_MT_MYMEMORY_ENABLED: 1
```

WEBLATE_MT_GLOSBE_ENABLED
Enables *Glosbe* machine translation.

```
environment:
  WEBLATE_MT_GLOSBE_ENABLED: 1
```

WEBLATE_MT_MICROSOFT_TERMINOLOGY_ENABLED
Enables *Microsoft Terminology Service* machine translation.

```
environment:
  WEBLATE_MT_MICROSOFT_TERMINOLOGY_ENABLED: 1
```

WEBLATE_MT_SAP_BASE_URL

WEBLATE_MT_SAP_SANDBOX_APIKEY

WEBLATE_MT_SAP_USERNAME

WEBLATE_MT_SAP_PASSWORD

WEBLATE_MT_SAP_USE_MT
Configures *SAP Translation Hub* machine translation.

```
environment:
    WEBLATE_MT_SAP_BASE_URL: "https://example.hana.ondemand.com/translationhub/
↪api/v1/"
    WEBLATE_MT_SAP_USERNAME: "user"
    WEBLATE_MT_SAP_PASSWORD: "password"
    WEBLATE_MT_SAP_USE_MT: 1
```

Authentication settings

LDAP

WEBLATE_AUTH_LDAP_SERVER_URI

WEBLATE_AUTH_LDAP_USER_DN_TEMPLATE

WEBLATE_AUTH_LDAP_USER_ATTR_MAP

WEBLATE_AUTH_LDAP_BIND_DN

WEBLATE_AUTH_LDAP_BIND_PASSWORD

WEBLATE_AUTH_LDAP_USER_SEARCH

WEBLATE_AUTH_LDAP_USER_SEARCH_FILTER
LDAP authentication configuration.

Example for direct bind:

```
environment:
  WEBLATE_AUTH_LDAP_SERVER_URI: ldap://ldap.example.org
  WEBLATE_AUTH_LDAP_USER_DN_TEMPLATE: uid=%(user)s,ou=People,dc=example,dc=net
```

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```
  # map weblate 'full_name' to ldap 'name' and weblate 'email' attribute to 'mail
↪' ldap attribute.
  # another example that can be used with OpenLDAP: 'full_name:cn,email:mail'
  WEBLATE_AUTH_LDAP_USER_ATTR_MAP: full_name:name,email:mail
```

Example for search and bind:

```
environment:
  WEBLATE_AUTH_LDAP_SERVER_URI: ldap://ldap.example.org
  WEBLATE_AUTH_LDAP_BIND_DN: CN=ldap,CN=Users,DC=example,DC=com
  WEBLATE_AUTH_LDAP_BIND_PASSWORD: password
  WEBLATE_AUTH_LDAP_USER_ATTR_MAP: full_name:name,email:mail
  WEBLATE_AUTH_LDAP_USER_SEARCH: CN=Users,DC=example,DC=com
```

Example with search and bind against Active Directory:

```
environment:
  WEBLATE_AUTH_LDAP_BIND_DN: CN=ldap,CN=Users,DC=example,DC=com
  WEBLATE_AUTH_LDAP_BIND_PASSWORD: password
  WEBLATE_AUTH_LDAP_SERVER_URI: ldap://ldap.example.org
  WEBLATE_AUTH_LDAP_USER_ATTR_MAP: full_name:name,email:mail
  WEBLATE_AUTH_LDAP_USER_SEARCH: CN=Users,DC=example,DC=com
  WEBLATE_AUTH_LDAP_USER_SEARCH_FILTER: (sAMAccountName=%(user)s)
```

See also:

LDAP authentication

GitHub

`WEBLATE_SOCIAL_AUTH_GITHUB_KEY`

`WEBLATE_SOCIAL_AUTH_GITHUB_SECRET`
Enables *GitHub authentication*.

BitBucket

`WEBLATE_SOCIAL_AUTH_BITBUCKET_KEY`

`WEBLATE_SOCIAL_AUTH_BITBUCKET_SECRET`
Enables *Bitbucket authentication*.

Facebook

`WEBLATE_SOCIAL_AUTH_FACEBOOK_KEY`

`WEBLATE_SOCIAL_AUTH_FACEBOOK_SECRET`
Enables *Facebook OAuth 2*.

Google

`WEBLATE_SOCIAL_AUTH_GOOGLE_OAUTH2_KEY`

`WEBLATE_SOCIAL_AUTH_GOOGLE_OAUTH2_SECRET`
Enables *Google OAuth 2*.

GitLab

`WEBLATE_SOCIAL_AUTH_GITLAB_KEY`

`WEBLATE_SOCIAL_AUTH_GITLAB_SECRET`

`WEBLATE_SOCIAL_AUTH_GITLAB_API_URL`
Enables *GitLab OAuth 2*.

Azure Active Directory

`WEBLATE_SOCIAL_AUTH_AZUREAD_OAUTH2_KEY`

`WEBLATE_SOCIAL_AUTH_AZUREAD_OAUTH2_SECRET`
Enables Azure Active Directory authentication, see *Microsoft Azure Active Directory*.

Azure Active Directory with Tenant support

`WEBLATE_SOCIAL_AUTH_AZUREAD_TENANT_OAUTH2_KEY`

`WEBLATE_SOCIAL_AUTH_AZUREAD_TENANT_OAUTH2_SECRET`

`WEBLATE_SOCIAL_AUTH_AZUREAD_TENANT_OAUTH2_TENANT_ID`
Enables Azure Active Directory authentication with Tenant support, see *Microsoft Azure Active Directory*.

Keycloak

`WEBLATE_SOCIAL_AUTH_KEYCLOAK_KEY`

`WEBLATE_SOCIAL_AUTH_KEYCLOAK_SECRET`

`WEBLATE_SOCIAL_AUTH_KEYCLOAK_PUBLIC_KEY`

`WEBLATE_SOCIAL_AUTH_KEYCLOAK_ALGORITHM`

`WEBLATE_SOCIAL_AUTH_KEYCLOAK_AUTHORIZATION_URL`

`WEBLATE_SOCIAL_AUTH_KEYCLOAK_ACCESS_TOKEN_URL`
Enables Keycloak authentication, see documentation.

Linux vendors

You can enable authentication using Linux vendors authentication services by setting following variables to any value.

`WEBLATE_SOCIAL_AUTH_FEDORA`

`WEBLATE_SOCIAL_AUTH_OPENSUSE`

`WEBLATE_SOCIAL_AUTH_UBUNTU`

Slack

`WEBLATE_SOCIAL_AUTH_SLACK_KEY`

`SOCIAL_AUTH_SLACK_SECRET`
Enables Slack authentication, see *Slack*.

Other authentication settings

`WEBLATE_NO_EMAIL_AUTH`
Disables e-mail authentication when set to any value.

PostgreSQL database setup

The database is created by `docker-compose.yml`, so these settings affect both Weblate and PostgreSQL containers.

See also:

Database setup for Weblate

`POSTGRES_PASSWORD`
PostgreSQL password.

`POSTGRES_USER`
PostgreSQL username.

`POSTGRES_DATABASE`
PostgreSQL database name.

`POSTGRES_HOST`
PostgreSQL server hostname or IP address. Defaults to `database`.

`POSTGRES_PORT`
PostgreSQL server port. Defaults to none (uses the default value).

`POSTGRES_SSL_MODE`
Configure how PostgreSQL handles SSL in connection to the server, for possible choices see SSL Mode Descriptions

Database backup settings

See also:

Dumped data for backups

`WEBLATE_DATABASE_BACKUP`
Configures the daily database dump using *DATABASE_BACKUP*. Defaults to `plain`.

Caching server setup

Using Redis is strongly recommended by Weblate and you have to provide a Redis instance when running Weblate in Docker.

See also:

Enable caching

`REDIS_HOST`
The Redis server hostname or IP address. Defaults to `cache`.

`REDIS_PORT`
The Redis server port. Defaults to `6379`.

`REDIS_DB`
The Redis database number, defaults to `1`.

`REDIS_PASSWORD`
The Redis server password, not used by default.

REDIS_TLS
: Enables using SSL for Redis connection.

REDIS_VERIFY_SSL
: Can be used to disable SSL certificate verification for Redis connection.

Email server setup

To make outgoing e-mail work, you need to provide a mail server.

See also:

Configuring outgoing e-mail

WEBLATE_EMAIL_HOST
: Mail server, the server has to listen on port 587 and understand TLS.

  See also:

  EMAIL_HOST

WEBLATE_EMAIL_PORT
: Mail server port. Use if your cloud provider or ISP blocks outgoing connections on port 587.

  See also:

  EMAIL_PORT

WEBLATE_EMAIL_HOST_USER
: Email authentication user, do NOT use quotes here.

  See also:

  EMAIL_HOST_USER

WEBLATE_EMAIL_HOST_PASSWORD
: Email authentication password, do NOT use quotes here.

  See also:

  EMAIL_HOST_PASSWORD

WEBLATE_EMAIL_USE_SSL
: Whether to use an implicit TLS (secure) connection when talking to the SMTP server. In most e-mail documentation, this type of TLS connection is referred to as SSL. It is generally used on port 465. If you are experiencing problems, see the explicit TLS setting *WEBLATE_EMAIL_USE_TLS*.

  See also:

  EMAIL_USE_SSL

WEBLATE_EMAIL_USE_TLS
: Whether to use a TLS (secure) connection when talking to the SMTP server. This is used for explicit TLS connections, generally on port 587. If you are experiencing connections that hang, see the implicit TLS setting *WEBLATE_EMAIL_USE_SSL*.

  See also:

  EMAIL_USE_TLS

WEBLATE_EMAIL_BACKEND
: Configures Django backend to use for sending e-mails.

  See also:

  Configure e-mail addresses, EMAIL_BACKEND

Error reporting

It is recommended to collect errors from the installation systematically, see *Collecting error reports*.

To enable support for Rollbar, set the following:

`ROLLBAR_KEY`
: Your Rollbar post server access token.

`ROLLBAR_ENVIRONMENT`
: Your Rollbar environment, defaults to `production`.

To enable support for Sentry, set following:

`SENTRY_DSN`
: Your Sentry DSN.

`SENTRY_ENVIRONMENT`
: Your Sentry Environment (optional).

Changing enabled apps, checks, addons or autofixes

New in version 3.8-5.

The built in configuration of enabled checks, addons or autofixes can be adjusted by following variables:

`WEBLATE_ADD_APPS`

`WEBLATE_REMOVE_APPS`

`WEBLATE_ADD_CHECK`

`WEBLATE_REMOVE_CHECK`

`WEBLATE_ADD_AUTOFIX`

`WEBLATE_REMOVE_AUTOFIX`

`WEBLATE_ADD_ADDONS`

`WEBLATE_REMOVE_ADDONS`

For example:

Example:

```
environment:
  WEBLATE_REMOVE_AUTOFIX: weblate.trans.autofixes.whitespace.
↪SameBookendingWhitespace
  WEBLATE_ADD_ADDONS: customize.addons.MyAddon,customize.addons.OtherAddon
```

See also:

CHECK_LIST, *AUTOFIX_LIST*, *WEBLATE_ADDONS*, INSTALLED_APPS

Docker container volumes

There is single data volume exported by the Weblate container. The other service containers (PostgreSQL or Redis) have their data volumes as well, but those are not covered by this document.

The data volume is used to store Weblate persistent data such as cloned repositories or to customize Weblate installation.

The placement of the Docker volume on host system depends on your Docker configuration, but usually it is stored in `/var/lib/docker/volumes/weblate-docker_weblate-data/_data/`. In the container it is mounted as `/app/data`.

See also:

Docker volumes documentation

Further configuration customization

You can further customize Weblate installation in the data volume, see *Docker container volumes*.

Custom configuration files

You can additionally override the configuration in `/app/data/settings-override.py` (see *Docker container volumes*). This is executed after all environment settings are loaded, so it gets completely set up, and can be used to customize anything.

Replacing logo and other static files

New in version 3.8-5.

The static files coming with Weblate can be overridden by placing into `/app/data/python/customize/static` (see *Docker container volumes*). For example creating `/app/data/python/customize/static/favicon.ico` will replace the favicon.

Hint: The files are copied to correspoding location on container startup, so restart is needed after changing the volume content.

Alternatively you can also include own module (see *Customizing Weblate*) and add it as separate volume to the Docker container, for example:

```
weblate:
  volumes:
    - weblate-data:/app/data
    - ./weblate_customization/weblate_customization:/app/data/python/weblate_
↪customization
  environment:
    WEBLATE_ADD_APPS: weblate_customization
```

Adding own Python modules

New in version 3.8-5.

You can place own Python modules in `/app/data/python/` (see *Docker container volumes*) and they can be then loaded by Weblate, most likely by using *Custom configuration files*.

See also:

Customizing Weblate

Hub setup

In order to use the GitHub's pull-request feature, you must initialize hub configuration by entering the Weblate container and executing an arbitrary Hub command. For example:

```
docker-compose exec --user weblate weblate bash
cd
HOME=/app/data/home hub clone octocat/Spoon-Knife
```

The username passed for credentials must be the same as *GITHUB_USERNAME*.

See also:

Pushing changes to GitHub as pull requests, *Setting up hub*

Lab setup

In order to use GitLab's merge-request feature, you must initialize `lab` configuration by entering the weblate contained and executing `lab` command. For example:

```
docker-compose exec --user weblate weblate bash
cd
HOME=/app/data/home lab
```

You can also use environment variables to configure `lab` on each container start. Just add `WEBLATE_GITLAB_USERNAME`, `WEBLATE_GITLAB_HOST``and ``WEBLATE_GITLAB_TOKEN` to your env configuration.

```
weblate:
  environment:
    WEBLATE_GITLAB_USERNAME: translations_bot
    WEBLATE_GITLAB_HOST: https://gitlab.example.com
    WEBLATE_GITLAB_TOKEN: personal_access_token_of_translations_bot
```

The `access_token` passed for lab configuratoin must be same as *GITLAB_USERNAME*.

See also:

Pushing changes to GitLab as merge requests Setting up Lab

Select your machine - local or cloud providers

With docker-machine you can create your Weblate deployment either on your local machine, or on any large number of cloud-based deployments on e.g. Amazon AWS, Greenhost, and many other providers.

Installing on Debian and Ubuntu

Hardware requirements

Weblate should run on all contemporary hardware without problems, the following is the minimal configuration required to run Weblate on a single host (Weblate, database and webserver):

- 2 GB of RAM
- 2 CPU cores
- 1 GB of storage space

The more memory the better - it is used for caching on all levels (filesystem, database and Weblate).

Many concurrent users increases the amount of needed CPU cores. For hundreds of translation components at least 4 GB of RAM is recommended.

Note: Actual requirements for your installation of Weblate vary heavily based on the size of the translations managed in it.

Installation

System requirements

Install the dependencies needed to build the Python modules (see *Software requirements*):

```
apt install \
   libxml2-dev libxslt-dev libfreetype6-dev libjpeg-dev libz-dev libyaml-dev \
   libcairo-dev gir1.2-pango-1.0 libgirepository1.0-dev libacl1-dev libssl-dev \
   build-essential python3-gdbm python3-dev python3-pip python3-virtualenv virtualenv␣
↪git
```

Install wanted optional dependencies depending on features you intend to use (see *Optional dependecies*):

```
apt install tesseract-ocr libtesseract-dev libleptonica-dev
```

Optionally install software for running production server, see *Running server*, *Database setup for Weblate*, *Background tasks using Celery*. Depending on size of your installation you might want to run these components on dedicated servers.

The local installation instructions:

```
# Web server option 1: NGINX and uWSGI
apt install nginx uwsgi uwsgi-plugin-python3

# Web server option 2: Apache with ``mod_wsgi``
apt install apache2 libapache2-mod-wsgi

# Caching backend: Redis
apt install redis-server

# Database server: PostgreSQL
apt install postgresql

# SMTP server
apt install exim4
```

Python modules

Hint: We're using virtualenv to install Weblate in a separate environment from your system. If you are not familiar with it, check virtualenv User Guide.

1. Create the virtualenv for Weblate:

   ```
   virtualenv --python=python3 ~/weblate-env
   ```

2. Activate the virtualenv for Weblate:

   ```
   . ~/weblate-env/bin/activate
   ```

3. Install Weblate including all dependencies:

```
pip install Weblate
```

4. Install database driver:

```
pip install psycopg2-binary
```

5. Install wanted optional dependencies depending on features you intend to use (some might require additional system libraries, check *Optional dependecies*):

```
pip install ruamel.yaml aeidon boto3 zeep chardet tesserocr
```

Configuring Weblate

Note: Following steps assume virtualenv used by Weblate is active (what can be done by `. ~/weblate-env/bin/activate`). In case this is not true, you will have to specify full path to **`weblate`** command as `~/weblate-env/bin/weblate`.

1. Copy the file `~/weblate-env/lib/python3.7/site-packages/weblate/settings_example.py` to `~/weblate-env/lib/python3.7/site-packages/weblate/settings.py`
2. Adjust the values in the new `settings.py` file to your liking. You can stick with shipped example for testing purposes, but you will want changes for production setup, see *Adjusting configuration*.
3. Create the database and its structure for Weblate (the example settings use PostgreSQL, check *Database setup for Weblate* for production ready setup):

```
weblate migrate
```

4. Create the administrator user account and copy the password it outputs to the clipboard, and also save it for later use:

```
weblate createadmin
```

5. Collect static files for web server (see *Running server*):

```
weblate collectstatic
```

6. Start Celery workers. This is not necessary for development purposes, but strongly recommended otherwise. See *Background tasks using Celery* for more info:

```
~/weblate-env/lib/python3.7/site-packages/weblate/examples/celery start
```

7. Start the development server (see *Running server* for production setup):

```
weblate runserver
```

After installation

Congratulations, your Weblate server is now running and you can start using it.

- You can now access Weblate on `http://localhost:8000/`.
- Login with admin credentials obtained during installation or register with new users.
- You can now run Weblate commands using **`weblate`** command when Weblate virtualenv is active, see *Management commands*.

- You can stop the test server with Ctrl+C.

Adding translation

1. Open the admin interface (`http://localhost:8000/create/project/`) and create the project you want to translate. See *Project configuration* for more details.

   All you need to specify here is the project name and its website.

2. Create a component which is the real object for translation - it points to the VCS repository, and selects which files to translate. See *Component configuration* for more details.

   The important fields here are: Component name, VCS repository address and mask for finding translatable files. Weblate supports a wide range of formats including gettext PO files, Android resource strings, iOS string properties, Java properties or Qt Linguist files, see *Supported file formats* for more details.

3. Once the above is completed (it can be lengthy process depending on the size of your VCS repository, and number of messages to translate), you can start translating.

Installing on SUSE and openSUSE

Hardware requirements

Weblate should run on all contemporary hardware without problems, the following is the minimal configuration required to run Weblate on a single host (Weblate, database and webserver):

- 2 GB of RAM
- 2 CPU cores
- 1 GB of storage space

The more memory the better - it is used for caching on all levels (filesystem, database and Weblate).

Many concurrent users increases the amount of needed CPU cores. For hundreds of translation components at least 4 GB of RAM is recommended.

Note: Actual requirements for your installation of Weblate vary heavily based on the size of the translations managed in it.

Installation

System requirements

Install the dependencies needed to build the Python modules (see *Software requirements*):

```
zypper install \
   libxslt-devel libxml2-devel freetype-devel libjpeg-devel zlib-devel libyaml-devel \
   cairo-devel typelib-1_0-Pango-1_0 gobject-introspection-devel libacl-devel \
   python3-pip python3-virtualenv python3-devel git
```

Install wanted optional dependencies depending on features you intend to use (see *Optional dependecies*):

```
zypper install tesseract-ocr tesseract-devel leptonica-devel
```

Optionally install software for running production server, see *Running server*, *Database setup for Weblate*, *Background tasks using Celery*. Depending on size of your installation you might want to run these components on dedicated servers.

The local installation instructions:

```
# Web server option 1: NGINX and uWSGI
zypper install nginx uwsgi uwsgi-plugin-python3

# Web server option 2: Apache with ``mod_wsgi``
zypper install apache2 apache2-mod_wsgi

# Caching backend: Redis
zypper install redis-server

# Database server: PostgreSQL
zypper install postgresql

# SMTP server
zypper install postfix
```

Python modules

Hint: We're using virtualenv to install Weblate in a separate environment from your system. If you are not familiar with it, check virtualenv User Guide.

1. Create the virtualenv for Weblate:

   ```
   virtualenv --python=python3 ~/weblate-env
   ```

2. Activate the virtualenv for Weblate:

   ```
   . ~/weblate-env/bin/activate
   ```

3. Install Weblate including all dependencies:

   ```
   pip install Weblate
   ```

4. Install database driver:

   ```
   pip install psycopg2-binary
   ```

5. Install wanted optional dependencies depending on features you intend to use (some might require additional system libraries, check *Optional dependecies*):

   ```
   pip install ruamel.yaml aeidon boto3 zeep chardet tesserocr
   ```

Configuring Weblate

Note: Following steps assume virtualenv used by Weblate is active (what can be done by `. ~/weblate-env/bin/activate`). In case this is not true, you will have to specify full path to `weblate` command as `~/weblate-env/bin/weblate`.

1. Copy the file `~/weblate-env/lib/python3.7/site-packages/weblate/settings_example.py` to `~/weblate-env/lib/python3.7/site-packages/weblate/settings.py`
2. Adjust the values in the new `settings.py` file to your liking. You can stick with shipped example for testing purposes, but you will want changes for production setup, see *Adjusting configuration*.
3. Create the database and its structure for Weblate (the example settings use PostgreSQL, check *Database setup for Weblate* for production ready setup):

```
weblate migrate
```

4. Create the administrator user account and copy the password it outputs to the clipboard, and also save it for later use:

```
weblate createadmin
```

5. Collect static files for web server (see *Running server*):

```
weblate collectstatic
```

6. Start Celery workers. This is not necessary for development purposes, but strongly recommended otherwise. See *Background tasks using Celery* for more info:

```
~/weblate-env/lib/python3.7/site-packages/weblate/examples/celery start
```

7. Start the development server (see *Running server* for production setup):

```
weblate runserver
```

After installation

Congratulations, your Weblate server is now running and you can start using it.

- You can now access Weblate on `http://localhost:8000/`.
- Login with admin credentials obtained during installation or register with new users.
- You can now run Weblate commands using **`weblate`** command when Weblate virtualenv is active, see *Management commands*.
- You can stop the test server with Ctrl+C.

Adding translation

1. Open the admin interface (`http://localhost:8000/create/project/`) and create the project you want to translate. See *Project configuration* for more details.

   All you need to specify here is the project name and its website.

2. Create a component which is the real object for translation - it points to the VCS repository, and selects which files to translate. See *Component configuration* for more details.

   The important fields here are: Component name, VCS repository address and mask for finding translatable files. Weblate supports a wide range of formats including gettext PO files, Android resource strings, iOS string properties, Java properties or Qt Linguist files, see *Supported file formats* for more details.

3. Once the above is completed (it can be lengthy process depending on the size of your VCS repository, and number of messages to translate), you can start translating.

Installing on RedHat, Fedora and CentOS

Hardware requirements

Weblate should run on all contemporary hardware without problems, the following is the minimal configuration required to run Weblate on a single host (Weblate, database and webserver):

- 2 GB of RAM
- 2 CPU cores
- 1 GB of storage space

The more memory the better - it is used for caching on all levels (filesystem, database and Weblate).

Many concurrent users increases the amount of needed CPU cores. For hundreds of translation components at least 4 GB of RAM is recommended.

Note: Actual requirements for your installation of Weblate vary heavily based on the size of the translations managed in it.

Installation

System requirements

Install the dependencies needed to build the Python modules (see *Software requirements*):

```
dnf install \
   libxslt-devel libxml2-devel freetype-devel libjpeg-devel zlib-devel libyaml-devel \
   cairo-devel pango-devel gobject-introspection-devel libacl-devel \
   python3-pip python3-virtualenv python3-devel git
```

Install wanted optional dependencies depending on features you intend to use (see *Optional dependecies*):

```
dnf install tesseract-langpack-eng tesseract-devel leptonica-devel
```

Optionally install software for running production server, see *Running server*, *Database setup for Weblate*, *Background tasks using Celery*. Depending on size of your installation you might want to run these components on dedicated servers.

The local installation instructions:

```
# Web server option 1: NGINX and uWSGI
dnf install nginx uwsgi uwsgi-plugin-python3

# Web server option 2: Apache with ``mod_wsgi``
dnf install apache2 apache2-mod_wsgi

# Caching backend: Redis
dnf install redis

# Database server: PostgreSQL
dnf install postgresql

# SMTP server
dnf install postfix
```

Python modules

Hint: We're using virtualenv to install Weblate in a separate environment from your system. If you are not familiar with it, check virtualenv User Guide.

1. Create the virtualenv for Weblate:

```
virtualenv --python=python3 ~/weblate-env
```

2. Activate the virtualenv for Weblate:

```
. ~/weblate-env/bin/activate
```

3. Install Weblate including all dependencies:

```
pip install Weblate
```

4. Install database driver:

```
pip install psycopg2-binary
```

5. Install wanted optional dependencies depending on features you intend to use (some might require additional system libraries, check *Optional dependecies*):

```
pip install ruamel.yaml aeidon boto3 zeep chardet tesserocr
```

Configuring Weblate

Note: Following steps assume virtualenv used by Weblate is active (what can be done by `. ~/weblate-env/bin/activate`). In case this is not true, you will have to specify full path to `weblate` command as `~/weblate-env/bin/weblate`.

1. Copy the file `~/weblate-env/lib/python3.7/site-packages/weblate/settings_example.py` to `~/weblate-env/lib/python3.7/site-packages/weblate/settings.py`
2. Adjust the values in the new `settings.py` file to your liking. You can stick with shipped example for testing purposes, but you will want changes for production setup, see *Adjusting configuration*.
3. Create the database and its structure for Weblate (the example settings use PostgreSQL, check *Database setup for Weblate* for production ready setup):

```
weblate migrate
```

4. Create the administrator user account and copy the password it outputs to the clipboard, and also save it for later use:

```
weblate createadmin
```

5. Collect static files for web server (see *Running server*):

```
weblate collectstatic
```

6. Start Celery workers. This is not necessary for development purposes, but strongly recommended otherwise. See *Background tasks using Celery* for more info:

```
~/weblate-env/lib/python3.7/site-packages/weblate/examples/celery start
```

7. Start the development server (see *Running server* for production setup):

```
weblate runserver
```

After installation

Congratulations, your Weblate server is now running and you can start using it.

- You can now access Weblate on `http://localhost:8000/`.
- Login with admin credentials obtained during installation or register with new users.
- You can now run Weblate commands using **`weblate`** command when Weblate virtualenv is active, see *Management commands*.
- You can stop the test server with Ctrl+C.

Adding translation

1. Open the admin interface (`http://localhost:8000/create/project/`) and create the project you want to translate. See *Project configuration* for more details.

   All you need to specify here is the project name and its website.

2. Create a component which is the real object for translation - it points to the VCS repository, and selects which files to translate. See *Component configuration* for more details.

   The important fields here are: Component name, VCS repository address and mask for finding translatable files. Weblate supports a wide range of formats including gettext PO files, Android resource strings, iOS string properties, Java properties or Qt Linguist files, see *Supported file formats* for more details.

3. Once the above is completed (it can be lengthy process depending on the size of your VCS repository, and number of messages to translate), you can start translating.

Installing on macOS

Warning: This guide is currently untested, please provide feedback or corrections to it.

Hardware requirements

Weblate should run on all contemporary hardware without problems, the following is the minimal configuration required to run Weblate on a single host (Weblate, database and webserver):

- 2 GB of RAM
- 2 CPU cores
- 1 GB of storage space

The more memory the better - it is used for caching on all levels (filesystem, database and Weblate).

Many concurrent users increases the amount of needed CPU cores. For hundreds of translation components at least 4 GB of RAM is recommended.

Note: Actual requirements for your installation of Weblate vary heavily based on the size of the translations managed in it.

Installation

System requirements

Install the dependencies needed to build the Python modules (see *Software requirements*):

```
brew install pango cairo libjpeg python git libyaml gobject-introspection
pip3 install virtualenv
```

Install wanted optional dependencies depending on features you intend to use (see *Optional dependecies*):

```
brew install tesseract
```

Optionally install software for running production server, see *Running server*, *Database setup for Weblate*, *Background tasks using Celery*. Depending on size of your installation you might want to run these components on dedicated servers.

The local installation instructions:

```
# Web server option 1: NGINX and uWSGI
brew install nginx uwsgi

# Web server option 2: Apache with ``mod_wsgi``
brew install httpd

# Caching backend: Redis
brew install redis

# Database server: PostgreSQL
brew install postgresql
```

Python modules

Hint: We're using virtualenv to install Weblate in a separate environment from your system. If you are not familiar with it, check virtualenv User Guide.

1. Create the virtualenv for Weblate:

   ```
   virtualenv --python=python3 ~/weblate-env
   ```

2. Activate the virtualenv for Weblate:

   ```
   . ~/weblate-env/bin/activate
   ```

3. Install Weblate including all dependencies:

   ```
   pip install Weblate
   ```

4. Install database driver:

```
pip install psycopg2-binary
```

5. Install wanted optional dependencies depending on features you intend to use (some might require additional system libraries, check *Optional dependecies*):

```
pip install ruamel.yaml aeidon boto3 zeep chardet tesserocr
```

Configuring Weblate

Note: Following steps assume virtualenv used by Weblate is active (what can be done by `. ~/weblate-env/bin/activate`). In case this is not true, you will have to specify full path to **`weblate`** command as `~/weblate-env/bin/weblate`.

---

1. Copy the file `~/weblate-env/lib/python3.7/site-packages/weblate/settings_example.py` to `~/weblate-env/lib/python3.7/site-packages/weblate/settings.py`
2. Adjust the values in the new `settings.py` file to your liking. You can stick with shipped example for testing purposes, but you will want changes for production setup, see *Adjusting configuration*.
3. Create the database and its structure for Weblate (the example settings use PostgreSQL, check *Database setup for Weblate* for production ready setup):

```
weblate migrate
```

4. Create the administrator user account and copy the password it outputs to the clipboard, and also save it for later use:

```
weblate createadmin
```

5. Collect static files for web server (see *Running server*):

```
weblate collectstatic
```

6. Start Celery workers. This is not necessary for development purposes, but strongly recommended otherwise. See *Background tasks using Celery* for more info:

```
~/weblate-env/lib/python3.7/site-packages/weblate/examples/celery start
```

7. Start the development server (see *Running server* for production setup):

```
weblate runserver
```

After installation

Congratulations, your Weblate server is now running and you can start using it.

- You can now access Weblate on `http://localhost:8000/`.
- Login with admin credentials obtained during installation or register with new users.
- You can now run Weblate commands using **`weblate`** command when Weblate virtualenv is active, see *Management commands*.
- You can stop the test server with Ctrl+C.

Adding translation

1. Open the admin interface (`http://localhost:8000/create/project/`) and create the project you want to translate. See *Project configuration* for more details.

   All you need to specify here is the project name and its website.

2. Create a component which is the real object for translation - it points to the VCS repository, and selects which files to translate. See *Component configuration* for more details.

   The important fields here are: Component name, VCS repository address and mask for finding translatable files. Weblate supports a wide range of formats including gettext PO files, Android resource strings, iOS string properties, Java properties or Qt Linguist files, see *Supported file formats* for more details.

3. Once the above is completed (it can be lengthy process depending on the size of your VCS repository, and number of messages to translate), you can start translating.

Installing from sources

1. Please follow the installatin instructions for your system first:

   - *Installing on Debian and Ubuntu*
   - *Installing on SUSE and openSUSE*
   - *Installing on RedHat, Fedora and CentOS*

2. Grab the latest Weblate sources using Git (or download a tarball and unpack that):

   ```
   git clone https://github.com/WeblateOrg/weblate.git weblate-src
   ```

   Alternatively you can use released archives. You can download them from our website <https://weblate.org/>. Those downloads are cryptographically signed, please see *Verifying release signatures*.

3. Install current Weblate code into the virtualenv:

   ```
   . ~/weblate-env/bin/activate
   pip install -e weblate-src
   ```

4. Copy `weblate/settings_example.py` to `weblate/settings.py`.

5. Adjust the values in the new `settings.py` file to your liking. You can stick with shipped example for testing purposes, but you will want changes for production setup, see *Adjusting configuration*.

6. Create the database used by Weblate, see *Database setup for Weblate*.

7. Build Django tables, static files and initial data (see *Filling up the database* and *Serving static files*):

   ```
   weblate migrate
   weblate collectstatic
   weblate compilemessages
   ```

   Note: This step should be repeated whenever you update the repository.

Installing on OpenShift

Note: This guide is looking for contributors expereinced with OpenShift, see <https://github.com/WeblateOrg/weblate/issues/2889>.

Weblate supports OpenShift, the needed integration files are in main repository in the `openshift3` directory.

Depending on your setup and experience, choose appropriate installation method:

- *Installing using Docker*, recommended for production setup.
- Virtualenv installation, recommended for production setup:
  - *Installing on Debian and Ubuntu*
  - *Installing on SUSE and openSUSE*
  - *Installing on RedHat, Fedora and CentOS*
  - *Installing on macOS*
- *Installing from sources*, recommended for development.
- *Installing on OpenShift*.

2.1.2 Software requirements

Other services

Weblate is using other services for it's operation. You will need at least following services running:

- PostgreSQL database server, see *Database setup for Weblate*.
- Redis server for cache and tasks queue, see *Background tasks using Celery*.
- SMTP server for outgoing e-mail, see *Configuring outgoing e-mail*.

Python dependencies

Weblate is written in Python and supports Python 3.6 or newer. You can install dependencies using pip or from your distribution packages, full list of them is available in `requirements.txt`.

Most notable dependencies:

Django https://www.djangoproject.com/

Celery http://www.celeryproject.org/

Translate Toolkit https://toolkit.translatehouse.org/

translation-finder https://github.com/WeblateOrg/translation-finder

Python Social Auth https://python-social-auth.readthedocs.io/

Whoosh https://bitbucket.org/mchaput/whoosh/wiki/Home

Django REST Framework https://www.django-rest-framework.org/

Optional dependecies

Following modules are necessary for some of Weblate features. You can find all of them in `requirements-optional.txt`.

`Mercurial` (optional for Mercurial repositories support) https://www.mercurial-scm.org/

`phply` (optional for PHP support) https://github.com/viraptor/phply

tesserocr (optional for screenshots OCR) https://github.com/sirfz/tesserocr

akismet (optional for suggestion spam protection) https://github.com/ubernostrum/akismet

ruamel.yaml (optional for *YAML files*) https://pypi.org/project/ruamel.yaml/

Zeep (optional for *Microsoft Terminology Service*) https://python-zeep.readthedocs.io/

aeidon (optional for *Subtitle files*) https://pypi.org/project/aeidon/

Database backend dependencies

Any database supported in Django will work, see *Database setup for Weblate* and backends documentation for more details.

Other system requirements

The following dependencies have to be installed on the system:

Git https://git-scm.com/

Pango, Cairo and related header files and gir introspection data https://cairographics.org/, https://pango.gnome.org/, see *Pango and Cairo*

hub (optional for sending pull requests to GitHub) https://hub.github.com/

git-review (optional for Gerrit support) https://pypi.org/project/git-review/

git-svn (optional for Subversion support) https://git-scm.com/docs/git-svn

tesseract and it's data (optional for screenshots OCR) https://github.com/tesseract-ocr/tesseract

Compile time dependencies

To compile some of the *Python dependencies* you might need to install their dependencies. This depends on how you install them, so please consult individual packages for documentation. You won't need those if using prebuilt `Wheels` while installing using `pip` or when you use distribution packages.

Pango and Cairo

Changed in version 3.7.

Weblate uses Pango and Cairo for rendering bitmap widgets (see *Promoting the translation*) and rendering checks (see *Managing fonts*). To properly install Python bindings for those you need to install system libraries first - you need both Cairo and Pango, which in turn need Glib. All those should be installed with development files and GObject introspection data.

2.1.3 Verifying release signatures

Weblate release are cryptographically signed by the releasing developer. Currently this is Michal Čihař. Fingerprint of his PGP key is:

```
63CB 1DF1 EF12 CF2A C0EE 5A32 9C27 B313 42B7 511D
```

and you can get more identification information from <https://keybase.io/nijel>.

You should verify that the signature matches the archive you have downloaded. This way you can be sure that you are using the same code that was released. You should also verify the date of the signature to make sure that you downloaded the latest version.

Each archive is accompanied with `.asc` files which contains the PGP signature for it. Once you have both of them in the same folder, you can verify the signature:

```
$ gpg --verify Weblate-3.5.tar.xz.asc
gpg: assuming signed data in 'Weblate-3.5.tar.xz'
gpg: Signature made Ne 3. března 2019, 16:43:15 CET
gpg:                using RSA key 87E673AF83F6C3A0C344C8C3F4AA229D4D58C245
gpg: Can't check signature: public key not found
```

As you can see gpg complains that it does not know the public key. At this point you should do one of the following steps:

- Use wkd to download the key:

```
$ gpg --auto-key-locate wkd --locate-keys michal@cihar.com
pub   rsa4096 2009-06-17 [SC]
      63CB1DF1EF12CF2AC0EE5A329C27B31342B7511D
uid           [ultimate] Michal Čihař <michal@cihar.com>
uid           [ultimate] Michal Čihař <nijel@debian.org>
uid           [ultimate] [jpeg image of size 8848]
uid           [ultimate] Michal Čihař (Braiins) <michal.cihar@braiins.cz>
sub   rsa4096 2009-06-17 [E]
sub   rsa4096 2015-09-09 [S]
```

- Download the keyring from Michal's server, then import it with:

```
$ gpg --import wmxth3chu9jfxdxywj1skpmhsj311mzm
```

- Download and import the key from one of the key servers:

```
$ gpg --keyserver hkp://pgp.mit.edu --recv-keys␣
↪87E673AF83F6C3A0C344C8C3F4AA229D4D58C245
gpg: key 9C27B31342B7511D: "Michal Čihař <michal@cihar.com>" imported
gpg: Total number processed: 1
gpg:               unchanged: 1
```

This will improve the situation a bit - at this point you can verify that the signature from the given key is correct but you still can not trust the name used in the key:

```
$ gpg --verify Weblate-3.5.tar.xz.asc
gpg: assuming signed data in 'Weblate-3.5.tar.xz'
gpg: Signature made Ne 3. března 2019, 16:43:15 CET
gpg:                using RSA key 87E673AF83F6C3A0C344C8C3F4AA229D4D58C245
gpg: Good signature from "Michal Čihař <michal@cihar.com>" [ultimate]
gpg:                 aka "Michal Čihař <nijel@debian.org>" [ultimate]
gpg:                 aka "[jpeg image of size 8848]" [ultimate]
gpg:                 aka "Michal Čihař (Braiins) <michal.cihar@braiins.cz>" [ultimate]
gpg: WARNING: This key is not certified with a trusted signature!
gpg:          There is no indication that the signature belongs to the owner.
Primary key fingerprint: 63CB 1DF1 EF12 CF2A C0EE  5A32 9C27 B313 42B7 511D
```

The problem here is that anybody could issue the key with this name. You need to ensure that the key is actually owned by the mentioned person. The GNU Privacy Handbook covers this topic in the chapter Validating other keys on your public keyring. The most reliable method is to meet the developer in person and exchange key fingerprints, however you can also rely on the web of trust. This way you can trust the key transitively though signatures of others, who have met the developer in person.

Once the key is trusted, the warning will not occur:

```
$ gpg --verify Weblate-3.5.tar.xz.asc
gpg: assuming signed data in 'Weblate-3.5.tar.xz'
gpg: Signature made Sun Mar  3 16:43:15 2019 CET
gpg:                using RSA key 87E673AF83F6C3A0C344C8C3F4AA229D4D58C245
gpg: Good signature from "Michal Čihař <michal@cihar.com>" [ultimate]
gpg:                 aka "Michal Čihař <nijel@debian.org>" [ultimate]
gpg:                 aka "[jpeg image of size 8848]" [ultimate]
gpg:                 aka "Michal Čihař (Braiins) <michal.cihar@braiins.cz>" [ultimate]
```

Should the signature be invalid (the archive has been changed), you would get a clear error regardless of the fact that the key is trusted or not:

```
$ gpg --verify Weblate-3.5.tar.xz.asc
gpg: Signature made Sun Mar  3 16:43:15 2019 CET
gpg:                using RSA key 87E673AF83F6C3A0C344C8C3F4AA229D4D58C245
gpg: BAD signature from "Michal Čihař <michal@cihar.com>" [ultimate]
```

2.1.4 Filesystem permissions

The Weblate process needs to be able to read and write to the directory where it keeps data - *DATA_DIR*. All files within this directory should be owned and writable by user running Weblate.

The default configuration places them in the same tree as the Weblate sources, however you might prefer to move these to a better location such as: `/var/lib/weblate`.

Weblate tries to create these directories automatically, but it will fail when it does not have permissions to do so.

You should also take care when running *Management commands*, as they should be ran under the same user as Weblate itself is running, otherwise permissions on some files might be wrong.

See also:

Serving static files

2.1.5 Database setup for Weblate

It is recommended to run Weblate with a PostgreSQL database server.

See also:

Use a powerful database engine, Databases, *Migrating from other databases to PostgreSQL*

PostgreSQL

PostgreSQL is usually the best choice for Django based sites. It's the reference database used for implementing Django database layer.

See also:

PostgreSQL notes

Creating a database in PostgreSQL

It is usually a good idea to run Weblate in a separate database, and separate user account:

```
# If PostgreSQL was not installed before, set the master password
sudo -u postgres psql postgres -c "\password postgres"

# Create a database user called "weblate"
sudo -u postgres createuser --superuser --pwprompt weblate

# Create the database "weblate" owned by "weblate"
sudo -u postgres createdb -O weblate weblate
```

Hint: If you don't want to make Weblate user a superuser in PostgreSQL, you can omit that. In that case you will have to perform some of the migration steps manually as a PostgreSQL superuser:

```
CREATE EXTENSION IF NOT EXISTS pg_trgm;
```

Configuring Weblate to use PostgreSQL

The `settings.py` snippet for PostgreSQL:

```
DATABASES = {
    'default': {
        # Database engine
        'ENGINE': 'django.db.backends.postgresql',
        # Database name
        'NAME': 'weblate',
        # Database user
        'USER': 'weblate',
        # Database password
        'PASSWORD': 'password',
        # Set to empty string for localhost
        'HOST': 'database.example.com',
        # Set to empty string for default
        'PORT': '',
    }
}
```

MySQL and MariaDB

Weblate can be also used with MySQL or MariaDB, please see MySQL notes and MariaDB notes for caveats using Django with those.

Following configuration is recommended for Weblate:

- Use `utf8mb4` charset to allow representation of higher Unicode planes (for example emojis).
- Configure the server with `Innodb_large_prefix` to allow longer indices on text fields.
- Set isolcation level to `READ COMMITTED`.
- The SQL mode should be set to `STRICT_TRANS_TABLES`.

2.1.6 Other configurations

Configuring outgoing e-mail

Weblate sends out e-mails on various occasions - for account activation and on various notifications configured by users. For this it needs access to a SMTP server.

The mail server setup is configured using these settings: `EMAIL_HOST`, `EMAIL_HOST_PASSWORD`, `EMAIL_HOST_USER` and `EMAIL_PORT`. Their names are quite self-explanatory, but you can find more info in the Django documentation.

Note: You can verify whether outgoing e-mail is working correctly by using the `sendtestemail` management command (see *Invoking management commands* for instructions how to invoke it in different environments).

HTTP proxy

Weblate does execute VCS commands and those accept proxy configuration from environment. The recommended approach is to define proxy settings in `settings.py`:

```
import os
os.environ['http_proxy'] = "http://proxy.example.com:8080"
os.environ['HTTPS_PROXY'] = "http://proxy.example.com:8080"
```

See also:

Proxy Environment Variables

2.1.7 Adjusting configuration

See also:

Sample configuration

Copy `weblate/settings_example.py` to `weblate/settings.py` and adjust it to match your setup. You will probably want to adjust the following options: `ADMINS`

List of site administrators to receive notifications when something goes wrong, for example notifications on failed merges, or Django errors.

See also:

`ADMINS`

`ALLOWED_HOSTS`

You need to set this to list the hosts your site is supposed to serve. For example:

```
ALLOWED_HOSTS = ['demo.weblate.org']
```

Alternatively you can include wildcard:

```
ALLOWED_HOSTS = ['*']
```

See also:

`ALLOWED_HOSTS`

`SESSION_ENGINE`

Configure how your sessions will be stored. In case you keep the default database backend engine, you should schedule: **`weblate clearsessions`** to remove stale session data from the database.

If you are using Redis as cache (see *Enable caching*) it is recommended to use it for sessions as well:

```
SESSION_ENGINE = 'django.contrib.sessions.backends.cache'
```

See also:

Configuring the session engine, SESSION_ENGINE

DATABASES

Connectivity to database server, please check Django's documentation for more details.

See also:

Database setup for Weblate, DATABASES, Databases

DEBUG

Disable this for any production server. With debug mode enabled, Django will show backtraces in case of error to users, when you disable it, errors will be sent per e-mail to ADMINS (see above).

Debug mode also slows down Weblate, as Django stores much more info internally in this case.

See also:

DEBUG,

DEFAULT_FROM_EMAIL

Email sender address for outgoing e-mail, for example registration e-mails.

See also:

DEFAULT_FROM_EMAIL,

SECRET_KEY

Key used by Django to sign some info in cookies, see *Django secret key* for more info.

SERVER_EMAIL

Email used as sender address for sending e-mails to the administrator, for example notifications on failed merges.

See also:

SERVER_EMAIL

2.1.8 Filling up the database

After your configuration is ready, you can run `weblate migrate` to create the database structure. Now you should be able to create translation projects using the admin interface.

In case you want to run an installation non interactively, you can use `weblate migrate --noinput`, and then create an admin user using *`createadmin`* command.

You should also sign in to the admin interface (on `/admin/` URL) and adjust the default sitename to match your domain by clicking on *Sites* and once there, change the `example.com` record to match your real domain name.

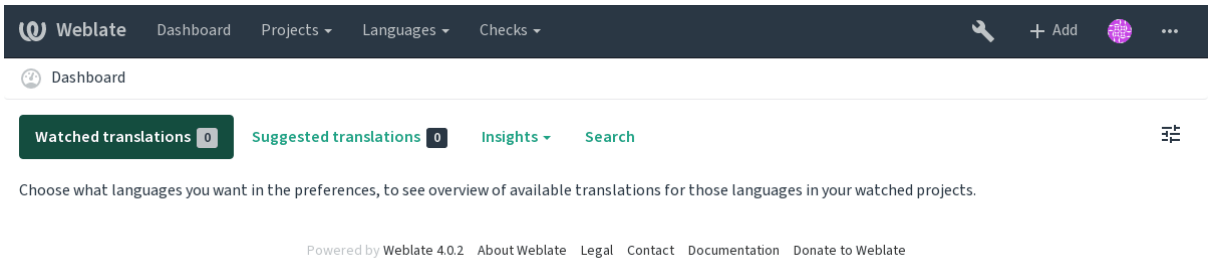
Once you are done, you should also check the *Performance report* in the admin interface, which will give you hints of potential non optimal configuration on your site.

See also:

Configuration, *Access control*, *Why do links contain example.com as the domain?*, *Set correct site domain*

2.1.9 Production setup

For a production setup you should carry out adjustments described in the following sections. The most critical settings will trigger a warning, which is indicated by an exclamation mark in the top bar if signed in as a superuser:



It is also recommended to inspect checks triggered by Django (though you might not need to fix all of them):

```
weblate check --deploy
```

See also:

Deployment checklist

Disable debug mode

Disable Django's debug mode (*DEBUG*) by:

```
DEBUG = False
```

With debug mode on, Django stores all executed queries and shows users backtraces of errors, which is not desired in a production setup.

See also:

Adjusting configuration

Properly configure admins

Set the correct admin addresses to the *ADMINS* setting to defining who will receive e-mails in case something goes wrong on the server, for example:

```
ADMINS = (
    ('Your Name', 'your_email@example.com'),
)
```

See also:

Adjusting configuration

Set correct site domain

Adjust site name and domain in the admin interface, otherwise links in RSS or registration e-mails will not work.

Please open the admin interface and edit the default sitename and domain under the *Sites › Sites* (or do it directly at the `/admin/sites/site/1/` URL under your Weblate installation). You have to change the *Domain name* to match your setup.

Note: This setting should only contain the domain name. For configuring protocol, (enabling and enforcing HTTPS) use *ENABLE_HTTPS* and for changing URL, use *URL_PREFIX*.

Alternatively, you can set the site name from the commandline using *changesite*. For example, when using the built-in server:

```
weblate changesite --set-name 127.0.0.1:8000
```

For a production site, you want something like:

```
weblate changesite --set-name weblate.example.com
```

See also:

Why do links contain example.com as the domain?, *Correctly configure HTTPS ENABLE_HTTPS*, *changesite*, The "sites" framework

Correctly configure HTTPS

It is strongly recommended to run Weblate using the encrypted HTTPS protocol. After enabling it, you should set *ENABLE_HTTPS* in the settings:

```
ENABLE_HTTPS = True
```

Hint: You might want to set up HSTS as well, see SSL/HTTPS for more details.

See also:

ENABLE_HTTPS, *Set correct site domain*

Use a powerful database engine

Please use PostgreSQL for a production environment, see *Database setup for Weblate* for more info.

See also:

Database setup for Weblate, *Migrating from other databases to PostgreSQL*, *Adjusting configuration*, Databases

Enable caching

If possible, use Redis from Django by adjusting the `CACHES` configuration variable, for example:

```
CACHES = {
    'default': {
        'BACKEND': 'django_redis.cache.RedisCache',
        'LOCATION': 'redis://127.0.0.1:6379/0',
        # If redis is running on same host as Weblate, you might
        # want to use unix sockets instead:
        # 'LOCATION': 'unix:///var/run/redis/redis.sock?db=0',
        'OPTIONS': {
            'CLIENT_CLASS': 'django_redis.client.DefaultClient',
            'PARSER_CLASS': 'redis.connection.HiredisParser',
        }
    }
}
```

See also:

Avatar caching, Django's cache framework

Avatar caching

In addition to caching of Django, Weblate performs caching of avatars. It is recommended to use a separate, file-backed cache for this purpose:

```
CACHES = {
    'default': {
        # Default caching backend setup, see above
        'BACKEND': 'django_redis.cache.RedisCache',
        'LOCATION': 'unix:///var/run/redis/redis.sock?db=0',
        'OPTIONS': {
            'CLIENT_CLASS': 'django_redis.client.DefaultClient',
            'PARSER_CLASS': 'redis.connection.HiredisParser',
        }
    },
    'avatar': {
        'BACKEND': 'django.core.cache.backends.filebased.FileBasedCache',
        'LOCATION': os.path.join(DATA_DIR, 'avatar-cache'),
        'TIMEOUT': 604800,
        'OPTIONS': {
            'MAX_ENTRIES': 1000,
        },
    }
```

See also:

ENABLE_AVATARS, *AVATAR_URL_PREFIX*, *Avatars*, *Enable caching*, Django's cache framework

Configure e-mail addresses

Weblate needs to send out e-mails on several occasions, and these e-mails should have a correct sender address, please configure *SERVER_EMAIL* and *DEFAULT_FROM_EMAIL* to match your environment, for example:

```
SERVER_EMAIL = 'admin@example.org'
DEFAULT_FROM_EMAIL = 'weblate@example.org'
```

Note: To disable sending e-mails by Weblate set EMAIL_BACKEND to `django.core.mail.backends.dummy.EmailBackend`.

This will disable *all* e-mail delivery including registration or pasword reset e-mails.

See also:

Adjusting configuration, *Configuring outgoing e-mail*, DEFAULT_FROM_EMAIL, SERVER_EMAIL

Allowed hosts setup

Django requires *ALLOWED_HOSTS* to hold a list of domain names your site is allowed to serve, leaving it empty will block any requests.

See also:

ALLOWED_HOSTS

Django secret key

The *SECRET_KEY* setting is used by Django to sign cookies, and you should really generate your own value rather than using the one from the example setup.

You can generate a new key using `weblate/examples/generate-secret-key` shipped with Weblate.

See also:

SECRET_KEY

Home directory

Changed in version 2.1: This is no longer required, Weblate now stores all its data in *DATA_DIR*.

The home directory for the user running Weblate should exist and be writable by this user. This is especially needed if you want to use SSH to access private repositories, but Git might need to access this directory as well (depending on the Git version you use).

You can change the directory used by Weblate in `settings.py`, for example to set it to `configuration` directory under the Weblate tree:

```
os.environ['HOME'] = os.path.join(BASE_DIR, 'configuration')
```

Note: On Linux, and other UNIX like systems, the path to user's home directory is defined in `/etc/passwd`. Many distributions default to a non-writable directory for users used for serving web content (such as `apache`, `www-data` or `wwwrun`, so you either have to run Weblate under a different user, or change this setting.

See also:

Accessing repositories

Template loading

It is recommended to use a cached template loader for Django. It caches parsed templates and avoids the need to do parsing with every single request. You can configure it using the following snippet (the `loaders` setting is important here):

```
TEMPLATES = [
    {
        'BACKEND': 'django.template.backends.django.DjangoTemplates',
        'DIRS': [
            os.path.join(BASE_DIR, 'templates'),
        ],
        'OPTIONS': {
            'context_processors': [
                'django.contrib.auth.context_processors.auth',
                'django.template.context_processors.debug',
                'django.template.context_processors.i18n',
                'django.template.context_processors.request',
                'django.template.context_processors.csrf',
                'django.contrib.messages.context_processors.messages',
                'weblate.trans.context_processors.weblate_context',
            ],
            'loaders': [
                ('django.template.loaders.cached.Loader', [
                    'django.template.loaders.filesystem.Loader',
```

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```
                    'django.template.loaders.app_directories.Loader',
                ]),
            ],
        },
    },
]
```

See also:

`django.template.loaders.cached.Loader`

Running maintenance tasks

For optimal performance, it is good idea to run some maintenance tasks in the background. This is now automatically done by *Background tasks using Celery* and covers following tasks:

- Configuration health check (hourly).
- Committing pending changes (hourly), see *Lazy commits* and *commit_pending*.
- Updating component alerts (daily).
- Update remote branches (nightly), see *AUTO_UPDATE*.
- Translation memory backup to JSON (daily), see *dump_memory*.
- Fulltext and database maintenance tasks (daily and weekly taks), see *cleanuptrans*.

Changed in version 3.2: Since version 3.2, the default way of executing these tasks is using Celery and Weblate already comes with proper configuration, see *Background tasks using Celery*.

System locales and encoding

The system locales should be configured to UTF-8 capable ones. On most Linux distributions this is the default setting. In case it is not the case on your system, please change locales to UTF-8 variant.

For examble by editing `/etc/default/locale` and setting there `LANG="C.UTF-8"`.

2.1.10 Running server

You will need several services to run Weblate, the recommended setup consists of:

- Database server (see *Database setup for Weblate*)
- Cache server (see *Enable caching*)
- Frontend web server for static files and SSL termination (see *Serving static files*)
- Wsgi server for dynamic content (see *Sample configuration for NGINX and uWSGI*)
- Celery for executing background tasks (see *Background tasks using Celery*)

Note: There are some dependencies between the services, for example cache and database should be running when starting up Celery or uwsgi processes.

In most cases, you will run all services on single (virtual) server, but in case your installation is heavy loaded, you can split up the services. The only limitation on this is that Celery and Wsgi servers need access to *DATA_DIR*.

Running web server

Running Weblate is not different from running any other Django based program. Django is usually executed as uWSGI or fcgi (see examples for different webservers below).

For testing purposes, you can use the built-in web server in Django:

```
weblate runserver
```

Warning: DO NOT USE THIS SERVER IN A PRODUCTION SETTING. It has not gone through security audits or performance tests. See also Django documentation on `runserver`.

Hint: The Django built in server serves static files only with *DEBUG* enabled as it is intended for development only. For production use, please see wsgi setups in *Sample configuration for NGINX and uWSGI*, *Sample configuration for Apache*, *Sample configuration for Apache and Gunicorn*, and *Serving static files*.

Serving static files

Changed in version 2.4: Prior to version 2.4, Weblate didn't properly use the Django static files framework and the setup was more complex.

Django needs to collect its static files in a single directory. To do so, execute `weblate collectstatic --noinput`. This will copy the static files into a directory specified by the `STATIC_ROOT` setting (this defaults to a `static` directory inside *DATA_DIR*).

It is recommended to serve static files directly from your web server, you should use that for the following paths:

`/static/` Serves static files for Weblate and the admin interface (from defined by `STATIC_ROOT`).

`/media/` Used for user media uploads (e.g. screenshots).

`/favicon.ico` Should be rewritten to rewrite a rule to serve `/static/favicon.ico`

See also:

Deploying Django, Deploying static files

Content security policy

The default Weblate configuration enables `weblate.middleware.SecurityMiddleware` middleware which sets security related HTTP headers like `Content-Security-Policy` or `X-XSS-Protection`. These are by default set up to work with Weblate and it's configuration, but this might clash with your customization. If that is the case, it is recommended to disable this middleware and set these headers manually.

Sample configuration for Apache

The following configuration runs Weblate as WSGI, you need to have enabled mod_wsgi (available as `weblate/examples/apache.conf`):

```
#
# VirtualHost for weblate
#
# This example assumes Weblate is installed in /usr/share/weblate
```

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```
#
# If using virtualenv, you need to add it to search path as well:
# WSGIPythonPath /usr/share/weblate:/path/to/your/venv/lib/python3.7/site-packages
#
<VirtualHost *:80>
    ServerAdmin admin@weblate.example.org
    ServerName weblate.example.org

    # DATA_DIR/static/favicon.ico
    Alias /favicon.ico /var/lib/weblate/static/favicon.ico

    # DATA_DIR/static/
    Alias /static/ /var/lib/weblate/static/
    <Directory /var/lib/weblate/static/>
        Require all granted
    </Directory>

    # DATA_DIR/media/
    Alias /media/ /var/lib/weblate/media/
    <Directory /var/lib/weblate/media/>
        Require all granted
    </Directory>

    WSGIDaemonProcess weblate.example.org python-path=/usr/share/weblate
    WSGIProcessGroup weblate.example.org
    WSGIApplicationGroup %{GLOBAL}

    WSGIScriptAlias / /usr/share/weblate/weblate/wsgi.py process-group=weblate.
↪example.org
    WSGIPassAuthorization On

    <Directory /usr/share/weblate/weblate>
        <Files wsgi.py>
        Require all granted
        </Files>
    </Directory>

</VirtualHost>
```

This configuration is for Apache 2.4 and later. For earlier versions of Apache, replace *Require all granted* with *Allow from all*.

See also:

How to use Django with Apache and mod_wsgi

Sample configuration for Apache and Gunicorn

The following configuration runs Weblate in Gunicorn and Apache 2.4 (available as `weblate/examples/apache.gunicorn.conf`):

```
#
# VirtualHost for weblate using gunicorn on localhost:8000
#
# This example assumes Weblate is installed in /usr/share/weblate
#
```

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```
#

<VirtualHost *:443>
    ServerAdmin admin@weblate.example.org
    ServerName weblate.example.org

    # DATA_DIR/static/favicon.ico
    Alias /favicon.ico /var/lib/weblate/static/favicon.ico

    # DATA_DIR/static/
    Alias /static/ /var/lib/weblate/static/
    <Directory /var/lib/weblate/static/>
        Require all granted
    </Directory>

    # DATA_DIR/media/
    Alias /media/ /var/lib/weblate/media/
    <Directory /var/lib/weblate/media/>
        Require all granted
    </Directory>

    SSLEngine on
    SSLCertificateFile /etc/apache2/ssl/https_cert.cert
    SSLCertificateKeyFile /etc/apache2/ssl/https_key.pem
    SSLProxyEngine On

    ProxyPass /favicon.ico !
    ProxyPass /static/ !
    ProxyPass /media/ !

    ProxyPass / http://localhost:8000/
    ProxyPassReverse / http://localhost:8000/
    ProxyPreserveHost On
</VirtualHost>
```

See also:

How to use Django with Gunicorn

Sample configuration for NGINX and uWSGI

To run production webserver, use the wsgi wrapper installed with Weblate (in virtual env case it is installed as `~/weblate-env/lib/python3.7/site-packages/weblate/wsgi.py`). Don't forget to set the Python search path to your virtualenv as well (for example using `virtualenv = /home/user/weblate-env` in uWSGI).

The following configuration runs Weblate as uWSGI under the NGINX webserver.

Configuration for NGINX (also available as `weblate/examples/weblate.nginx.conf`):

```
server {
    listen 80;
    server_name weblate;
    root /usr/share/weblate;

    location ~ ^/favicon.ico$ {
        # DATA_DIR/static/favicon.ico
```

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```
        alias /var/lib/weblate/static/favicon.ico;
        expires 30d;
    }

    location /static/ {
        # DATA_DIR/static/
        alias /var/lib/weblate/static/;
        expires 30d;
    }

    location /media/ {
        # DATA_DIR/media/
        alias /var/lib/weblate/media/;
        expires 30d;
    }

    location / {
        include uwsgi_params;
        # Needed for long running operations in admin interface
        uwsgi_read_timeout 3600;
        # Adjust based to uwsgi configuration:
        uwsgi_pass unix:///run/uwsgi/app/weblate/socket;
        # uwsgi_pass 127.0.0.1:8080;
    }
}
```

Configuration for uWSGI (also available as `weblate/examples/weblate.uwsgi.ini`):

```
[uwsgi]
plugins       = python3
master        = true
protocol      = uwsgi
socket        = 127.0.0.1:8080
wsgi-file     = /home/weblate/weblate-env/lib/python3.7/site-packages/weblate/wsgi.py

# Add path to Weblate checkout if you did not install
# Weblate by pip
# python-path   = /path/to/weblate

# In case you're using virtualenv uncomment this:
virtualenv = /home/weblate/weblate-env

# Needed for OAuth/OpenID
buffer-size   = 8192

# Increase number of workers for heavily loaded sites
workers       = 8

# Enable threads for Sentry error submission
enable-threads = true

# Child processes do not need file descriptors
close-on-exec = true

# Avoid default 0000 umask
umask = 0022
```

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```
# Run as weblate user
uid = weblate
gid = weblate

# Enable harakiri mode (kill requests after some time)
# harakiri = 3600
# harakiri-verbose = true

# Enable uWSGI stats server
# stats = :1717
# stats-http = true

# Do not log some errors caused by client disconnects
ignore-sigpipe = true
ignore-write-errors = true
disable-write-exception = true
```

See also:

How to use Django with uWSGI

Running Weblate under path

Changed in version 1.3: This is supported since Weblate 1.3.

A sample Apache configuration to serve Weblate under `/weblate`. Again using mod_wsgi (also available as `weblate/examples/apache-path.conf`):

```
# Example Apache configuration for running Weblate under /weblate path

WSGIPythonPath /usr/share/weblate
# If using virtualenv, you need to add it to search path as well:
# WSGIPythonPath /usr/share/weblate:/path/to/your/venv/lib/python3.7/site-packages
<VirtualHost *:80>
    ServerAdmin admin@image.weblate.org
    ServerName image.weblate.org

    # DATA_DIR/static/favicon.ico
    Alias /weblate/favicon.ico /var/lib/weblate/static/favicon.ico

    # DATA_DIR/static/
    Alias /weblate/static/ /var/lib/weblate/static/
    <Directory /var/lib/weblate/static/>
        Require all granted
    </Directory>

    # DATA_DIR/media/
    Alias /weblate/media/ /var/lib/weblate/media/
    <Directory /var/lib/weblate/media/>
        Require all granted
    </Directory>

    WSGIScriptAlias /weblate /usr/share/weblate/weblate/wsgi.py/weblate
    WSGIPassAuthorization On
```

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```
    <Directory /usr/share/weblate/weblate>
        <Files wsgi.py>
        Require all granted
        </Files>
    </Directory>

</VirtualHost>
```

Additionally, you will have to adjust `weblate/settings.py`:

```
URL_PREFIX = '/weblate'
```

2.1.11 Background tasks using Celery

New in version 3.2.

Weblate uses Celery to process background tasks. The example settings come with eager configuration, which does process all tasks in place, but you want to change this to something more reasonable for a production setup.

A typical setup using Redis as a backend looks like this:

```
CELERY_TASK_ALWAYS_EAGER = False
CELERY_BROKER_URL = 'redis://localhost:6379'
CELERY_RESULT_BACKEND = CELERY_BROKER_URL
```

You should also start the Celery worker to process the tasks and start scheduled tasks, this can be done directly on the command line (which is mostly useful when debugging or developing):

```
./weblate/examples/celery start
./weblate/examples/celery stop
```

Running Celery as system service

Most likely you will want to run Celery as a daemon and that is covered by Daemonization. For the most common Linux setup using systemd, you can use the example files shipped in the `examples` folder listed below.

Systemd unit to be placed as `/etc/systemd/system/celery-weblate.service`:

```
[Unit]
Description=Celery Service (Weblate)
After=network.target

[Service]
Type=forking
User=weblate
Group=weblate
EnvironmentFile=/etc/default/celery-weblate
WorkingDirectory=/home/weblate
RuntimeDirectory=celery
RuntimeDirectoryPreserve=restart
LogsDirectory=celery
ExecStart=/bin/sh -c '${CELERY_BIN} multi start ${CELERYD_NODES} \
  -A ${CELERY_APP} --pidfile=${CELERYD_PID_FILE} \
  --logfile=${CELERYD_LOG_FILE} --loglevel=${CELERYD_LOG_LEVEL} ${CELERYD_OPTS}'
```

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```
ExecStop=/bin/sh -c '${CELERY_BIN} multi stopwait ${CELERYD_NODES} \
  --pidfile=${CELERYD_PID_FILE}'
ExecReload=/bin/sh -c '${CELERY_BIN} multi restart ${CELERYD_NODES} \
  -A ${CELERY_APP} --pidfile=${CELERYD_PID_FILE} \
  --logfile=${CELERYD_LOG_FILE} --loglevel=${CELERYD_LOG_LEVEL} ${CELERYD_OPTS}'

[Install]
WantedBy=multi-user.target
```

Environment configuration to be placed as `/etc/default/celery-weblate`:

```
# Name of nodes to start
CELERYD_NODES="celery notify search memory backup translate"

# Absolute or relative path to the 'celery' command:
CELERY_BIN="/home/weblate/weblate-env/bin/celery"

# App instance to use
# comment out this line if you don't use an app
CELERY_APP="weblate.utils"

# Extra command-line arguments to the worker,
# increase concurency if you get weblate.E019
CELERYD_OPTS="--beat:celery --concurrency:celery=4 --queues:celery=celery --prefetch-
↪multiplier:celery=4 \
    --concurrency:notify=4 --queues:notify=notify --prefetch-multiplier:notify=10 \
    --concurrency:memory=1 --queues:memory=memory --prefetch-multiplier:memory=4 \
    --concurrency:translate=4 --queues:translate=translate --prefetch-
↪multiplier:translate=4 \
    --concurrency:backup=1 --queues:backup=backup  --prefetch-multiplier:backup=2"

# Logging configuration
# - %n will be replaced with the first part of the nodename.
# - %I will be replaced with the current child process index
#   and is important when using the prefork pool to avoid race conditions.
CELERYD_PID_FILE="/var/run/celery/weblate-%n.pid"
CELERYD_LOG_FILE="/var/log/celery/weblate-%n%I.log"
CELERYD_LOG_LEVEL="INFO"

# Internal Weblate variable to indicate we're running inside Celery
CELERY_WORKER_RUNNING="1"
```

Logrotate configuration to be placed as `/etc/logrotate.d/celery`:

```
/var/log/celery/*.log {
        weekly
        missingok
        rotate 12
        compress
        notifempty
}
```

Note: The Celery process has to be executed under the same user as Weblate and the WSGI process, otherwise files in the *DATA_DIR* will be stored with mixed ownership, leading to runtime issues.

Periodic tasks using Celery beat

Weblate comes with built-in setup for scheduled tasks. You can however define additional tasks in `settings.py`, for example see *Lazy commits*.

The tasks are supposed to be executed by Celery beats deamon. In case it it not working properly, it might be not running or it's database was corrupted. Check the Celery startup logs in such case to figure out root cause.

Monitoring Celery status

You can use *celery_queues* to see current length of Celery task queues. In case the queue will get too long, you will also get configuration error in the admin interface.

Warning: The Celery errors are by default only logged into Celery log and are not visible to user. In case you want to have overview on such failures, it is recommended to configure *Collecting error reports*.

See also:

Configuration and defaults, Workers Guide, Daemonization, Monitoring and Management Guide, *celery_queues*

2.1.12 Monitoring Weblate

Weblate provides the `/healthz/` URL to be used in simple health checks, for example using Kubernetes.

2.1.13 Collecting error reports

Weblate, as any other software, can fail. In order to collect useful failure states we recommend to use third party services to collect such information. This is especially useful in case of failing Celery tasks, which would otherwise only report error to the logs and you won't get notified on them. Weblate has support for the following services:

Sentry

Weblate has built in support for Sentry. To use it, it's enough to set *SENTRY_DSN* in the `settings.py`:

```
SENTRY_DSN = "https://id@your.sentry.example.com/"
```

Rollbar

Weblate has built-in support for Rollbar. To use it, it's enough to follow instructions for Rollbar notifier for Python.

In short, you need to adjust `settings.py`:

```
# Add rollbar as last middleware:
MIDDLEWARE = [
    # … other middleware classes …
    'rollbar.contrib.django.middleware.RollbarNotifierMiddleware',
]
```

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```
# Configure client access
ROLLBAR = {
    'access_token': 'POST_SERVER_ITEM_ACCESS_TOKEN',
    'client_token': 'POST_CLIENT_ITEM_ACCESS_TOKEN',
    'environment': 'development' if DEBUG else 'production',
    'branch': 'master',
    'root': '/absolute/path/to/code/root',
}
```

Everything else is integrated automatically, you will now collect both server and client side errors.

2.1.14 Migrating Weblate to another server

Migrating Weblate to another server should be pretty easy, however it stores data in few locations which you should migrate carefully. The best approach is to stop Weblate for the migration.

Migrating database

Depending on your database backend, you might have several options to migrate the database. The most straightforward one is to dump the database on one server and import it on the new one. Alternatively you can use replication in case your database supports it.

The best approach is to use database native tools, as they are usually the most effective (e.g. **mysqldump** or **pg_dump**). If you want to migrate between different databases, the only option might be to use Django management to dump and import the database:

```
# Export current data
weblate dumpdata > /tmp/weblate.dump
# Import dump
weblate loaddata /tmp/weblate.dump
```

Migrating VCS repositories

The VCS repositories stored under *DATA_DIR* need to be migrated as well. You can simply copy them or use **rsync** to do the migration more effectively.

Other notes

Don't forget to move other services Weblate might have been using like Redis, Cron jobs or custom authentication backends.

2.2 Weblate deployments

Weblate can be easily installed in your cloud. Please find detailed guide for your platform:

- *Installing using Docker*
- *Installing on OpenShift*

2.2.1 Bitnami Weblate stack

Bitnami provides a Weblate stack for many platforms at <https://bitnami.com/stack/weblate>. The setup will be adjusted during installation, see <https://bitnami.com/stack/weblate/README.txt> for more documentation.

2.2.2 Weblate in YunoHost

The self-hosting project YunoHost provides a package for Weblate. Once you have your YunoHost installation, you may install Weblate as any other application. It will provide you with a fully working stack with backup and restoration, but you may still have to edit your settings file for specific usages.

You may use your administration interface, or this button (it will bring you to your server):



It also is possible to use the commandline interface:

```
yunohost app install https://github.com/YunoHost-Apps/weblate_ynh
```

2.3 Upgrading Weblate

2.3.1 Docker image upgrades

The official Docker image (see *Installing using Docker*) has all upgrade steps integrated. There are no manual step besides pulling latest version.

2.3.2 Generic upgrade instructions

Before upgrading, please check the current *Software requirements* as they might have changed. Once all requirements are installed or updated, please adjust your `settings.py` to match changes in the configuration (consult `settings_example.py` for correct values).

Always check *Version specific instructions* before upgrade. In case you are skipping some versions, please follow instructions for all versions you are skipping in the upgrade. Sometimes it's better to upgrade to some intermediate version to ensure a smooth migration. Upgrading across multiple releases should work, but is not as well tested as single version upgrades.

Note: It is recommended to perform a full database backup prior to upgrade so that you can roll back the database in case upgrade fails, see *Backing up and moving Weblate*.

---

1. Stop wsgi and Celery processes. The upgrade can perform incompatible changes in the database, so it is always safer to avoid old processes running while upgrading.
2. Upgrade Weblate code. For pip installs it can be achieved by `pip install -U Weblate` for Git checkout `git pull` should do it.
3. Upgrade configuration file, refer to `settings_example.py` or *Version specific instructions* for needed steps.
4. Upgrade database structure:

   ```
   weblate migrate --noinput
   ```

5. Collect updated static files (mostly javascript and CSS):

```
weblate collectstatic --noinput
```

6. If you are running version from Git, you should also regenerate locale files every time you are upgrading. You can do this by invoking:

```
weblate compilemessages
```

7. Verify that your setup is sane (see also *Production setup*):

```
weblate check --deploy
```

8. Restart celery worker (see *Background tasks using Celery*).

2.3.3 Version specific instructions

Upgrade from 2.x

If you are upgrading from 2.x release, always first upgrade to 3.0.1 and the continue upgrading in the 3.x series. Upgrades skipping this step are not supported and will break.

See also:

Upgrade from 2.20 to 3.0 in Weblate 3.0 documentation

Upgrade from 3.0.1 to 3.1

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- Several no longer needed applications have been removed from `INSTALLED_APPS`.
- The settings now recommend using several Django security features, see SSL/HTTPS.
- There is new dependency on the `jellyfish` module.

See also:

Generic upgrade instructions

Upgrade from 3.1 to 3.2

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- Rate limiting configuration has been changed, please see *Rate limiting*.
- Microsoft Terminology machine translation was moved to separate module and now requires `zeep` module.
- Weblate now uses Celery for several background tasks. There are new dependencies and settings because of this. You should also run Celery worker as standalone process. See *Background tasks using Celery* for more information.
- There are several changes in `settings_example.py`, most notable Celery configuration and middleware changes, please adjust your settings accordingly.

See also:

Generic upgrade instructions

Upgrade from 3.2 to 3.3

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- The DEFAULT_CUSTOM_ACL settings was replaced by *DEFAULT_ACCESS_CONTROL*. If you were using that please update your `settings.py`.
- Increase required translate-toolkit version to 2.3.1.
- Increase required social auth module versions (2.0.0 for social-auth-core and 3.0.0 for social-auth-app-django).
- The CELERY_RESULT_BACKEND should be now configured unless you are using eager mode, see Configuration and defaults.
- There is new `weblate.middleware.ProxyMiddleware` middleware needed if you use *IP_BEHIND_REVERSE_PROXY*.

See also:

Generic upgrade instructions

Upgrade from 3.3 to 3.4

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- The Celery now uses multiple queues, it is recommended to update to new worker setup which utilizes this, see *Background tasks using Celery*.
- There is new depedency on diff-match-patch and translation-finder.

See also:

Generic upgrade instructions

Upgrade from 3.4 to 3.5

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- There are several new checks included in the *CHECK_LIST*.

See also:

Generic upgrade instructions

Upgrade from 3.5 to 3.6

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- The automatic detection of file format has been removed. Please adjust your translation components configuration prior to upgrade. The upgrade should be able to gracefully handle most of situations, but can fail in some corner cases.
- If you have manually changed *WEBLATE_FORMATS*, you will have to remove `AutoFormat` from it.
- During the upgrade, the notifications settings need to be converted. This can be lengthty operation in case you have lot of users.

See also:

Generic upgrade instructions

Upgrade from 3.6 to 3.7

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- The Celery now uses separate queue for notifications, it is recommended to update to new worker setup which utilizes this, see *Background tasks using Celery*.
- There are new (`bleach`, `gobject`, `pycairo`) and updated (`translation-finder`) dependencies, you will now need Pango and Cairo system libraries as well, see *Pango and Cairo*.
- There are new addons, you might want to include them in case you modified the *WEBLATE_ADDONS*.
- There are new file formats, you might want to include them in case you modified the *WEBLATE_FORMATS*.
- There is change in the CSRF_FAILURE_VIEW.
- There is new app `weblate.fonts` to be included in INSTALLED_APPS.

See also:

Generic upgrade instructions

Upgrade from 3.7 to 3.8

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- There is new app `django.contrib.humanize` to be included in INSTALLED_APPS.

See also:

Generic upgrade instructions

Upgrade from 3.8 to 3.9

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- There are several new checks included in the *CHECK_LIST*.
- There are several updated and new dependencies.
- Sentry is now supported through modern Sentry SDK instead of Raven, please adjust your configuration to use new *SENTRY_DSN*.
- There are new addons, you might want to include them in case you modified the *WEBLATE_ADDONS*.
- The Celery now uses separate queue for backups, it is recommended to update to new worker setup which utilizes this, see *Background tasks using Celery*.

See also:

Generic upgrade instructions

Upgrade from 3.9 to 3.10

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- The database migration can take long on bigger installations.
- There is new dependency on the `misaka` and `GitPython` modules.
- The Celery now uses separate queue for translating, it is recommended to update to new worker setup which utilizes this, see *Background tasks using Celery*.
- There is new addon in the 3.10.2 release, you might want to include them in case you modified the *WEBLATE_ADDONS*.

See also:

Generic upgrade instructions

Upgrade from 3.10 to 3.11

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- The Matomo integration settings were changed, please see *MATOMO_SITE_ID* and *MATOMO_URL*.
- The Celery configuration has changed (Celery app name is different), see *Background tasks using Celery*.

See also:

Generic upgrade instructions

Upgrade from 3.11 to 4.0

Please follow *Generic upgrade instructions* in order to perform update.

Notable configuration or dependencies changes:

- Python versions older than 3.6 are no longer supported, see *Upgrading from Python 2 to Python 3*
- The only database backends supported by Weblate are now PostgreSQL, MySQL and MariaDB.
- There are several new checks included in the *CHECK_LIST*.
- There are several removed, updated and new dependencies.
- The migration will take some time if you have big translation memory.
- The translation memory and fulltext search now resides in the database, you can remove the `memory` and `whoosh` folders in the *DATA_DIR* after the upgrade.
- The database migration now creates PostgreSQL extensions, Weblate user now has to be superuser or the extensions created manuall, see *Creating a database in PostgreSQL*.

See also:

Generic upgrade instructions

2.3.4 Upgrading from Python 2 to Python 3

Weblate no longer supports Python older than 3.5. In case you are still running on older version, please perform migration to Python 3 first on existing version and upgrade later. See Upgrading from Python 2 to Python 3 in the Weblate 3.11.1 documentation.

2.3.5 Migrating from other databases to PostgreSQL

If you are running Weblate on other dabatase than PostgreSQL, you should migrate to PostgreSQL as that will be the only supported database backend in the 4.0 release. The following steps will guide you in migrating your data between the databases. Please remember to stop both web and Celery servers prior to the migration, otherwise you might end up with inconsistent data.

Creating a database in PostgreSQL

It is usually a good idea to run Weblate in a separate database, and separate user account:

```
# If PostgreSQL was not installed before, set the master password
sudo -u postgres psql postgres -c "\password postgres"

# Create a database user called "weblate"
sudo -u postgres createuser -D -P weblate

# Create the database "weblate" owned by "weblate"
sudo -u postgres createdb -O weblate weblate
```

Migrating using Django JSON dumps

The simplest approach for migration is to utilize Django JSON dumps. This works well for smaller installations. On bigger sites you might want to use pgloader instead, see *Migrating to PotsgreSQL using pgloader*.

1. Add PostgeSQL as additional database connection to the `settings.py`:

```
DATABASES = {
    'default': {
        # Database engine
        'ENGINE': 'django.db.backends.mysql',
        # Database name
        'NAME': 'weblate',
        # Database user
        'USER': 'weblate',
        # Database password
        'PASSWORD': 'password',
        # Set to empty string for localhost
        'HOST': 'database.example.com',
        # Set to empty string for default
        'PORT': '',
        # Additional database options
        'OPTIONS': {
            # In case of using an older MySQL server, which has MyISAM as a default␣
↪storage
            # 'init_command': 'SET storage_engine=INNODB',
            # Uncomment for MySQL older than 5.7:
            # 'init_command': "SET sql_mode='STRICT_TRANS_TABLES'",
            # If your server supports it, see the Unicode issues above
           'charset': 'utf8mb4',
           # Change connection timeout in case you get MySQL gone away error:
           'connect_timeout': 28800,
        }
    },
    'postgresql': {
```

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```
        # Database engine
        'ENGINE': 'django.db.backends.postgresql',
        # Database name
        'NAME': 'weblate',
        # Database user
        'USER': 'weblate',
        # Database password
        'PASSWORD': 'password',
        # Set to empty string for localhost
        'HOST': 'database.example.com',
        # Set to empty string for default
        'PORT': '',
    }
}
```

2. Run migrations and drop any data inserted into the tables:

```
weblate migrate --database=postgresql
weblate sqlflush --database=postgresql | weblate dbshell --database=postgresql
```

3. Dump legacy database and import to PostgreSQL

```
weblate dumpdata --all --output weblate.json
weblate loaddata weblate.json --database=postgresql
```

4. Adjust `DATABASES` to use just PostgreSQL database as default, remove legacy connection.

Weblate should be now ready to run from the PostgreSQL database.

Migrating to PotsgreSQL using pgloader

The pgloader is a generic migration tool to migrate data to PostgreSQL. You can use it to migrate Weblate database.

1. Adjust your `settings.py` to use PostgeSQL as a database.
2. Migrate the schema in the PostgreSQL database:

   ```
   weblate migrate
   weblate sqlflush | weblate dbshell
   ```

3. Run the pgloader to transfer the data. The following script can be used to migrate the database, but you might want to learn more about pgloader to understand what it does and tweak it to match your setup:

   ```
   LOAD DATABASE
        FROM      mysql://weblate:password@localhost/weblate
        INTO postgresql://weblate:password@localhost/weblate

   WITH include no drop, truncate, create no tables, create no indexes, no foreign␣
    ↪keys, disable triggers, reset sequences, data only

   ALTER SCHEMA 'weblate' RENAME TO 'public'
   ;
   ```

2.3.6 Migrating from Pootle

As Weblate was originally written as replacement from Pootle, it is supported to migrate user accounts from Pootle. You can dump the users from Pootle and import them using *importusers*.

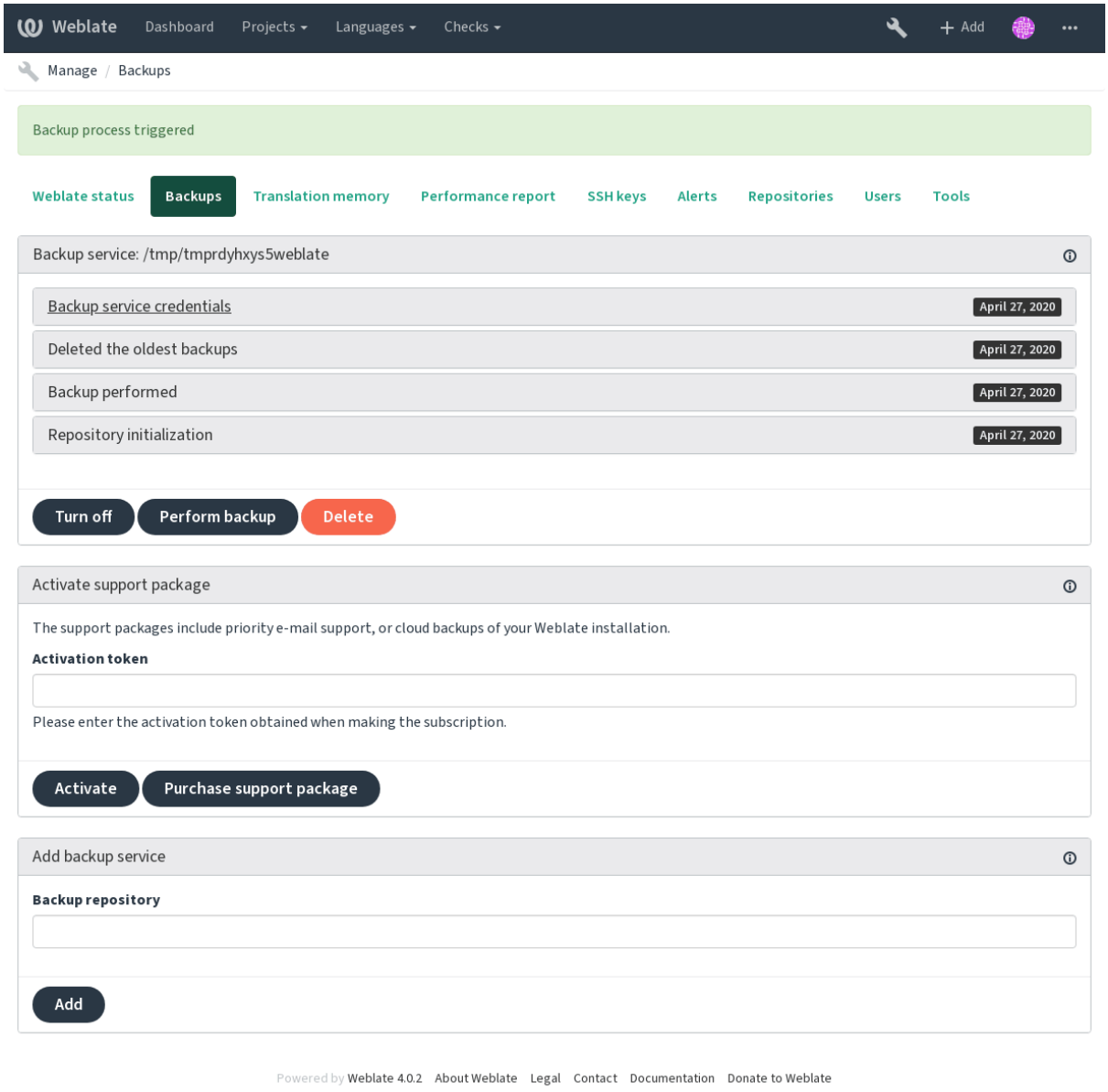
2.4 Backing up and moving Weblate

2.4.1 Automated backup

New in version 3.9.

Weblate has built in support for creating service backups using BorgBackup. Borg creates space-effective encrypted backups which can be safely stored in the cloud. The backups can be controlled in the management interface on the *Backups* tab.

Warning: Only PostgreSQL database is included in the automated backups. Other database engines have to be backed up manually. You are recommended to migrate to PostgreSQL as that will be the only supported database in the 4.0 release. See *Migrating from other databases to PostgreSQL*.



Using Weblate provisioned backup storage

The easiest approach to backup your Weblate instance is to purchase backup service at weblate.org. The process of activating can be performed in few steps:

1. Purchase backup service on https://weblate.org/support/#backup.
2. Enter obtained key in the management interface, see *Integrating support*.
3. Weblate will connect to the cloud service and obtain access information for the backups.
4. Turn on the new backup configuration on the *Backups* tab.
5. Backup Borg credentials in order to be able to restore the backups, see *Borg encryption key*.

Hint: The manual step of turning on is there for your safety. Without your consent no data is sent to the backup repository obtained through the registration process.

Using custom backup storage

You can also use your own storage for the backups. SSH can be used to store backups on the remote destination, the target server needs to have BorgBackup installed.

See also:

General in the Borg documentation

Borg encryption key

BorgBackup creates encrypted backups and without a passphrase you will not be able to restore the backup. The passphrase is generated when adding new backup service and you should copy it and keep it in a secure place.

In case you are using *Using Weblate provisioned backup storage*, please backup your private SSH key as well — it is used to access your backups.

See also:

borg init

Restoring from BorgBackup

1. Restore access to your backup repository and prepare your backup passphrase.
2. List backup existing on the server using `borg list REPOSITORY`.
3. Restore the desired backup to current directory using `borg extract REPOSITORY::ARCHIVE`.
4. Restore the database from the SQL dump placed in the `backup` directory in the Weblate data dir (see *Dumped data for backups*).
5. Copy Weblate configuration and data dir to the correct location.

The Borg session might look like:

```
$ borg list /tmp/xxx
Enter passphrase for key /tmp/xxx:
2019-09-26T14:56:08                  Thu, 2019-09-26 14:56:08␣
↪[de0e0f13643635d5090e9896bdaceb92a023050749ad3f3350e788f1a65576a5]
$ borg extract /tmp/xxx::2019-09-26T14:56:08
Enter passphrase for key /tmp/xxx:
```

See also:

borg list, borg extract

2.4.2 Manual backup

Depending on what you want to save, back up the type data Weblate stores in each respective place.

Hint: In case you are doing manual backups, you might want to silent Weblate warning about lack of backups by adding `weblate.I028` to `SILENCED_SYSTEM_CHECKS` in `settings.py` or *`WEBLATE_SILENCED_SYSTEM_CHECKS`* for Docker.

```
SILENCED_SYSTEM_CHECKS.append("weblate.I028")
```

Database

The actual storage location depends on your database setup.

The database is the most important storage. Set up regular backups of your database, without it all your translation setup will be gone.

Native database backup

The recommended approach is to do dump of the database using database native tools such as **pg_dump** or **mysqldump**. It usually performs better than Django backup and restores complete tables with all data.

You can restore this backup in newer Weblate release, it will perform any necessary migrations when running in `migrate`. Please consult *Upgrading Weblate* on more detailed information how to peform upgrade between versions.

Django database backup

Alternatively you can backup database using Django's `dumpdata` command. That way the backup is database agnostic and can be used in case you want to change database backend.

Prior to restoring you need to be running exactly same Weblate version as was used when doing backups. This is necessary as the database structure does change between releases and you would end up corrupting the data in some way. After installing the same version, run all database migrations using `migrate`.

Once this is done, some entries will be already created in the database and you will have them in the database backup as well. The recommended approach is to delete such entries manually using management shell (see *Invoking management commands*):

```
weblate shell
>>> from weblate.auth.models import User
>>> User.objects.get(username='anonymous').delete()
```

Files

If you have enough backup space, simply backup the whole *DATA_DIR*. This is safe bet even if it includes some files you don't want. The following sections describe in detail what you should back up and what you can skip.

Dumped data for backups

Stored in *DATA_DIR* `/backups`.

Weblate dumps various data here, and you can include these files for more complete backups. The files are updated daily (requires a running Celery beats server, see *Background tasks using Celery*). Currently, this includes:

- Weblate settings as `settings.py` (there is also expanded version in `settings-expanded.py`).
- PostgreSQL database backup as `database.sql`.

The database backup are by default saved as plain text, but they can also be compressed or entirely skipped by using *DATABASE_BACKUP*.

Version control repositories

Stored in *DATA_DIR* `/vcs`.

The version control repositories contain a copy of your upstream repositories with Weblate changes. If you have push on commit enabled for all your translation components, all Weblate changes are included upstream and you do not have to backup the repositories on the Weblate side. They can be cloned again from the upstream locations with no data loss.

SSH and GPG keys

Stored in *DATA_DIR* `/ssh` and *DATA_DIR* `/home`.

If you are using SSH or GPG keys generated by Weblate, you should back up these locations, otherwise you will lose the private keys and you will have to regenerate new ones.

User uploaded files

Stored in *DATA_DIR* `/media`.

You should back up user uploaded files (e.g. *Visual context for strings*).

Command line for manual backup

Using a cron task, you can set up a bash command to be executed on a daily basis, for instance:

```
$ XZ_OPT="-9" tar -Jcf ~/backup/weblate-backup-$(date -u +%Y-%m-%d_%H%M%S).xz backups␣
↪vcs ssh home media fonts secret
```

The string between quotes after XZ_OPT allows you to choose your xz options, for instance the amount of memory used for compression; see https://linux.die.net/man/1/xz

You can adjust the list of folders and files to your needs. For instance, to avoid saving the translation memory (in backups folder), you could use:

```
$ XZ_OPT="-9" tar -Jcf ~/backup/weblate-backup-$(date -u +%Y-%m-%d_%H%M%S).xz backups/
↪database.sql backups/settings.py vcs ssh home media fonts secret
```

2.4.3 Celery tasks

The Celery tasks queue might contain some info, but is usually not needed for a backup. At most you will lose updates that have not yet ben processed to translation memory. It is recommended to perform the fulltext or repository updates upon restoring anyhow, so there is no problem in losing these.

See also:

Background tasks using Celery

2.4.4 Restoring manual backup

1. Restore all data you have backed up.
2. Update all repositories using *`updategit`*.

   ```
   weblate updategit --all
   ```

2.4.5 Moving a Weblate installation

Relocate your installation to a different system by following the backup and restore instructions above.

See also:

Upgrading from Python 2 to Python 3, *Migrating from other databases to PostgreSQL*

2.5 Authentication

2.5.1 User registration

The default setup for Weblate is to use python-social-auth, a form on the website to handle registration of new users. After confirming their e-mail a new user can contribute or authenticate by using one of the third party services.

You can also turn off registration of new users using *REGISTRATION_OPEN*.

The authentication attempts are subject to *Rate limiting*.

2.5.2 Authentication backends

The inbuilt solution of Django is used for authentication, including various social options to do so. Using it means you can import the user database of other Django based projects (see *Migrating from Pootle*).

Django can additionally be set up to authenticate against other means too.

See also:

Authentication settings describes how to configure authentication in the official Docker image.

2.5.3 Social authentication

Thanks to Welcome to Python Social Auth's documentation!, Weblate support authentication using many third party services such as GitLab, Ubuntu, Fedora, etc.

Please check their documentation for generic configuration instructions in Django Framework.

Note: By default, Weblate relies on third-party authentication services to provide a validated e-mail address. If some of the services you want to use don't support this, please enforce e-mail validation on the Weblate side by configuring FORCE_EMAIL_VALIDATION for them. For example:

```
SOCIAL_AUTH_OPENSUSE_FORCE_EMAIL_VALIDATION = True
```

See also:

Pipeline

Enabling individual backends is quite easy, it's just a matter of adding an entry to the `AUTHENTICATION_BACKENDS` setting and possibly adding keys needed for a given authentication method. Please note that some backends do not provide user e-mail by default, you have to request it explicitly, otherwise Weblate will not be able to properly credit contributions users make.

See also:

Python Social Auth backend

OpenID authentication

For OpenID based services it's usually just a matter of enabling them. The following section enables OpenID authentication for OpenSUSE, Fedora and Ubuntu:

```
# Authentication configuration
AUTHENTICATION_BACKENDS = (
    'social_core.backends.email.EmailAuth',
    'social_core.backends.suse.OpenSUSEOpenId',
    'social_core.backends.ubuntu.UbuntuOpenId',
    'social_core.backends.fedora.FedoraOpenId',
    'weblate.accounts.auth.WeblateUserBackend',
)
```

See also:

OpenID

GitHub authentication

You need to register an application on GitHub and then tell Weblate all its secrets:

```
# Authentication configuration
AUTHENTICATION_BACKENDS = (
    'social_core.backends.github.GithubOAuth2',
    'social_core.backends.email.EmailAuth',
    'weblate.accounts.auth.WeblateUserBackend',
)

# Social auth backends setup
SOCIAL_AUTH_GITHUB_KEY = 'GitHub Client ID'
SOCIAL_AUTH_GITHUB_SECRET = 'GitHub Client Secret'
SOCIAL_AUTH_GITHUB_SCOPE = ['user:email']
```

The GitHub should be configured to have callback URL as `https://example.com/accounts/complete/github/`.

See also:

GitHub

Bitbucket authentication

You need to register an application on Bitbucket and then tell Weblate all its secrets:

```
# Authentication configuration
AUTHENTICATION_BACKENDS = (
    'social_core.backends.bitbucket.BitbucketOAuth',
    'social_core.backends.email.EmailAuth',
    'weblate.accounts.auth.WeblateUserBackend',
)

# Social auth backends setup
SOCIAL_AUTH_BITBUCKET_KEY = 'Bitbucket Client ID'
SOCIAL_AUTH_BITBUCKET_SECRET = 'Bitbucket Client Secret'
SOCIAL_AUTH_BITBUCKET_VERIFIED_EMAILS_ONLY = True
```

See also:

Bitbucket

Google OAuth 2

To use Google OAuth 2, you need to register an application on <https://console.developers.google.com/> and enable the Google+ API.

The redirect URL is `https://WEBLATE SERVER/accounts/complete/google-oauth2/`

```
# Authentication configuration
AUTHENTICATION_BACKENDS = (
    'social_core.backends.google.GoogleOAuth2',
    'social_core.backends.email.EmailAuth',
    'weblate.accounts.auth.WeblateUserBackend',
)

# Social auth backends setup
SOCIAL_AUTH_GOOGLE_OAUTH2_KEY = 'Client ID'
SOCIAL_AUTH_GOOGLE_OAUTH2_SECRET = 'Client secret'
```

See also:

Google

Facebook OAuth 2

As per usual with OAuth 2 services, you need to register your application with Facebook. Once this is done, you can set up Weblate to use it:

The redirect URL is `https://WEBLATE SERVER/accounts/complete/facebook/`

```
# Authentication configuration
AUTHENTICATION_BACKENDS = (
    'social_core.backends.facebook.FacebookOAuth2',
    'social_core.backends.email.EmailAuth',
    'weblate.accounts.auth.WeblateUserBackend',
)

# Social auth backends setup
SOCIAL_AUTH_FACEBOOK_KEY = 'key'
SOCIAL_AUTH_FACEBOOK_SECRET = 'secret'
SOCIAL_AUTH_FACEBOOK_SCOPE = ['email', 'public_profile']
```

See also:

Facebook

GitLab OAuth 2

For using GitLab OAuth 2, you need to register an application on <https://gitlab.com/profile/applications>.

The redirect URL is `https://WEBLATE SERVER/accounts/complete/gitlab/` and ensure you mark the *read_user* scope.

```
# Authentication configuration
AUTHENTICATION_BACKENDS = (
    'social_core.backends.gitlab.GitLabOAuth2',
    'social_core.backends.email.EmailAuth',
    'weblate.accounts.auth.WeblateUserBackend',
)
```

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```
# Social auth backends setup
SOCIAL_AUTH_GITLAB_KEY = 'Application ID'
SOCIAL_AUTH_GITLAB_SECRET = 'Secret'
SOCIAL_AUTH_GITLAB_SCOPE = ['read_user']

# If you are using your own GitLab
# SOCIAL_AUTH_GITLAB_API_URL = 'https://gitlab.example.com/'
```

See also:

GitLab

Microsoft Azure Active Directory

Weblate can be configured to use common or specific tenants for authentication.

The redirect URL is `https://WEBLATE SERVER/accounts/complete/azuread-oauth2/` for common and `https://WEBLATE SERVER/accounts/complete/azuread-tenant-oauth2/` for tenant specific authentication.

```
# Azure AD common

# Authentication configuration
AUTHENTICATION_BACKENDS = (
    "social_core.backends.azuread.AzureADOAuth2",
    "social_core.backends.email.EmailAuth",
    "weblate.accounts.auth.WeblateUserBackend",
)

# OAuth2 keys
SOCIAL_AUTH_AZUREAD_OAUTH2_KEY = ""
SOCIAL_AUTH_AZUREAD_OAUTH2_SECRET = ""
```

```
# Azure AD Tenant

# Authentication configuration
AUTHENTICATION_BACKENDS = (
    "social_core.backends.azuread_tenant.AzureADTenantOAuth2",
    "social_core.backends.email.EmailAuth",
    "weblate.accounts.auth.WeblateUserBackend",
)

# OAuth2 keys
SOCIAL_AUTH_AZUREAD_TENANT_OAUTH2_KEY = ""
SOCIAL_AUTH_AZUREAD_TENANT_OAUTH2_SECRET = ""
# Tenant ID
SOCIAL_AUTH_AZUREAD_TENANT_OAUTH2_TENANT_ID = ""
```

See also:

Microsoft Azure Active Directory

Slack

For using Slack OAuth 2, you need to register an application on <https://api.slack.com/apps>.

The redirect URL is `https://WEBLATE SERVER/accounts/complete/slack/`.

```
# Authentication configuration
AUTHENTICATION_BACKENDS = (
    'social_core.backends.slack.SlackOAuth2',
    'social_core.backends.email.EmailAuth',
    'weblate.accounts.auth.WeblateUserBackend',
)

# Social auth backends setup
SOCIAL_AUTH_SLACK_KEY = ''
SOCIAL_AUTH_SLACK_SECRET = ''
```

See also:

Slack

Turning off password authentication

Email and password authentication can be disabled by removing `social_core.backends.email.EmailAuth` from AUTHENTICATION_BACKENDS. Always keep `weblate.accounts.auth.WeblateUserBackend` there, it is needed for core Weblate functionality.

Tip: You can still use password authentication for the admin interface, for users you manually create there. Just navigate to `/admin/`.

For example authentication using only the openSUSE Open ID provider can be achieved using the following:

```
# Authentication configuration
AUTHENTICATION_BACKENDS = (
    'social_core.backends.suse.OpenSUSEOpenId',
    'weblate.accounts.auth.WeblateUserBackend',
)
```

2.5.4 Password authentication

The default `settings.py` comes with a reasonable set of AUTH_PASSWORD_VALIDATORS:

- Passwords can't be too similar to your other personal info.
- Passwords must contain at least 6 characters.
- Passwords can't be a commonly used password.
- Passwords can't be entirely numeric.
- Passwords can't consist of a single character or only whitespace.
- Passwords can't match a password you have used in the past.

You can customize this setting to match your password policy.

Additionally you can also install django-zxcvbn-password which gives quite realistic estimates of password difficulty and allows rejecting passwords below a certain threshold.

2.5.5 LDAP authentication

LDAP authentication can be best achieved using the *django-auth-ldap* package. You can install it via usual means:

```
# Using PyPI
pip install django-auth-ldap>=1.3.0

# Using apt-get
apt-get install python-django-auth-ldap
```

Warning: With django-auth-ldap older than 1.3.0 the *Automatic group assignments* will not work properly for newly created users.

Note: There are some incompatibilities in the Python LDAP 3.1.0 module, which might prevent you from using that version. If you get error AttributeError: 'module' object has no attribute '_trace_level', downgrading python-ldap to 3.0.0 might help.

Once you have the package installed, you can hook it into the Django authentication:

```
# Add LDAP backed, keep Django one if you want to be able to login
# even without LDAP for admin account
AUTHENTICATION_BACKENDS = (
    'django_auth_ldap.backend.LDAPBackend',
    'weblate.accounts.auth.WeblateUserBackend',
)

# LDAP server address
AUTH_LDAP_SERVER_URI = 'ldaps://ldap.example.net'

# DN to use for authentication
AUTH_LDAP_USER_DN_TEMPLATE = 'cn=%(user)s,o=Example'
# Depending on your LDAP server, you might use a different DN
# like:
# AUTH_LDAP_USER_DN_TEMPLATE = 'ou=users,dc=example,dc=com'

# List of attributes to import from LDAP upon login
# Weblate stores full name of the user in the full_name attribute
AUTH_LDAP_USER_ATTR_MAP = {
    'full_name': 'name',
    # Use the following if your LDAP server does not have full name
    # Weblate will merge them later
    # 'first_name': 'givenName',
    # 'last_name': 'sn',
    # Email is required for Weblate (used in VCS commits)
    'email': 'mail',
}

# Hide the registration form
REGISTRATION_OPEN = False
```

Note: You should remove `'social_core.backends.email.EmailAuth'` from the `AUTHENTICATION_BACKENDS` setting, otherwise users will be able to set their password in Weblate, and authenticate using that. Keeping `'weblate.accounts.auth.WeblateUserBackend'` is still

needed in order to make permissions and facilitate anonymous users. It will also allow you to sign in using a local admin account, if you have created it (e.g. by using *createadmin*).

Using bind password

If you can not use direct bind for authentication, you will need to use search, and provide a user to bind for the search. For example:

```
import ldap
from django_auth_ldap.config import LDAPSearch

AUTH_LDAP_BIND_DN = ""
AUTH_LDAP_BIND_PASSWORD = ""
AUTH_LDAP_USER_SEARCH = LDAPSearch("ou=users,dc=example,dc=com",
    ldap.SCOPE_SUBTREE, "(uid=%(user)s)")
```

Active directory integration

```
import ldap
from django_auth_ldap.config import LDAPSearch, NestedActiveDirectoryGroupType

AUTH_LDAP_BIND_DN = "CN=ldap,CN=Users,DC=example,DC=com"
AUTH_LDAP_BIND_PASSWORD = "password"

# User and group search objects and types
AUTH_LDAP_USER_SEARCH = LDAPSearch("CN=Users,DC=example,DC=com", ldap.SCOPE_SUBTREE,
↪"(sAMAccountName=%(user)s)")

# Make selected group a superuser in Weblate
AUTH_LDAP_USER_FLAGS_BY_GROUP = {
    # is_superuser means user has all permissions
    "is_superuser": "CN=weblate_AdminUsers,OU=Groups,DC=example,DC=com",
}

# Map groups from AD to Weblate
AUTH_LDAP_GROUP_SEARCH = LDAPSearch("OU=Groups,DC=example,DC=com", ldap.SCOPE_SUBTREE,
↪ "(objectClass=group)")
AUTH_LDAP_GROUP_TYPE = NestedActiveDirectoryGroupType()
AUTH_LDAP_FIND_GROUP_PERMS = True
```

See also:

Django Authentication Using LDAP, Authentication

2.5.6 CAS authentication

CAS authentication can be achieved using a package such as *django-cas-ng*.

Step one is disclosing the e-mail field of the user via CAS. This has to be configured on the CAS server itself, and requires you run at least CAS v2 since CAS v1 doesn't support attributes at all.

Step two is updating Weblate to use your CAS server and attributes.

To install *django-cas-ng*:

```
pip install django-cas-ng
```

Once you have the package installed you can hook it up to the Django authentication system by modifying the `settings.py` file:

```
# Add CAS backed, keep the Django one if you want to be able to sign in
# even without LDAP for the admin account
AUTHENTICATION_BACKENDS = (
    'django_cas_ng.backends.CASBackend',
    'weblate.accounts.auth.WeblateUserBackend',
)

# CAS server address
CAS_SERVER_URL = 'https://cas.example.net/cas/'

# Add django_cas_ng somewhere in the list of INSTALLED_APPS
INSTALLED_APPS = (
    ...,
    'django_cas_ng'
)
```

Finally, a signal can be used to map the e-mail field to the user object. For this to work you have to import the signal from the *django-cas-ng* package and connect your code with this signal. Doing this in settings file can cause problems, therefore it's suggested to put it:

- In your app config's `django.apps.AppConfig.ready()` method
- In the project's `urls.py` file (when no models exist)

```
from django_cas_ng.signals import cas_user_authenticated
from django.dispatch import receiver
@receiver(cas_user_authenticated)
def update_user_email_address(sender, user=None, attributes=None, **kwargs):
    # If your CAS server does not always include the email attribute
    # you can wrap the next two lines of code in a try/catch block.
    user.email = attributes['email']
    user.save()
```

See also:

Django CAS NG

2.5.7 Configuring third party Django authentication

Generally any Django authentication plugin should work with Weblate. Just follow the instructions for the plugin, just remember to keep the Weblate user backend installed.

See also:

LDAP authentication, *CAS authentication*

Typically the installation will consist of adding an authentication backend to `AUTHENTICATION_BACKENDS` and installing an authentication app (if there is any) into `INSTALLED_APPS`:

```
AUTHENTICATION_BACKENDS = (
    # Add authentication backend here
    'weblate.accounts.auth.WeblateUserBackend',
)
```

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```
INSTALLED_APPS = (
    ...
    'weblate',
    # Install authentication app here
)
```

2.6 Access control

Changed in version 3.0: Before Weblate 3.0, the privilege system was based on Django, but is now specifically built for Weblate. If you are using an older version, please the consult documentation for that version, the information here will not apply.

Weblate comes with a fine grained privilege system to assign user permissions for the whole instance, or in a limited scope.

The permission system based on groups and roles, where roles define a set of permissions, and groups assign them to users and translations, see *Users, roles, groups and permissions* for more details.

After installation a default set of groups is created, and you can use those to assign users roles for the whole instance (see *Default groups and roles*). Additionally when *Per project access control* is turned on, you can assign users to specific translation projects. More fine-grained configuration can be achieved using *Custom access control*

2.6.1 Common setups

Locking down Weblate

To completely lock down your Weblate installation, you can use *LOGIN_REQUIRED_URLS* to force users to sign in and *REGISTRATION_OPEN* to prevent new registrations.

Site wide permissions

To manage permissions for a whole instance, just add users to *Users* (this is done by default using the *Automatic group assignments*), *Reviewers* and *Managers* groups. Keep all projects configured as *Public* (see *Per project access control*).

Per project permissions

Set your projects to *Protected* or *Private*, and manage users per project in the Weblate interface.

Adding permissions to languages, components or projects

You can additionally grant permissions to any user based on project, component or language set. To achieve this, create a new group (e.g. *Czech translators*) and configure it for a given resource. Any assigned permissions will be granted to members of that group for selected resources.

This will work just fine without additional setup, if using per project permissions. For permissions on the whole instance, you will probably also want to remove these permissions from the *Users* group, or change automatic assignment of all users to that group (see *Automatic group assignments*).

See also:

Permission checking

2.6.2 Per project access control

Note: By enabling ACL, all users are prohibited from accessing anything within a given project, unless you add the permissions for them to do just that.

You can limit user's access to individual projects. This feature is turned on by *Access control* in the configuration of each respective project. This automatically creates several groups for this project, see *Predefined groups*.

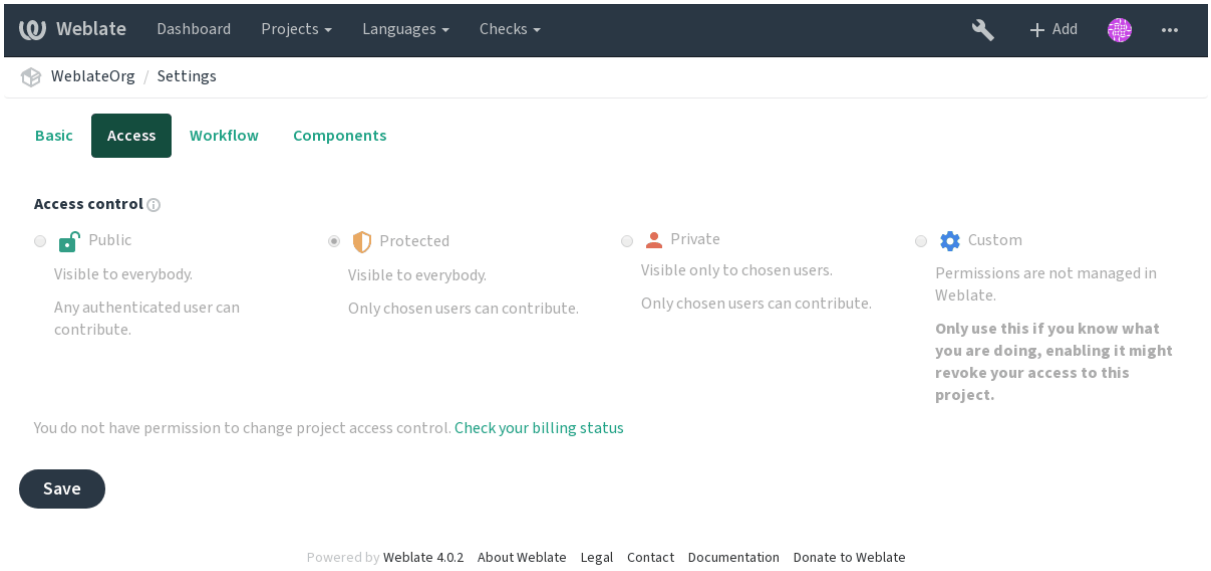
The following choices exist for *Access control*:

Public Publicly visible and translatable

Protected Publicly visible, but translatable only for selected users

Private Visible and translatable only for selected users

Custom Weblate does not manage users, see *Custom access control*.



To allow access to this project, you have to add the privilege either directly to the given user, or group of users in the Django admin interface, or by using user management on the project page, as described in *Managing per project access control*.

Note: Even with ACL turned on, some summary info will be available about your project:

- Statistics for the whole instance, including counts for all projects.
- Language summary for the whole instance, including counts for all projects.

2.6.3 Automatic group assignments

You can set up Weblate to automatically add users to groups based on their e-mail addresses. This automatic assignment happens only at the time of account creation.

This can be set up in the Django admin interface for each group (in the *Authentication* section).

Note: The automatic group assignment for the *Users* and *Viewers* groups will always be created by Weblate upon migrations, in case you want to turn it off, simply set the regular expression to `^$`, which

will never match.

2.6.4 Users, roles, groups and permissions

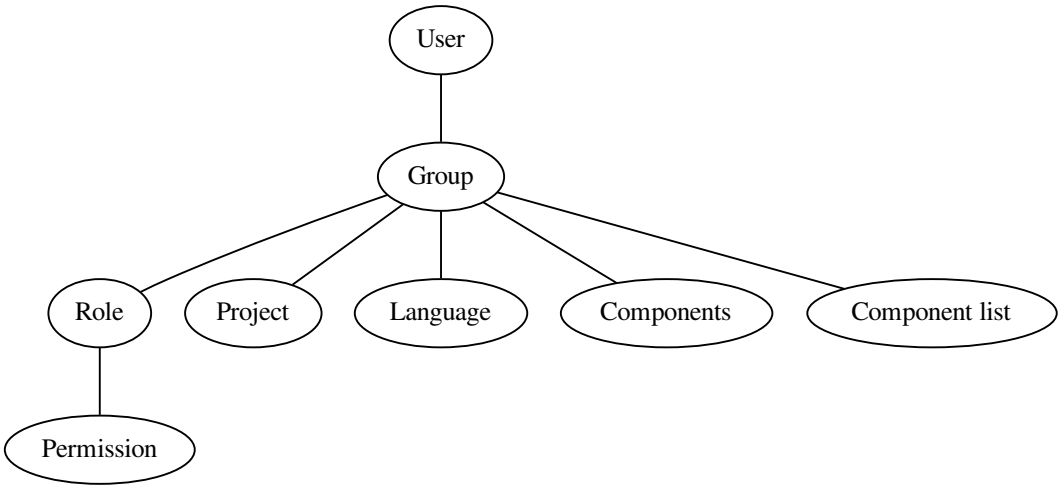
The authentication models consist of several objects:

Permission Individual permissions defined by Weblate. You can not assign individual permissions, this can only be done through assignment of roles.

Role Role defines a set of permissions. This allows reuse of these sets in several places, and makes the administration easier.

User Users can be members of several groups.

Group Groups connect roles, users and authentication objects (projects, languages and component lists).



Permission checking

Whenever a permission is checked to decide whether one is able to perform a given action, the check is carried out according to scope, and the following checks are performed in the order:

1. *Component list* are matched against component or project.
2. *Components* are matched against component or project.
3. *Projects* are matched against project.

As you can see, grating access to a component automatically grants user access to a containing project as well.

Note: Only first rule which is set is being used. So if you set all *Component list*, *Components* and *Project*, only *Component list* is being applied.

Additionally step is performed if checking permission for the translation:

4. *Languages* are matches against scope of translations, if not set, this matches no language.

Hint: You can use *Language selection* or *Project selection* to automate inclusion of all languages or projects.

Checking access to a project

A user has to be a member of a group linked to the project or any component inside it. Only membership is enough, no specific permissions are needed to access a project (this is used in the default *Viewers* group, see *Default groups and roles*).

2.6.5 Managing users and groups

All users and groups can be managed using the Django admin interface, available under `/admin/` URL.

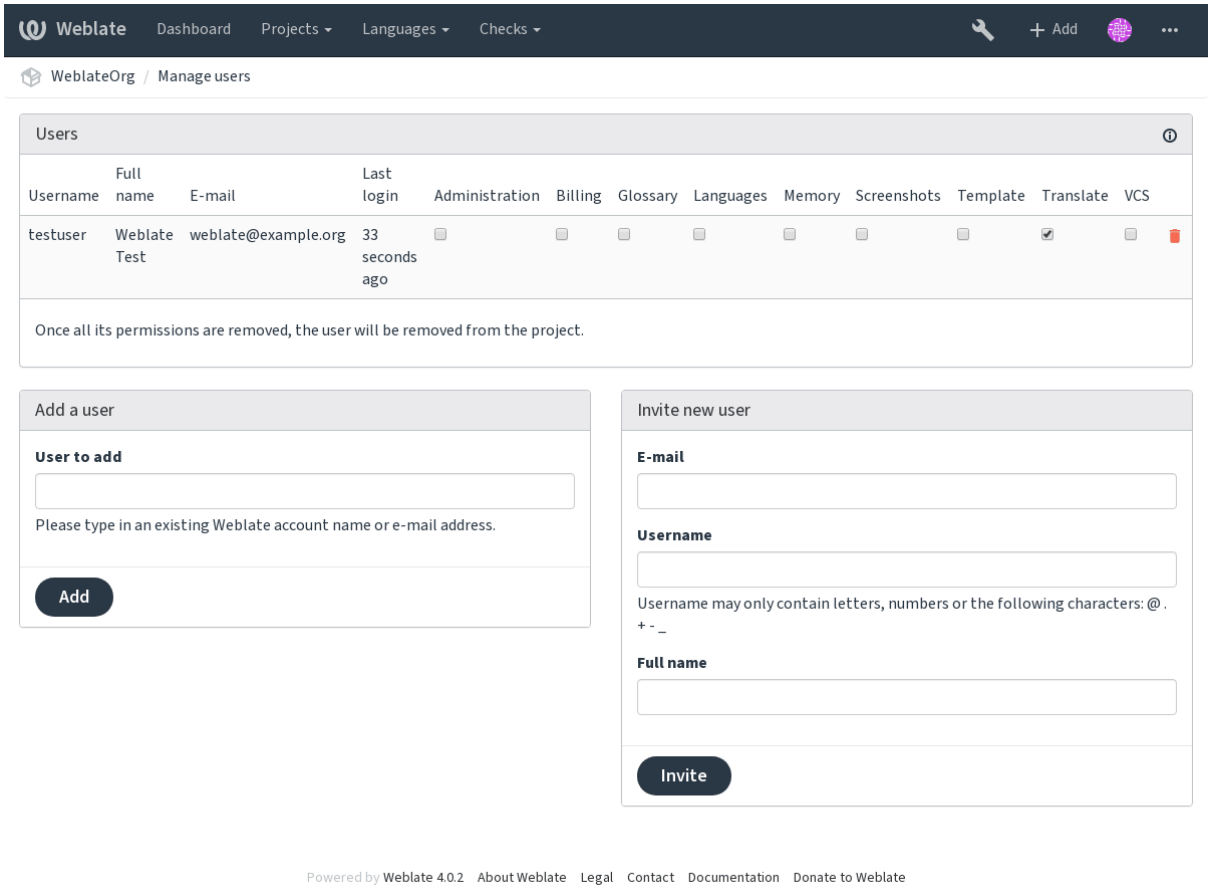
Managing per project access control

Note: This feature only works for ACL controlled projects, see *Per project access control*.

Users with the *Can manage ACL rules for a project* privilege (see *Access control*) can also manage users in projects with access control turned on through the project page. The interface allows you to:

- Add existing users to the project
- Invite new users to the project
- Change permissions of the users
- Revoke access to the users

The user management is available in the *Manage* menu of a project:



See also:

Per project access control

Predefined groups

Weblate comes with a predefined set of groups for a project, wherefrom you can assign users.

`Administration`
: Has all permissions available in the project.

`Glossary`
: Can manage glossary (add or remove entries, or upload).

`Languages`
: Can manage translated languages - add or remove translations.

`Screenshots`
: Can manage screenshots - add or remove them, and associate them to source strings.

`Template`
: Can edit translation templates in *Monolingual components* and source string info.

`Translate`
: Can translate the project, and upload translations made offline.

`VCS`
: Can manage VCS and access the exported repository.

`Review`
: Can approve translations during review.

`Billing`
: Can access billing info (see *Billing*).

2.6.6 Custom access control

By choosing *Custom* as *Access control*, Weblate will stop managing access for a given project, and you can set up custom rules in the Django admin interface. This can be used to define more complex access control, or set up a shared access policy for all projects in a single Weblate instance. If you want to enable this for all projects by default, please configure the *DEFAULT_ACCESS_CONTROL*.

Warning: By turning this on, Weblate will remove all *Per project access control* it has created for this project. If you are doing this without admin permission from the instance, you will instantly lose your access to manage the project.

2.6.7 Default groups and roles

List of privileges

Billing (see *Billing*) View billing info [*Administration*, *Billing*]

Changes Download changes [*Administration*]

Comments Post comment [*Administration*, *Edit source*, *Power user*, *Review strings*, *Translate*] Delete comment [*Administration*]

Component Edit component settings [*Administration*] Lock component, preventing it from being translated [*Administration*]

Glossary Add glossary entry [*Administration*, *Manage glossary*, *Power user*] Edit glossary entry [*Administration*, *Manage glossary*, *Power user*] Delete glossary entry [*Administration*, *Manage glossary*, *Power user*] Upload glossary entries [*Administration*, *Manage glossary*, *Power user*]

Machinery Use machine translation services [*Administration*, *Power user*]

Projects Edit project settings [*Administration*] Manage project access [*Administration*]

Reports Download reports [*Administration*]

Screenshots Add screenshot [*Administration*, *Manage screenshots*] Edit screenshot [*Administration*, *Manage screenshots*] Delete screenshot [*Administration*, *Manage screenshots*]

Source strings Edit source string info [*Administration*, *Edit source*]

Strings Add new strings [*Administration*] Ignore failing checks [*Administration*, *Edit source*, *Power user*, *Review strings*, *Translate*] Edit strings [*Administration*, *Edit source*, *Power user*, *Review strings*, *Translate*] Review strings [*Administration*, *Review strings*] Edit string when suggestions are enforced [*Administration*, *Review strings*] Edit source strings [*Administration*, *Edit source*, *Power user*]

Suggestions Accept suggestions [*Administration*, *Edit source*, *Power user*, *Review strings*, *Translate*] Add suggestions [*Add suggestion*, *Administration*, *Edit source*, *Power user*, *Review strings*, *Translate*] Delete suggestions [*Administration*] Vote on suggestions [*Administration*, *Edit source*, *Power user*, *Review strings*, *Translate*]

Translations Start new translation [*Administration*, *Manage languages*, *Power user*] Perform automatic translation [*Administration*, *Manage languages*] Delete existing translations [*Administration*, *Manage languages*] Start translation into a new language [*Administration*, *Manage languages*]

Uploads Define author of translation upload [*Administration*] Overwrite existing strings with an upload [*Administration*, *Edit source*, *Power user*, *Review strings*, *Translate*] Upload translation strings [*Administration*, *Edit source*, *Power user*, *Review strings*, *Translate*]

VCS Access the internal repository [*Access repository*, *Administration*, *Manage repository*, *Power user*] Commit changes to the internal repository [*Administration*, *Manage repository*] Push change from the internal repository [*Administration*, *Manage repository*] Reset changes in the internal repository [*Administration*, *Manage repository*] View upstream repository location [*Access repository*, *Administration*, *Manage repository*, *Power user*] Update the internal repository [*Administration*, *Manage repository*]

Global privileges Use management interface (global) Add language definitions (global) Manage language definitions (global) Add groups (global) Manage groups (global) Add users (global) Manage users (global) Manage announcements (global) Manage translation memory (global)

Note: The global privileges are not granted to any default role. These are powerful and they are quite close to the superuser status - most of them can affect all projects on your Weblate installation.

List of groups

The following groups are created upon installation (or after executing `setupgroups`):

Guests Defines permissions for non authenticated users.

This group contains only anonymous users (see `ANONYMOUS_USER_NAME`).

You can remove roles from this group to limit permissions for non authenticated users.

Default roles: *Add suggestion*, *Access repository*

Viewers This role ensures visibility of public projects for all users. By default all users are members of this group.

By default all users are members of this group, using *Automatic group assignments*.

Default roles: none

Users Default group for all users.

By default all users are members of this group using *Automatic group assignments*.

Default roles: *Power user*

Reviewers Group for reviewers (see *Translation workflows*).

Default roles: *Review strings*

Managers Group for administrators.

Default roles: *Administration*

Warning: Never remove the predefined Weblate groups and users, this can lead to unexpected problems. If you do not want to use these features, just remove all privileges from them.

2.7 Translation projects

2.7.1 Translation organization

Weblate organizes translatable VCS content of project/components into a tree-like structure.

- The bottom level object is *Project configuration*, which should hold all translations belonging together (for example translation of an application in several versions and/or accompanying documentation).

- On the level above, *Component configuration*, which is actually the component to translate, you define the VCS repository to use, and the mask of files to translate.
- Above *Component configuration* there are individual translations, handled automatically by Weblate as translation files (which match the mask defined in *Component configuration*) appear in the VCS repository.

Weblate supports a wide range of translation formats (both bilingual and monolingual ones) supported by Translate Toolkit, see *Supported file formats*.

Note: You can share cloned VCS repositories using *Weblate internal URLs*. Using this feature is highly recommended when you have many components sharing the same VCS. It improves performance and decreases required disk space.

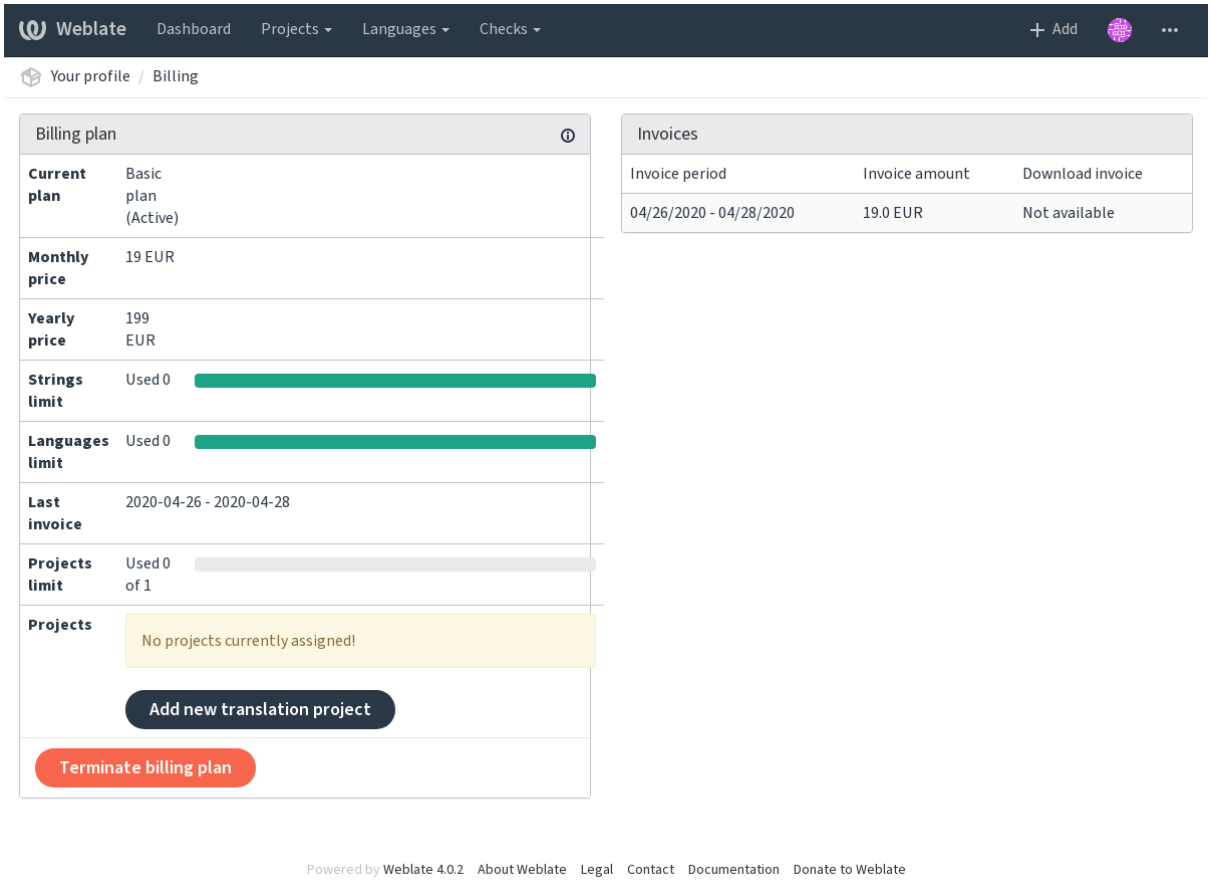
2.7.2 Adding translation projects and components

Changed in version 3.2: An interface for adding projects and components is included, and you no longer have to use *The Django admin interface*.

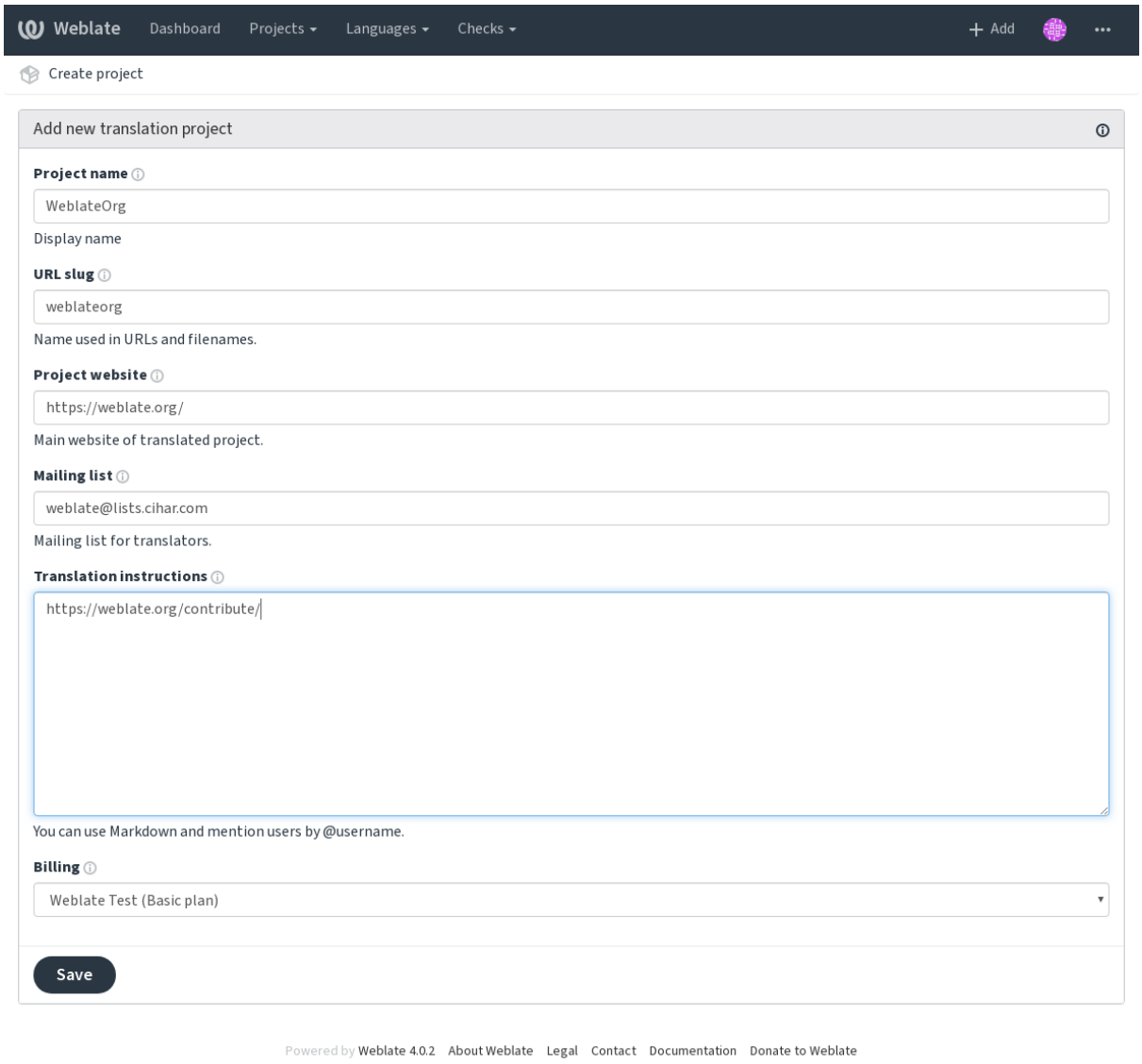
Changed in version 3.4: The process of adding components is now multi staged, with automated discovery of most parameters.

Based on your permissions, new translation projects and components can be created. It is always permitted for superusers, and if your instance uses billing (e.g. like https://hosted.weblate.org/ see *Billing*), you can also create those based on your plans allowance from the user account that manages billing.

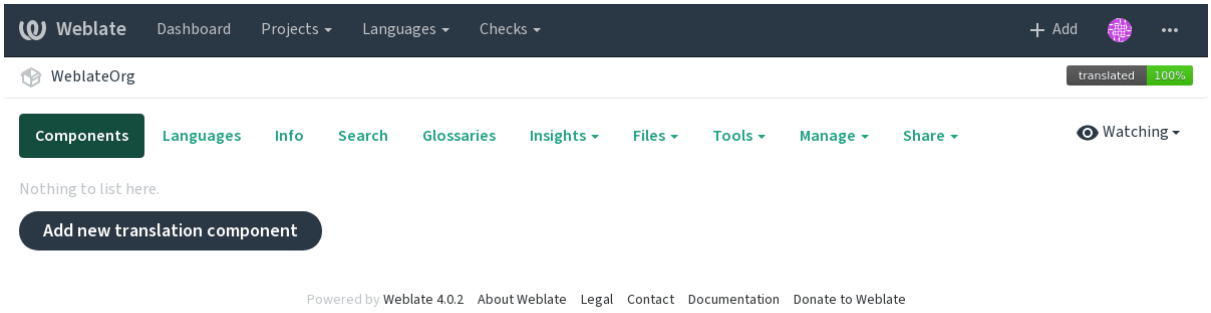
You can view your current billing plan on a separate page:



The project creation can be initiated from there, or using the menu in the navigation bar, filling in basic info about the translation project to complete addition of it:



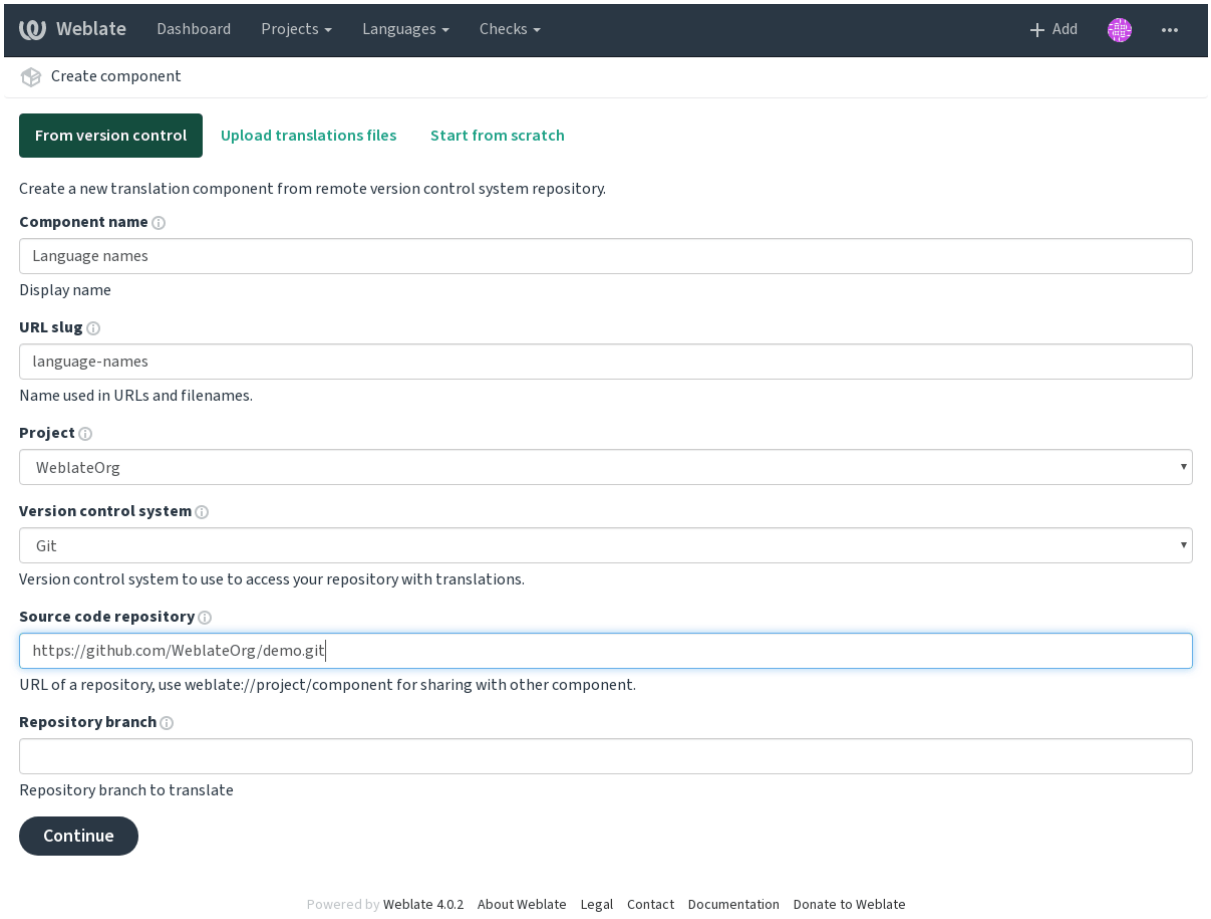
After creating the project, you are taken directly to the project page:



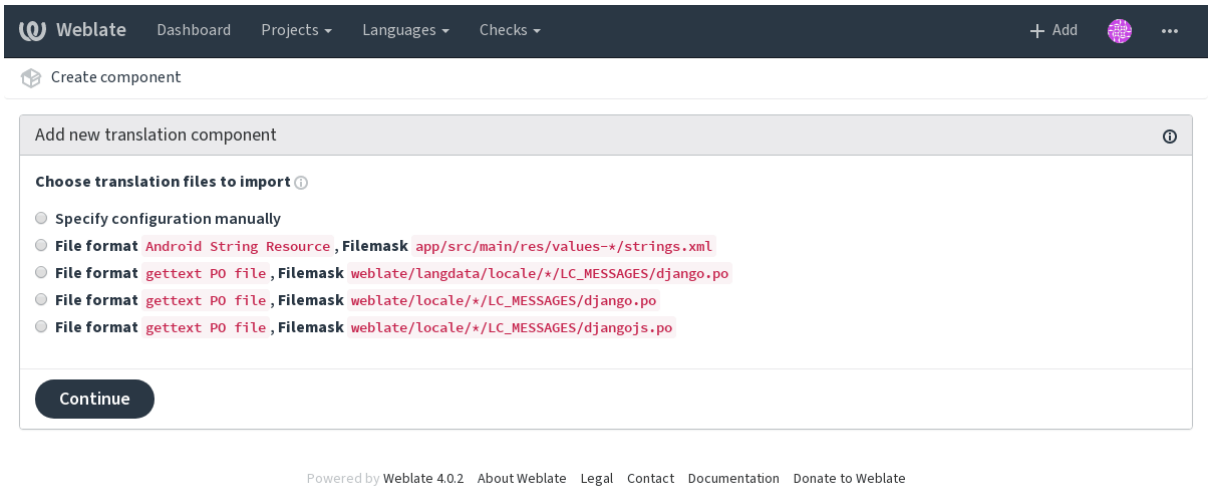
Creating a new translation component can be initiated via a single click there. The process of creating a component is multi-staged and automatically detects most translation parameters.

Once you have existing translation components, you can also easily add new ones for additional files or branches using same repository.

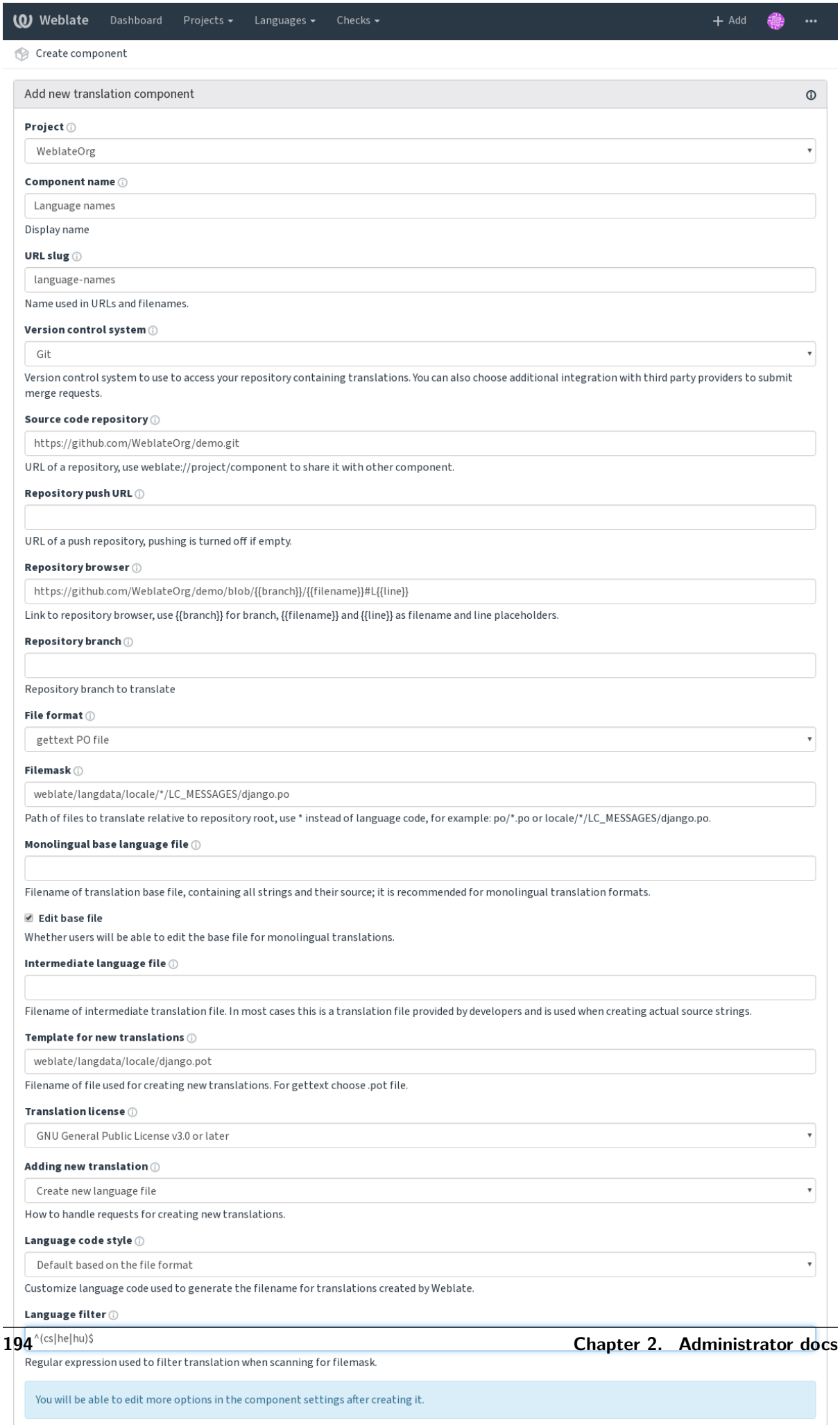
First you need to fill in name and repository location:



On the next page, you are presented with a list of discovered translatable resources:



As a last step, you review the translation component info and fill in optional details:


Weblate
Dashboard
Projects
Languages
Checks
Add
Create component
Add new translation component
Project
WeblateOrg
Component name
Language names
Display name
URL slug
language-names
Name used in URLs and filenames.
Version control system
Git
Version control system to use to access your repository containing translations. You can also choose additional integration with third party providers to submit merge requests.
Source code repository
https://github.com/WeblateOrg/demo.git
URL of a repository, use weblate://project/component to share it with other component.
Repository push URL
URL of a push repository, pushing is turned off if empty.
Repository browser
https://github.com/WeblateOrg/demo/blob/{{branch}}/{{filename}}#L{{line}}
Link to repository browser, use {{branch}} for branch, {{filename}} and {{line}} as filename and line placeholders.
Repository branch
Repository branch to translate
File format
gettext PO file
Filemask
weblate/langdata/locale/*/LC_MESSAGES/django.po
Path of files to translate relative to repository root, use * instead of language code, for example: po/*.po or locale/*/LC_MESSAGES/django.po.
Monolingual base language file
Filename of translation base file, containing all strings and their source; it is recommended for monolingual translation formats.
Edit base file
Whether users will be able to edit the base file for monolingual translations.
Intermediate language file
Filename of intermediate translation file. In most cases this is a translation file provided by developers and is used when creating actual source strings.
Template for new translations
weblate/langdata/locale/django.pot
Filename of file used for creating new translations. For gettext choose .pot file.
Translation license
GNU General Public License v3.0 or later
Adding new translation
Create new language file
How to handle requests for creating new translations.
Language code style
Default based on the file format
Customize language code used to generate the filename for translations created by Weblate.
Language filter
^(cs|he|hu)$
Regular expression used to filter translation when scanning for filemask.
You will be able to edit more options in the component settings after creating it.

See also:

The Django admin interface, *Project configuration*, *Component configuration*

2.7.3 Project configuration

Create a translation project and then add a new component for translation in it. The project is like a shelf, in which real translations are stacked. All components in the same project share suggestions and their dictionary; the translations are also automatically propagated through all components in a single project (unless turned off in the component configuration), see Memory Management.

These basic attributes set up and inform translators of a project:

Project name

Verbose project name, used to display the project name.

Project slug

Project name suitable for URLs.

Project website

URL where translators can find more info about the project.

Mailing list

Mailing list where translators can discuss or comment translations.

Translation instructions

URL to more site with more detailed instructions for translators.

Set Language-Team header

Whether Weblate should manage the `Language-Team` header (this is a *GNU gettext* only feature right now).

Use shared translation memory

Whether to use shared translation memory, see *Shared translation memory* for more details.

Contribute to shared translation memory

Whether to contribute to shared translation memory, see *Shared translation memory* for more details.

Access control

Configure per project access control, see *Per project access control* for more details.

Enable reviews

Enable review workflow for translations, see *Dedicated reviewers*.

Enable source reviews

Enable review workflow for source strings, see *Source strings reviews*.

Enable hooks

Whether unauthenticated *Notification hooks* are to be used for this repository.

Source language

Language used for source strings in all components. Change this if you are translating from something else than English.

Note: Most of the fields can be edited by project owners or managers, in the Weblate interface.

2.7.4 Component configuration

A component is a grouping of something for translation. You enter a VCS repository location and file mask for which files you want translated, and Weblate automatically fetches from this VCS, and finds all matching translatable files.

You can find some examples of typical configurations in the *Supported file formats*.

Note: It is recommended to keep translation components to a reasonable size - split the translation by anything that makes sense in your case (individual apps or addons, book chapters or websites).

Weblate easily handles translations with 10000s of strings, but it is harder to split work and coordinate among translators with such large translation components.

Should the language definition for a translation be missing, an empty definition is created and named as "cs_CZ (generated)". You should adjust the definition and report this back to the Weblate authors, so that the missing languages can be included in next release.

The component contains all important parameters for working with the VCS, and for getting translations out of it:

Component name

Verbose component name, used to display the component name.

Component slug

Component name suitable for URLs.

Component project

Project configuration where the component belongs.

Version control system

VCS to use, see *Version control integration* for details.

Source code repository

VCS repository used to pull changes.

See also:

See *Accessing repositories* for more details on specifying URLs.

Hint: This can either be a real VCS URL or `weblate://project/component` indicating that the repository should be shared with another component. See *Weblate internal URLs* for more details.

Repository push URL

Repository URL used for pushing. This is completely optional and push support is turned off when this is empty.

See also:

See *Accessing repositories* for more details on how to specify a repository URL and *Pushing changes* for more details on pushing changes from Weblate.

Repository browser

URL of repository browser used to display source files (location of used messages). When empty, no such links will be generated. You can use *Template markup*.

For example on GitHub, use something like: `https://github.com/WeblateOrg/hello/blob/{{branch}}/{{filename}}#L{{line}}`

In case your paths are relative to different folder, you might want to strip leading directory by `parentdir` filter (see *Template markup*): `https://github.com/WeblateOrg/hello/blob/{{branch}}/{{filename|parentdir}}#L{{line}}`

Exported repository URL

URL where changes made by Weblate are exported. This is important when *Continuous localization* is not used, or when there is a need to manually merge changes. You can use *Git exporter* to automate this for Git repositories.

Repository branch

Which branch to checkout from the VCS, and where to look for translations.

File mask

Mask of files to translate, including path. It should include one "*" replacing language code (see *Language definitions* for info on how this is processed). In case your repository contains more than one translation file (e.g. more gettext domains), you need to create a component for each of them.

For example `po/*.po` or `locale/*/LC_MESSAGES/django.po`.

In case your filename contains special characters such as `[`, `]`, these need to be escaped as `[[]` or `[]]`.

Monolingual base language file

Base file containing string definitions for *Monolingual components*.

See also:

Bilingual and monolingual formats

Edit base file

Whether to allow editing the base file for *Monolingual components*.

Intermediate language file

Intermediate language file for *Monolingual components*. In most cases this is a translation file provided by developers and is used when creating actual source strings.

When set, the source translation is based on this file, but all others are based on *Monolingual base language file*. In case the string is not translated in source translation, translating to other languages is prohibited.

See also:

Bilingual and monolingual formats

Template for new translations

Base file used to generate new translations, e.g. `.pot` file with gettext, see *Adding new translations* for more info.

File format

Translation file format, see also *Supported file formats*.

Source string bug report address

Email address used for reporting upstream bugs. This address will also receive notification about any source string comments made in Weblate.

Allow translation propagation

You can turn off propagation of translations to this component from other components within same project. This really depends on what you are translating, sometimes it's desirable to have make use of a translation more than once.

It's usually a good idea to turn this off for monolingual translations, unless you are using the same IDs across the whole project.

Enable suggestions

Whether translation suggestions are accepted for this component.

Suggestion voting

Turns on votecasting for suggestions, see *Suggestion voting*.

Autoaccept suggestions

Automatically accept voted suggestions, see *Suggestion voting*.

Translation flags

Customization of quality checks and other Weblate behavior, see *Customizing behavior*.

Enforced checks

List of checks which can not be ignored, see *Enforcing checks*.

Translation license

License of the translation, (does not need to be the same as the source code license).

Contributor agreement

User agreement which needs to be approved before a user can translate this component.

Adding new translation

How to handle requests for creation of new languages. See *Adding new translations*.

Language code style

Customize language code used to generate the filename for translations created by Weblate, see *Adding new translations* for more details.

Merge style

You can configure how updates from the upstream repository are handled. This might not be supported for some VCSs. See *Merge or rebase* for more details.

Commit, add, delete, merge and addon messages

Message used when committing a translation, see *Template markup*, default can be changed in `DEFAULT_COMMIT_MESSAGE`.

Committer name

Name of the committer used for Weblate commits, the author will always be the real translator. On some VCSs this might be not supported. Default value can be changed in `DEFAULT_COMMITER_NAME`.

Committer e-mail

Email of committer used for Weblate commits, the author will always be the real translator. On some VCSs this might be not supported. The default value can be changed in `DEFAULT_COMMITER_EMAIL`.

Push on commit

Whether committed changes should be automatically pushed to the upstream repository. When enabled, the push is initiated once Weblate commits changes to its internal repository (see *Lazy commits*). To actually enable pushing *Repository push URL* has to be configured as well.

Age of changes to commit

Sets how old changes (in hours) are to get before they are committed by background task or `commit_pending` management command. All changes in a component are committed once there is at least one older than this period. The Default value can be changed in `COMMIT_PENDING_HOURS`.

Language filter

Regular expression used to filter the translation when scanning for filemask. This can be used to limit the list of languages managed by Weblate (e.g. `^(cs|de|es)$` will include only these languages. Please note that you need to list language codes as they appear in the filename.

Shapings regular expression

Regular expression used to determine the shapings of a string, see *String shapings*.

Note: Most of the fields can be edited by project owners or managers, in the Weblate interface.

See also:

Does Weblate support other VCSes than Git and Mercurial?, *Translation component alerts*

Priority

Components with higher priority are offered first to translators.

2.7.5 Template markup

Weblate uses simple markup language in several places where text rendering is needed. It is based on The Django template language, so it can be quite powerful.

Currently it is used in:

- Commit message formatting, see *Component configuration*
- **Several addons**
  - *Component discovery*
  - *Statistics generator*
  - *Executing scripts from addon*

There following variables are available in the component templates:

`{{ language_code }}` Language code

`{{ language_name }}` Language name

`{{ component_name }}` Component name

`{{ component_slug }}` Component slug

`{{ project_name }}` Project name

{{ project_slug }} Project slug

{{ url }} Translation URL

{{ filename }} Transaltion filename

{{ stats }} Translation stats, this has further attributes, examples below.

{{ stats.all }} Total strings count

{{ stats.fuzzy }} Count of strings needing review

{{ stats.fuzzy_percent }} Percent of strings needing review

{{ stats.translated }} Translated strings count

{{ stats.translated_percent }} Translated strings percent

{{ stats.allchecks }} Number of strings with failing checks

{{ stats.allchecks_percent }} Percent of strings with failing checks

{{ author }} Author of current commit, available only in the commit scope.

{{ addon_name }} Name of currently executed addon, available only in the addon commit message.

The following variables are available in the repository browser or editor templates:

{{branch}} current branch

{{line}} line in file

{{filename}} filename, you can also strip leading parts using the `parentdir` filter, for example `{{filename|parentdir}}`

You can combine them with filters:

```
{{ component|title }}
```

You can use conditions:

```
{% if stats.translated_percent > 80 %}Well translated!{% endif %}
```

There is additional tag available for replacing characters:

```
{% replace component "-" " " %}
```

You can combine it with filters:

```
{% replace component|capfirst "-" " " %}
```

There are also additional filter to manipulate with filenames:

```
Directory of a file: {{ filename|dirname }}
File without extension: {{ filename|stripext }}
File in parent dir: {{ filename|parentdir }}
It can be used multiple times:  {{ filename|parentdir|parentdir }}
```

...and other Django template features.

2.7.6 Importing speed

Fetching VCS repository and importing translations to Weblate can be a lengthy process, depending on size of your translations. Here are some tips:

Optimize configuration

The default configuration is useful for testing and debugging Weblate, while for a production setup, you should do some adjustments. Many of them have quite a big impact on performance. Please check *Production setup* for more details, especially:

- Configure Celery for executing background tasks (see *Background tasks using Celery*)
- *Enable caching*
- *Use a powerful database engine*
- *Disable debug mode*

Check resource limits

If you are importing huge translations or repositories, you might be hit by resource limitations of your server.

- Check the amount of free memory, having translation files cached by the operating system will greatly improve performance.
- Disk operations might be bottleneck if there is a lot of strings to process—the disk is pushed by both Weblate and the database.
- Additional CPU cores might help improve performance of background tasks (see *Background tasks using Celery*).

Disable unneeded checks

Some quality checks can be quite expensive, and if not needed, can save you some time during import if omitted. See `CHECK_LIST` for info on configuration.

2.7.7 Automatic creation of components

In case your project has dozen of translation files (e.g. for different gettext domains, or parts of Android apps), you might want to import them automatically. This can either be achieved from the command line by using `import_project` or `import_json`, or by installing the *Component discovery* addon.

To use the addon, you first need to create a component for one translation file (choose the one that is the least likely to be renamed or removed in future), and install the addon on this component.

For the management commands, you need to create a project which will contain all components and then run `import_project` or `import_json`.

See also:

Management commands, *Component discovery*

2.8 Language definitions

To present different translations properly, info about language name, text direction, plural definitions and language code is needed. Definitions for about 350 languages are included.

2.8.1 Parsing language codes

While parsing translations, Weblate attempts to map language code (usually the ISO 639-1 one) to any existing language object.

If no exact match can be found, an attempt will be made to best fit it into an existing language (e.g. ignoring the default country code for a given language—choosing `cs` instead of `cs_CZ`).

Should that also fail, a new language definition will be created using the defaults (left to right text direction, one plural) and naming of the language as *xx_XX (generated)*. You might want to change this in the admin interface later, (see *Changing language definitions*) and report it to the issue tracker (see *Contributing*).

Hint: In case you see something unwanted as a language, you might want to adjust *Language filter* to ignore such file when parsing translations.

2.8.2 Changing language definitions

You can change language definitions in the languages interface (`/languages/` URL).

While editing, make sure all fields are correct (especially plurals and text direction), otherwise translators will be unable to properly edit those translations.

2.8.3 Language definitions

Each language consists of following fields:

Language code

Code identifying the language. Weblate prefers two letter codes as defined by ISO 639-1, but uses ISO 639-2 or ISO 639-3 codes for languages that do not have two letter code. It can also support extended codes as defined by BCP 47.

See also:

Parsing language codes

Language name

Visible name of the language. The language names included in Weblate are also being localized depending on user interface language.

Text direction

Determines whether language is written right to left or left to right. This properly is autodetected correctly for most of the languages.

Plural number

Number of plurals used in the language.

Plural formula

Gettext compatible plural formula used to determine which plural form is used for given count.

See also:

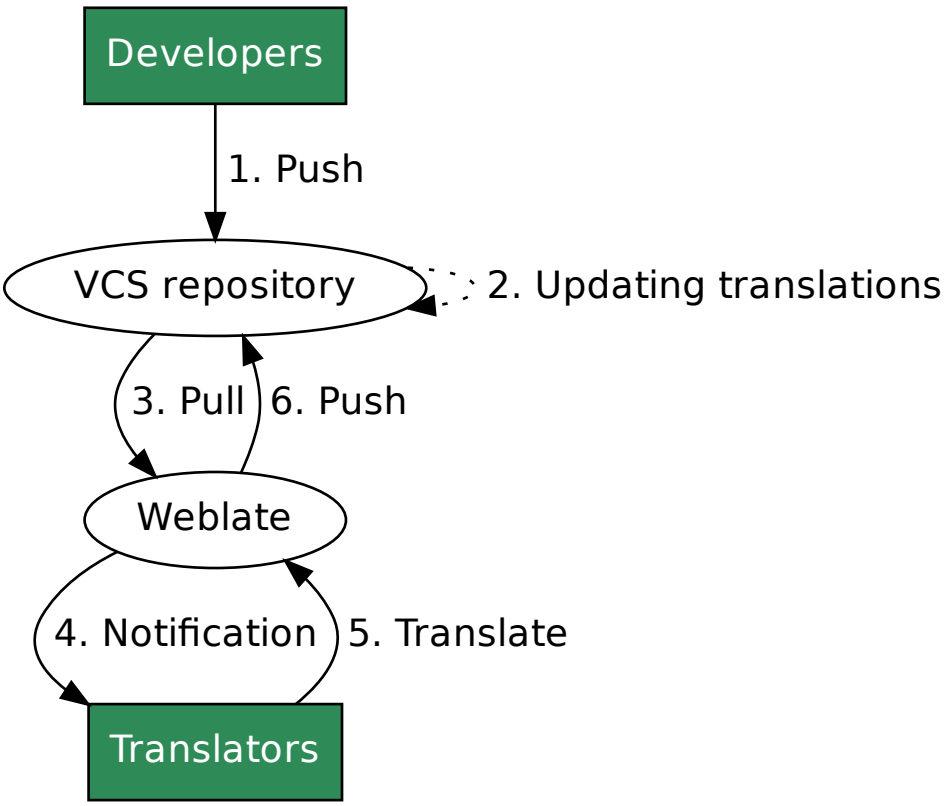
Plurals, GNU gettext utilities: Plural forms, Language Plural Rules by the Unicode Consortium

2.9 Continuous localization

There is infrastructure in place so that your translation closely follows development. This way translators can work on translations the entire time, instead of working through huge amount of new text just prior to release.

This is the process:

1. Developers make changes and push them to the VCS repository.
2. Optionally the translation files are updated (this depends on the file format, see *Why does Weblate still show old translation strings when I've updated the template?*).
3. Weblate pulls changes from the VCS repository, see *Updating repositories*.
4. Once Weblate detects changes in translations, translators are notified based on their subscription settings.
5. Translators submit translations using the Weblate web interface, or upload offline changes.
6. Once the translators are finished, Weblate commits the changes to the local repository (see *Lazy commits*) and pushes them back if it has permissions to do so (see *Pushing changes*).



2.9.1 Updating repositories

You should set up some way of updating backend repositories from their source.

- Use *Notification hooks* to integrate with most of common code hosting services
- Manually trigger update either in the repository management or using *Weblate's Web API* or *Weblate Client*
- Enable *AUTO_UPDATE* to automatically update all components on your Weblate instance
- Execute *updategit* (with selection of project or *–all* to update all)

Whenever Weblate updates the repository, the post update addons will be triggered, see *Addons*.

Avoiding merge conflicts

The merge conflicts from Weblate arise when same file was changed both in Weblate and outside it. There are two approaches to deal with that - avoid edits outside Weblate or integrate Weblate into your updating process, so that it flushes changes prior to updating the files outside Weblate.

The first approach is easy with monolingual files - you can add new strings within Weblate and leave whole editing of the files there. For bilingual files, there is usually some kind of message extraction process to generate translatable files from the source code. In some cases this can be split into two parts - one for the extraction generates template (for example gettext POT is generated using **xgettext**) and then further process merges it into actual translations (the gettext PO files are updated using **msgmerge**). You

can perform the second step within Weblate and it will make sure that all pending changes are included prior to this operation.

The second approach can be achieved by using *Weblate's Web API* to force Weblate to push all pending changes and lock the translation while you are doing changes on your side.

The script for doing updates can look like this:

```
# Lock Weblate translation
wlc lock
# Push changes from Weblate to upstream repository
wlc push
# Pull changes from upstream repository to your local copy
git pull
# Update translation files, this example is for Django
./manage.py makemessages --keep-pot -a
git commit -m 'Locale updates' -- locale
# Push changes to upstream repository
git push
# Tell Weblate to pull changes (not needed if Weblate follows your repo
# automatically)
wlc pull
# Unlock translations
wlc unlock
```

If you have multiple components sharing same repository, you need to lock them all separately:

```
wlc lock foo/bar
wlc lock foo/baz
wlc lock foo/baj
```

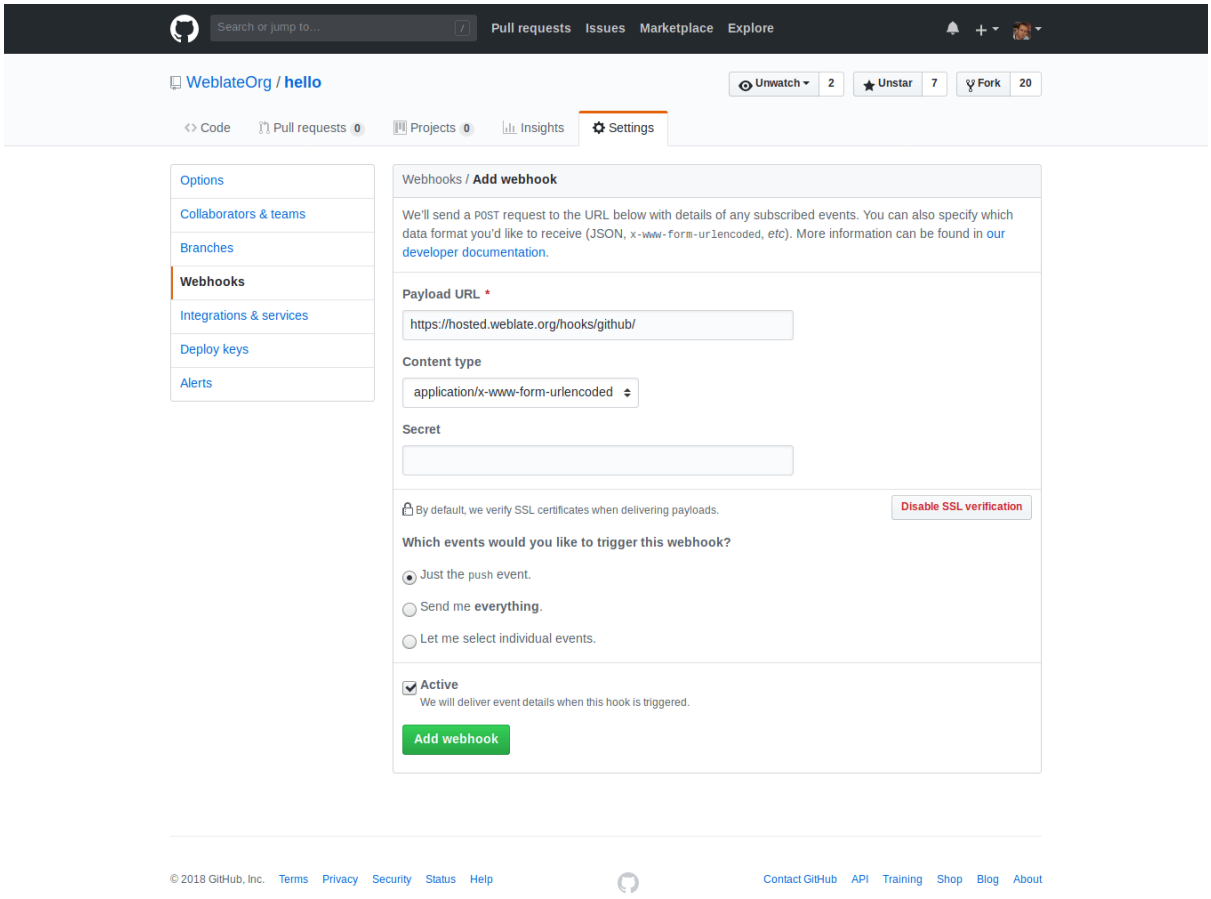
Note: The example uses *Weblate Client*, which needs configuration (API keys) to be able to control Weblate remotely. You can also achieve this using any HTTP client instead of wlc, e.g. curl, see *Weblate's Web API*.

Automatically receiving changes from GitHub

Weblate comes with native support for GitHub.

If you are using Hosted Weblate, the recommended approach is to install the Weblate app, that way you will get the correct setup without having to set much up. It can also be used for pushing changes back.

To receive notifications on every push to a GitHub repository, add the Weblate Webhook in the repository settings (*Webhooks*) as shown on the image below:



For the payload URL, append `/hooks/github/` to your Weblate URL, for example for the Hosted Weblate service, this is `https://hosted.weblate.org/hooks/github/`.

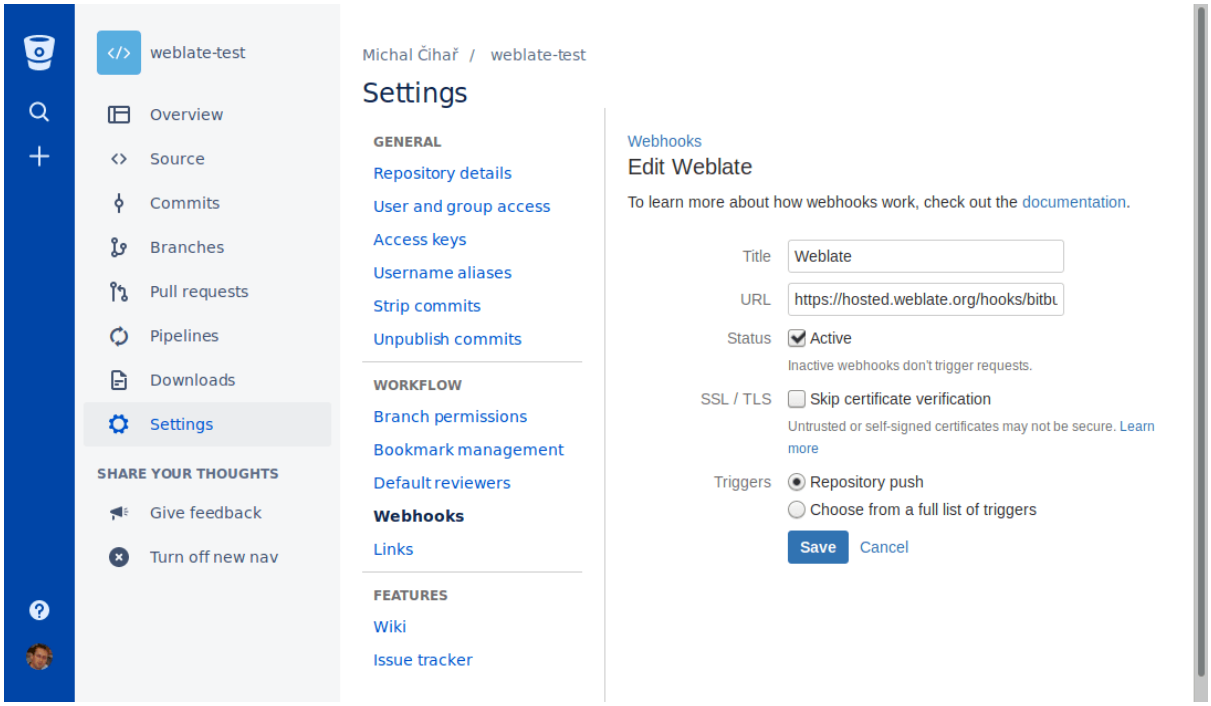
You can leave other values at default settings (Weblate can handle both content types and consumes just the *push* event).

See also:

`POST /hooks/github/`, *Accessing repositories from Hosted Weblate*

Automatically receiving changes from Bitbucket

Weblate has support for Bitbucket webhooks, add a webhook which triggers upon repository push, with destination to `/hooks/bitbucket/` URL on your Weblate installation (for example `https://hosted.weblate.org/hooks/bitbucket/`).



See also:

POST /hooks/bitbucket/, *Accessing repositories from Hosted Weblate*

Automatically receiving changes from GitLab

Weblate has support for GitLab hooks, add a project webhook with destination to `/hooks/gitlab/` URL on your Weblate installation (for example `https://hosted.weblate.org/hooks/gitlab/`).

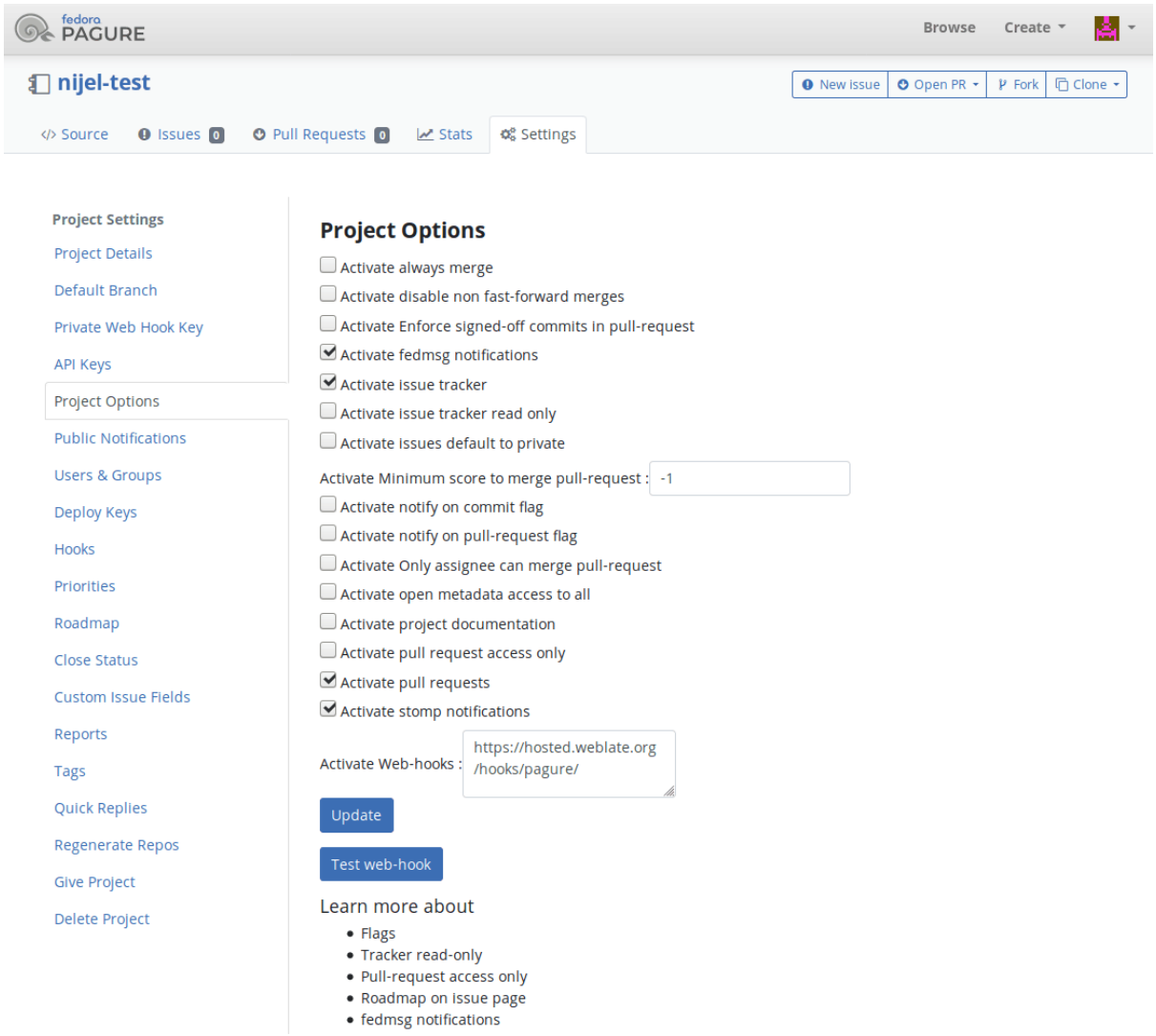
See also:

POST /hooks/gitlab/, *Accessing repositories from Hosted Weblate*

Automatically receiving changes from Pagure

New in version 3.3.

Weblate has support for Pagure hooks, add a webhook with destination to `/hooks/pagure/` URL on your Weblate installation (for example `https://hosted.weblate.org/hooks/pagure/`). This can be done in *Activate Web-hooks* under *Project options*:



See also:

POST /hooks/pagure/, *Accessing repositories from Hosted Weblate*

Automatically receiving changes from Azure Repos

New in version 3.8.

Weblate has support for Azure Repos web hooks, add a webhook for *Code pushed* event with destination to `/hooks/azure/` URL on your Weblate installation (for example `https://hosted.weblate.org/hooks/azure/`). This can be done in *Service hooks* under *Project settings*.

See also:

Web hooks in Azure DevOps manual, *POST /hooks/azure/*, *Accessing repositories from Hosted Weblate*

Automatically receiving changes from Gitea Repos

New in version 3.9.

Weblate has support for Gitea webhooks, add a *Gitea Webhook* for *Push events* event with destination to `/hooks/gitea/` URL on your Weblate installation (for example `https://hosted.weblate.org/hooks/gitea/`). This can be done in *Webhooks* under repository *Settings*.

See also:

Webhooks in Gitea manual, *POST /hooks/gitea/*, *Accessing repositories from Hosted Weblate*

Automatically receiving changes from Gitee Repos

New in version 3.9.

Weblate has support for Gitee webhooks, add a *WebHook* for *Push* event with destination to `/hooks/gitee/` URL on your Weblate installation (for example `https://hosted.weblate.org/hooks/gitee/`). This can be done in *WebHooks* under repository *Management*.

See also:

Webhooks in Gitee manual, *POST /hooks/gitee/*, *Accessing repositories from Hosted Weblate*

Automatically updating repositories nightly

Weblate automatically fetches remote repositories nightly to improve performance when merging changes later. You can optionally turn this into doing nightly merges as well, by enabling *AUTO_UPDATE*.

2.9.2 Pushing changes

Each translation component can have a push URL set up (see *Repository push URL*), and in that case Weblate will be able to push change to the remote repository. Weblate can be also be configured to automatically push changes on every commit (this is default, see *Push on commit*). If you do not want changes to be pushed automatically, you can do that manually under *Repository maintenance* or using API via *wlc push*.

The push options differ based on the *Version control integration* used, more details are found in that chapter.

In case you do not want direct pushes by Weblate, there is support for *GitHub*, *GitLab* pull requests or *Gerrit* reviews, you can activate these by choosing *GitHub*, *GitLab* or *Gerrit* as *Version control system* in *Component configuration*.

Note: You can also enable automatic pushing of changes after Weblate commits, this can be done in *Push on commit*.

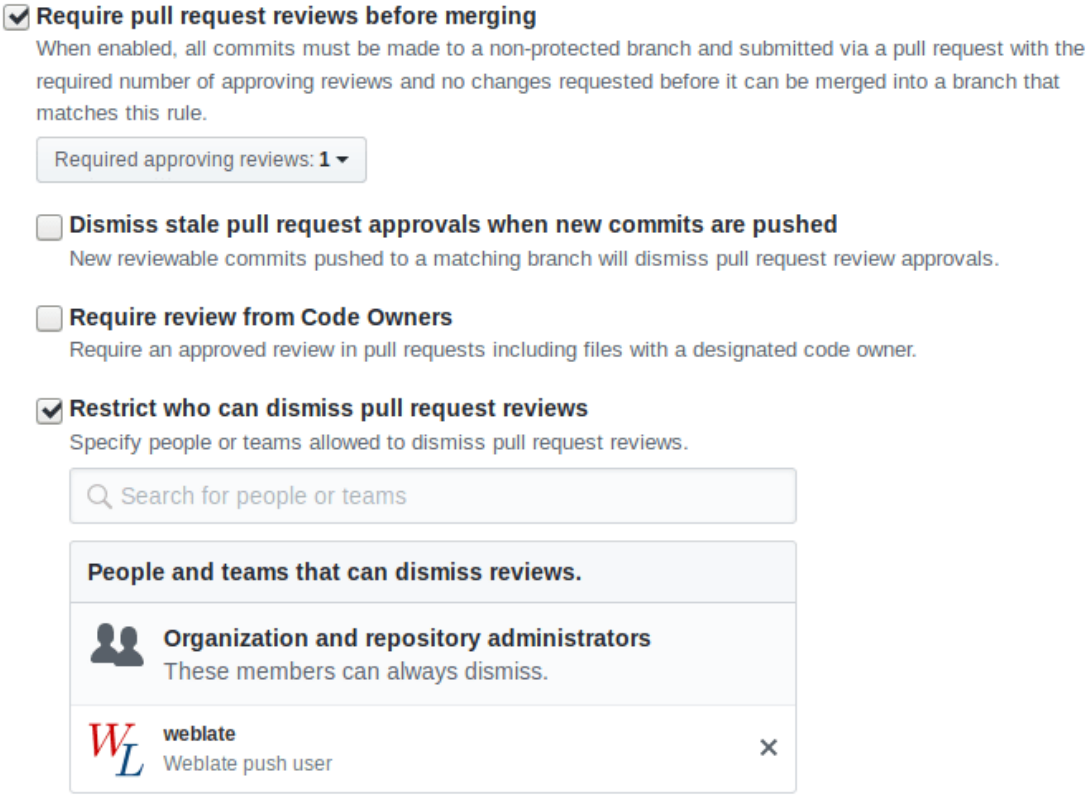
See also:

See *Accessing repositories* for setting up SSH keys, and *Lazy commits* for info about when Weblate decides to commit changes.

Protected branches

If you are using Weblate on protected branch, you can configure it to use pull requests and perform actual review on the translations (what might be problematic for languages you do not know). Alternative approach is to to waive this limitation for the Weblate push user.

For example on GitHub this can be done in the repository configuration:



2.9.3 Merge or rebase

By default, Weblate merges the upstream repository into its own. This is the safest way in case you also access the underlying repository by other means. In case you don't need this, you can enable rebasing of changes on upstream, which will produce history with fewer merge commits.

Note: Rebasing can cause you trouble in case of complicated merges, so carefully consider whether or not you want to enable them.

2.9.4 Interacting with others

Weblate makes it easy to interact with others using its API.

See also:

Weblate's Web API

2.9.5 Lazy commits

The behaviour of Weblate is to group commits from the same author into one commit if possible. This greatly reduces the number of commits, however you might need to explicitly tell it to do the commits in case you want to get the VCS repository in sync, e.g. for merge (this is by default allowed for the Managers group, see *Access control*).

The changes in this mode are committed once any of the following conditions are fulfilled:

- Somebody else changes an already changed string.

- A merge from upstream occurs.
- An explicit commit is requested.
- Change is older than period defined as *Age of changes to commit* on *Component configuration*.

Hint: Commits are created for every component. So in case you have many components you will still see lot of commits. You might utilize *Squash Git commits* addon in that case.

If you want to commit changes more frequently and without checking of age, you can schedule a regular task to perform a commit:

```
CELERY_BEAT_SCHEDULE = {
    # Unconditionally commit all changes every 2 minutes
    "commit": {
        "task": "weblate.trans.tasks.commit_pending",
        # Ommiting hours will honor per component settings,
        # otherwise components with no changes older than this
        # won't be committed
        "kwargs": {"hours": 0},
        # How frequently to execute the job in seconds
        "schedule": 120,
    }
}
```

2.9.6 Processing repository with scripts

The way to customize how Weblate interacts with the repository is *Addons*. Consult *Executing scripts from addon* for info on how to execute external scripts through addons.

2.9.7 Keeping translations same across components

Once you have multiple translation components, you might want to ensure that the same strings have same translation. This can be achieved at several levels.

Translation propagation

With translation propagation enabled (what is the default, see *Component configuration*), all new translations are automatically done in all components with matching strings. Such translations are properly credited to currently translating user in all components.

Note: The translation propagation requires the key to be match for monolingual translation formats, so keep that in mind when creating translation keys.

Consistency check

The *Inconsistent* check fires whenever the strings are different. You can utilize this to review such differences manually and choose the right translation.

Automatic translation

Automatic translation based on different components can be way to synchronize the translations across components. You can either trigger it manually (see *Automatic translation*) or make it run automatically on repository update using addon (see *Automatic translation*).

2.10 Licensing translations

You can specify which license translations are contributed under. This is especially important to do if translations are open to the public, to stipulate what they can be used for.

You should specify *Component configuration* license info. You should avoid requiring a contributor license agreement, though it is possible.

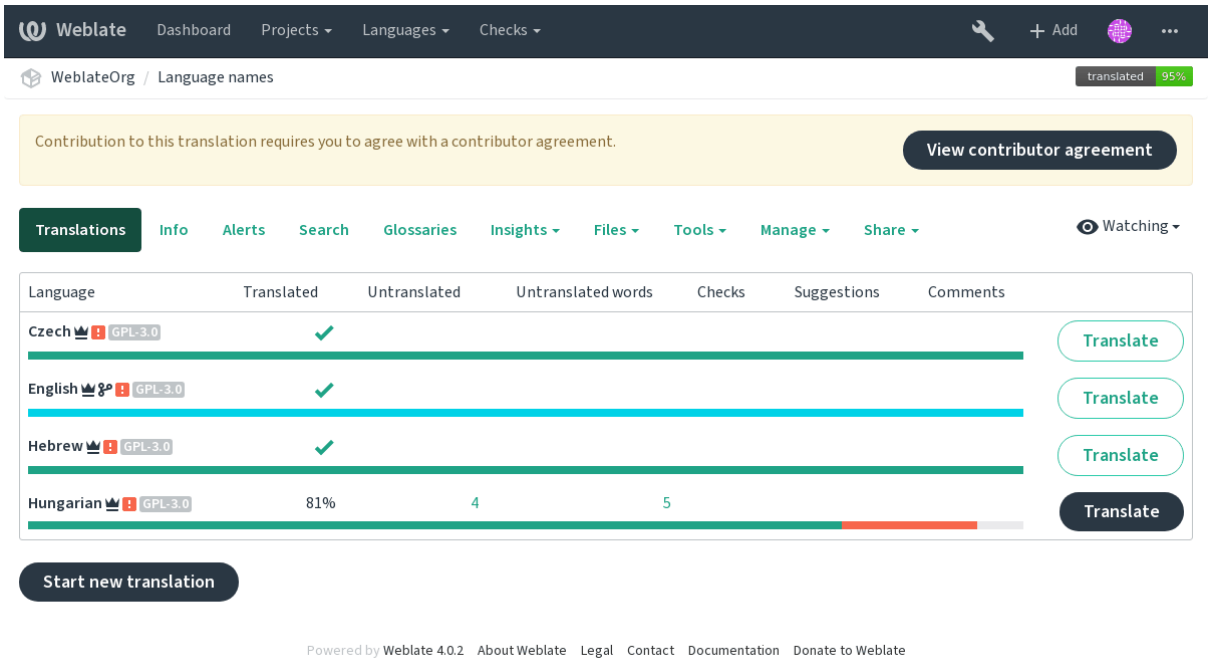
2.10.1 License info

Upon specifying license info (license name and URL), this info is shown in the translation info section of the respective *Component configuration*.

Usually this is best place to post licensing info if no explicit consent is required. If your project or translation is not libre you most probably need prior consent.

2.10.2 Contributor agreement

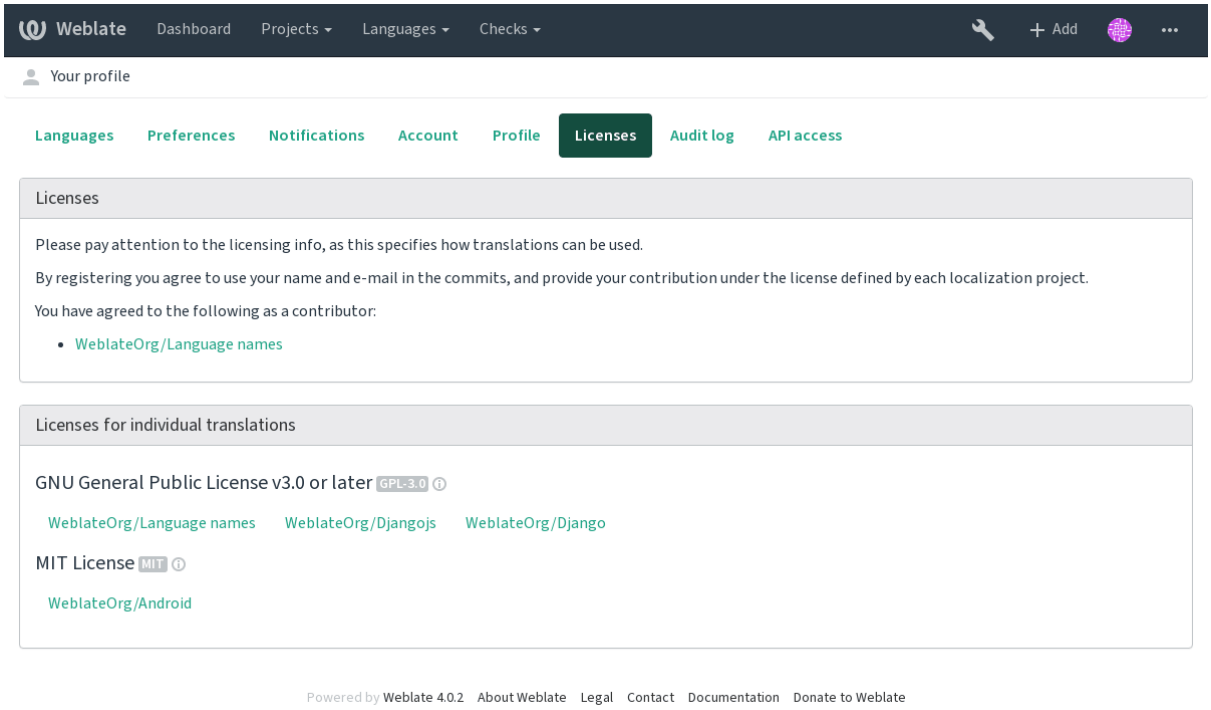
If you specify a contributor license agreement, only users who have agreed to it will be able to contribute. This is a clearly visible step when accessing the translation:



The entered text is formatted into paragraphs and external links can be included. HTML markup can not be used.

2.10.3 User licenses

Any user can review all translation licenses of all public projects on the instance from their profile:



2.11 Translation process

2.11.1 Suggestion voting

Everyone can add suggestions by default, to be accepted by signed in users. Suggestion voting can be used to make use of a string when more than signed in user agrees, by setting up the *Component configuration* configuration with *Suggestion voting* to turn on voting, and *Autoaccept suggestions* to set a treshold for accepted suggestions (this includes a vote from the user making the suggestion if it is cast).

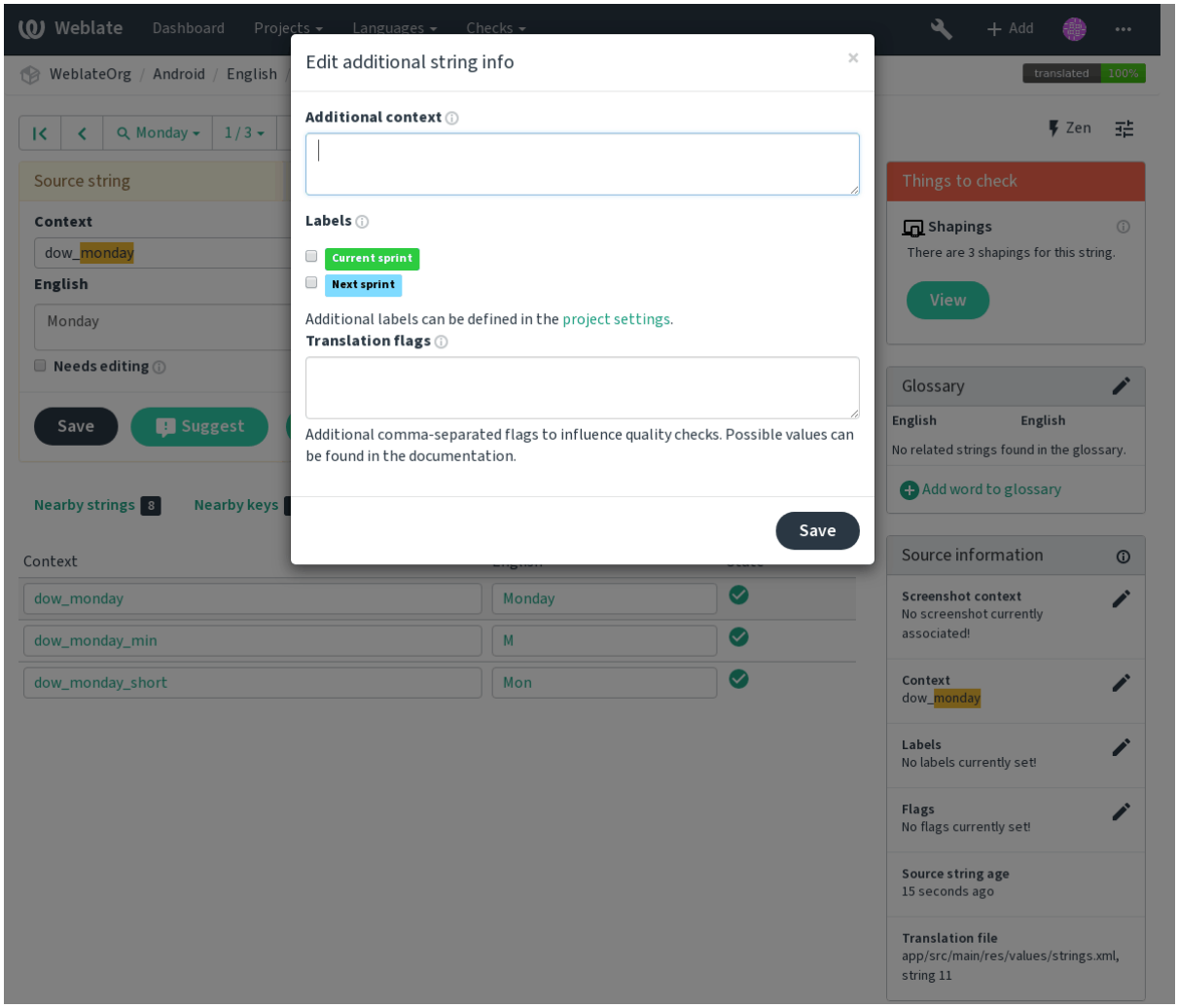
Note: Once automatic acceptance is set up, normal users lose the privilege to directly save translations or accept suggestions. This can be overridden with the *Can override suggestion state* privilege (see *Access control*).

You can combine these with *Access control* into one of the following setups:

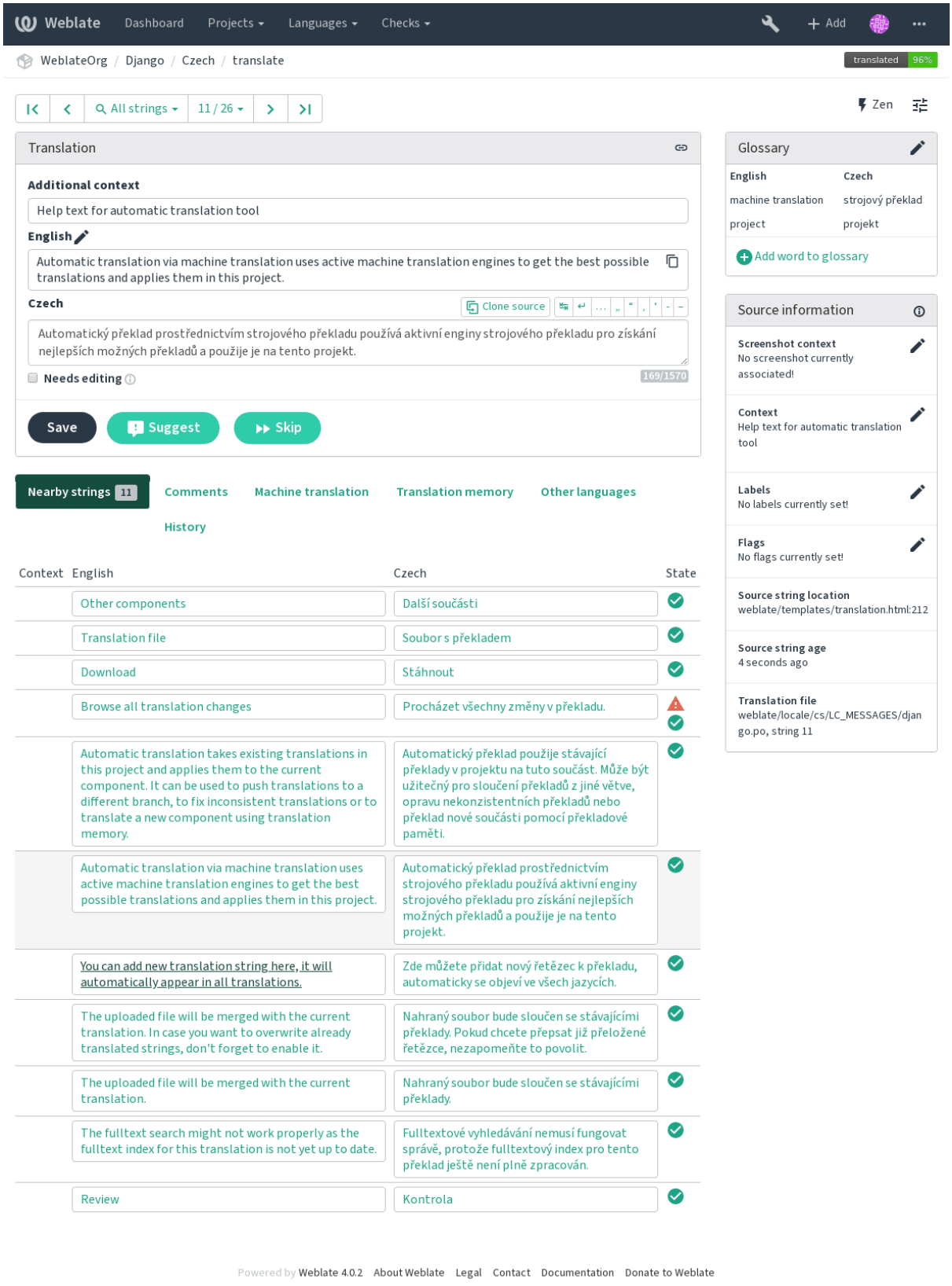
- Users suggest and vote for suggestions and a limited group controls what is accepted. - Turn on voting. - Turn off automatic acceptance. - Don't let users save translations.
- Users suggest and vote for suggestions with automatic acceptance once the defined number of them agree. - Turn on voting. - Set the desired number of votes for automatic acceptance.
- Optional voting for suggestions. (Can optionally be used by users when they are unsure about a translation by making multiple suggestions.) - Only turn on voting.

2.11.2 Additional info on source strings

Enhance the translation process with info available in the translation files. This includes string priority, check flags, or providing visual context. All these features can be set in the *Reviewing strings*:



Access this directly from the translation interface by clicking the "Edit" icon next to *Screenshot context* or *Flags*.



Strings prioritization

New in version 2.0.

String priority can be changed to offer higher priority strings for translation earlier by using the `priority`

flag

Hint: This can be used to order the flow of translation in a logical manner.

See also:

Quality checks

Translation flags

New in version 2.4.

Changed in version 3.3: Previously called *Quality checks flags*, it no longer configures only checks.

The default set of translation flags is determined by the translation *Component configuration* and the translation file. However, you might want to use it to customize this per source string.

See also:

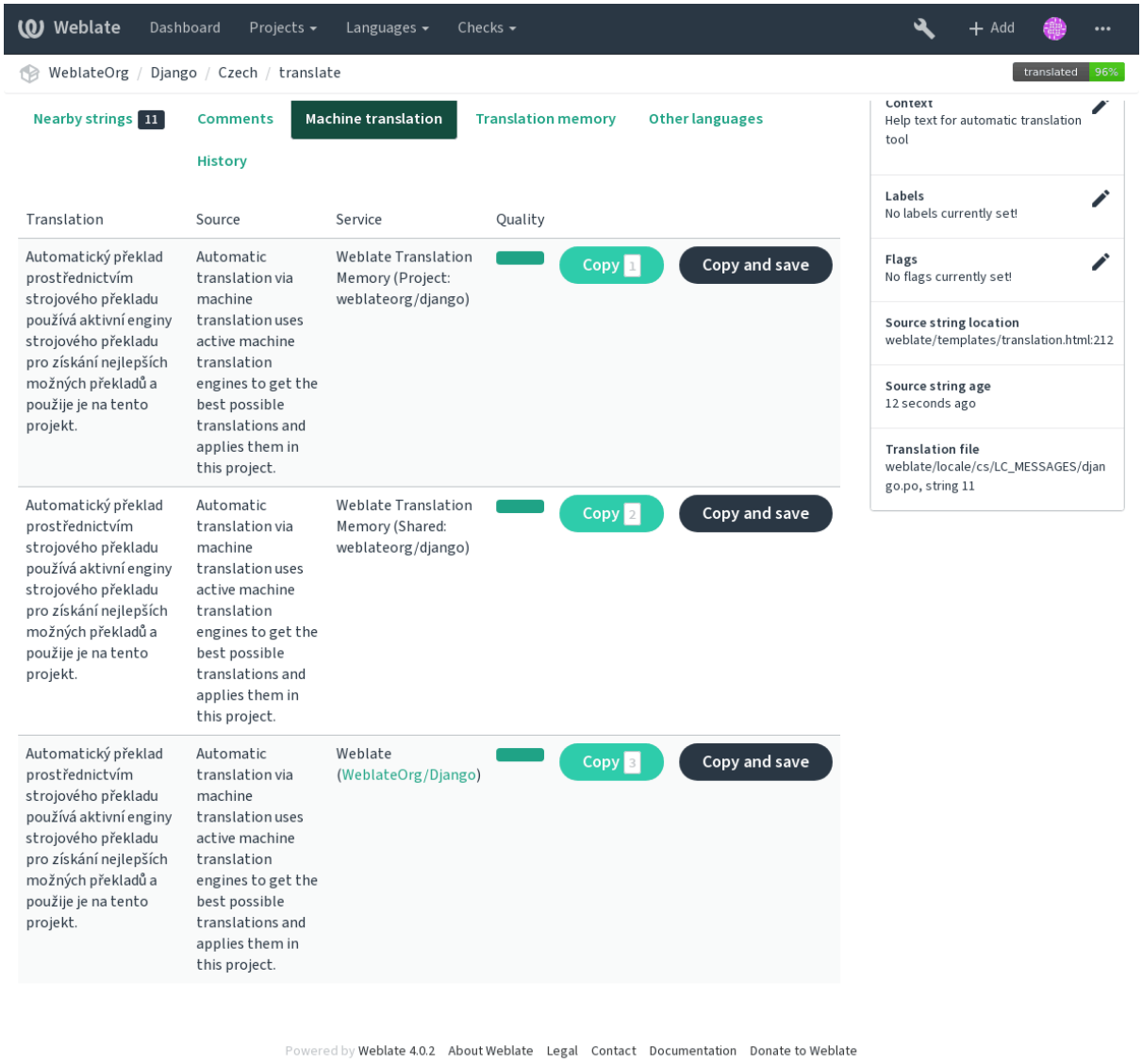
Quality checks

Visual context for strings

New in version 2.9.

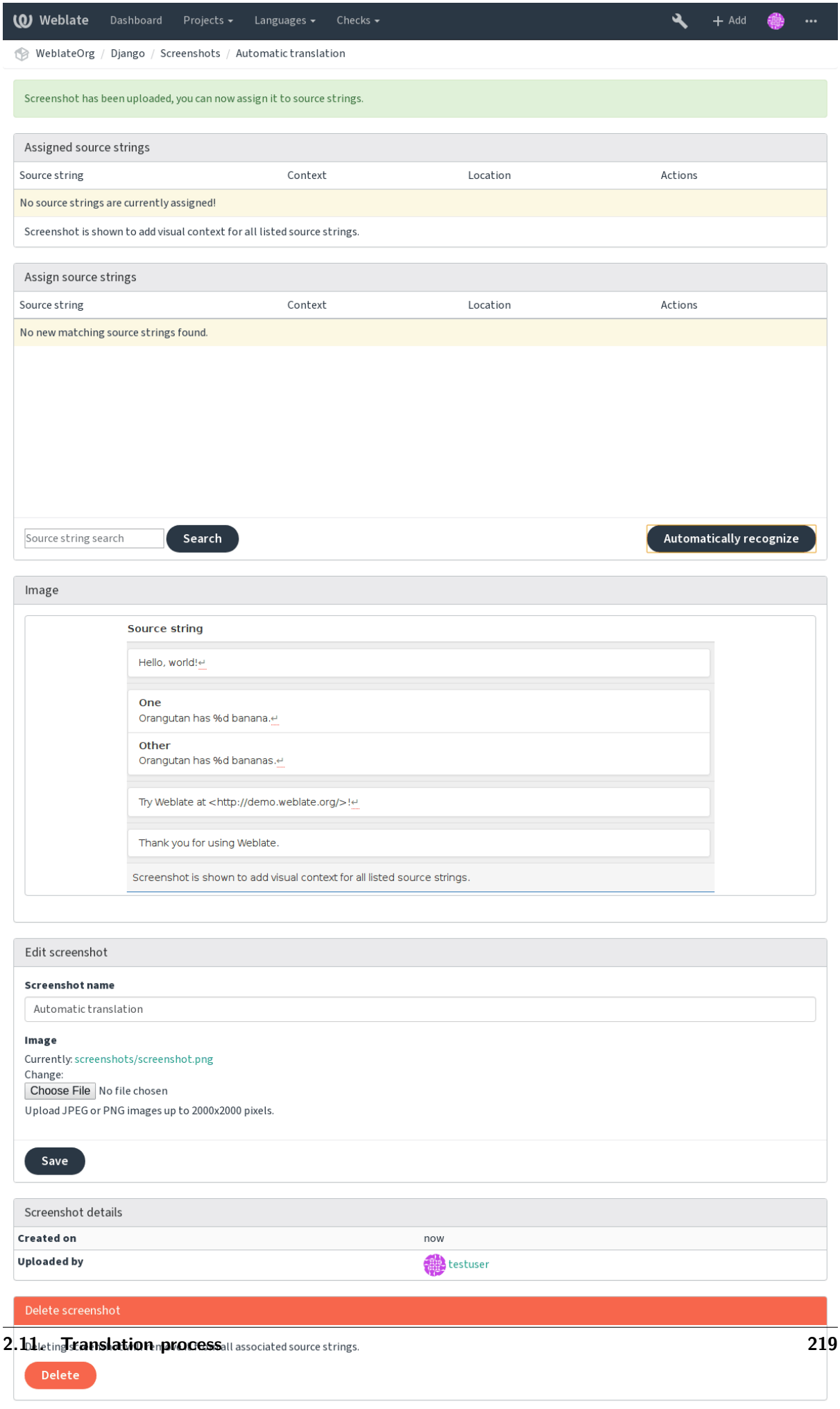
You can upload a screenshot showing a given source string in use within your program. This helps translators understand where it is used, and how it should be translated.

The uploaded screenshot is shown in the translation context sidebar:



In addition to *Reviewing strings*, screenshots have a separate management interface under the *Tools* menu. Upload screenshots, assign them to source strings manually, or use optical character recognition to do so.

Once a screenshot is uploaded, this interface handles management and source string association:


Weblate
Dashboard
Projects
Languages
Checks
Add
WeblateOrg / Django / Screenshots / Automatic translation
Screenshot has been uploaded, you can now assign it to source strings.
Assigned source strings
Source string
Context
Location
Actions
No source strings are currently assigned!
Screenshot is shown to add visual context for all listed source strings.
Assign source strings
Source string
Context
Location
Actions
No new matching source strings found.
Source string search
Search
Automatically recognize
Image
Source string
Hello, world!
One
Orangutan has %d banana.
Other
Orangutan has %d bananas.
Try Weblate at <http://demo.weblate.org/>!
Thank you for using Weblate.
Screenshot is shown to add visual context for all listed source strings.
Edit screenshot
Screenshot name
Automatic translation
Image
Currently: screenshots/screenshot.png
Change:
Choose File
No file chosen
Upload JPEG or PNG images up to 2000x2000 pixels.
Save
Screenshot details
Created on
now
Uploaded by
testuser
Delete screenshot
Delete

2.12 Checks and fixups

2.12.1 Custom automatic fixups

You can also implement your own automatic fixup in addition to the standard ones and include them in *AUTOFIX_LIST*.

The automatic fixes are powerful, but can also cause damage; be careful when writing one.

For example, the following automatic fixup would replace every occurrence of the string `foo` in a translation with `bar`:

```
#
# Copyright © 2012 - 2020 Michal Čihař <michal@cihar.com>
#
# This file is part of Weblate <https://weblate.org/>
#
# This program is free software: you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation, either version 3 of the License, or
# (at your option) any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
# GNU General Public License for more details.
#
# You should have received a copy of the GNU General Public License
# along with this program.  If not, see <https://www.gnu.org/licenses/>.
#

from django.utils.translation import gettext_lazy as _

from weblate.trans.autofixes.base import AutoFix


class ReplaceFooWithBar(AutoFix):
    """Replace foo with bar."""

    name = _("Foobar")

    def fix_single_target(self, target, source, unit):
        if "foo" in target:
            return target.replace("foo", "bar"), True
        return target, False
```

To install custom checks, provide a fully-qualified path to the Python class in the *AUTOFIX_LIST*, see *Custom quality checks, addons and auto-fixes*.

2.12.2 Customizing behavior

You can fine-tune the behavior of Weblate (mostly checks) for each source string (in source strings review, see *Additional info on source strings*) or in the *Component configuration* (*Translation flags*). Some file formats also allow to specify flags directly in the format.

Here is a list of flags currently accepted:

rst-text Treat a text as an RST document, affects *Unchanged translation*.

md-text Treat text as a Markdown document.

dos-eol Uses DOS end-of-line markers instead of Unix ones (`\r\n` instead of `\n`).

url The string should consist of only a URL.

safe-html The string should be HTML safe, see *Unsafe HTML*.

read-only The string is read-only and should not be edited in Weblate, see *Read only strings*.

priority:N Priority of the string. Higher priority strings are presented first for translation. The default priority is 100, the higher priority a string has, the earlier it is offered for translation.

max-length:N Limit the maximal length for a string to N characters, see *Maximum length*

xml-text Treat text as XML document, affects *XML syntax* and *XML markup*.

font-family:NAME Define font-family for rendering checks, see *Managing fonts*.

font-weight:WEIGHT Define font-weight for rendering checks, see *Managing fonts*.

font-size:SIZE Define font-size for rendering checks, see *Managing fonts*.

font-spacing:SPACING Define font-spacing for rendering checks, see *Managing fonts*.

placeholders:NAME Placeholder strings expected in translation, see *Placeholders*.

regex:REGEX Regular expresion to match translation, see *Regular expression*.

python-format, c-format, php-format, python-brace-format, javascript-format, c-sharp-format, java-format Treats all strings like format strings, affects *Formatted strings*, *Formatted strings*, *Formatted strings*, *Formatted strings*, *Formatted strings*, *Formatted strings*, *Formatted strings*, *Formatted strings*, *Formatted strings*, *Formatted strings*, *Formatted strings*, *Unchanged translation*.

ignore-end-space Skip the “Trailing space” quality check.

ignore-inconsistent Skip the “Inconsistent” quality check.

ignore-translated Skip the “Has been translated” quality check.

ignore-begin-newline Skip the “Starting newline” quality check.

ignore-zero-width-space Skip the “Zero-width space” quality check.

ignore-escaped-newline Skip the “Mismatched n” quality check.

ignore-same Skip the “Unchanged translation” quality check.

strict-same Make “Unchanged translation” avoid using built in words blacklist, see *Unchanged translation*.

ignore-end-question Skip the “Trailing question” quality check.

ignore-end-ellipsis Skip the “Trailing ellipsis” quality check.

ignore-ellipsis Skip the “Ellipsis” quality check.

ignore-python-brace-format Skip the “Python brace format” quality check.

ignore-end-newline Skip the “Trailing newline” quality check.

ignore-c-format Skip the “C format” quality check.

ignore-javascript-format Skip the “JavaScript format” quality check.

ignore-optional-plural Skip the “Unpluralized” quality check.

ignore-end-exclamation Skip the “Trailing exclamation” quality check.

ignore-end-colon Skip the “Trailing colon” quality check.

ignore-xml-invalid Skip the “XML syntax” quality check.

ignore-xml-tags Skip the “XML markup” quality check.

ignore-python-format Skip the “Python format” quality check.

`ignore-plurals` Skip the “Missing plurals” quality check.

`ignore-begin-space` Skip the “Starting spaces” quality check.

`ignore-bbcode` Skip the “BBcode markup” quality check.

`ignore-multiple-failures` Skip the “Multiple failing checks” quality check.

`ignore-php-format` Skip the “PHP format” quality check.

`ignore-end-stop` Skip the “Trailing stop” quality check.

`ignore-angularjs-format` Skip the “AngularJS interpolation string” quality check.

`ignore-c-sharp-format` Skip the “C# format” quality check.

`ignore-java-format` Skip the “Java format” quality check.

`ignore-qt-format` Skip the “Qt format” quality check.

`ignore-qt-plural-format` Skip the “Qt plural format” quality check.

`ignore-ruby-format` Skip the “Ruby format” quality check.

`ignore-punctuation-spacing` Skip the “Punctuation spacing” quality check.

Note: Generally the rule is named `ignore-*` for any check, using its identifier, so you can use this even for your custom checks.

These flags are understood both in *Component configuration* settings, per source string settings and in the translation file itself (for example in GNU gettext).

2.12.3 Enforcing checks

New in version 3.11.

You can configure a list of checks which can not be ignored by setting *Enforced checks* in *Component configuration*. Each listed check can not be ignored in the user interface and any string failing this check is marked as *Needs editing* (see *Translation states*).

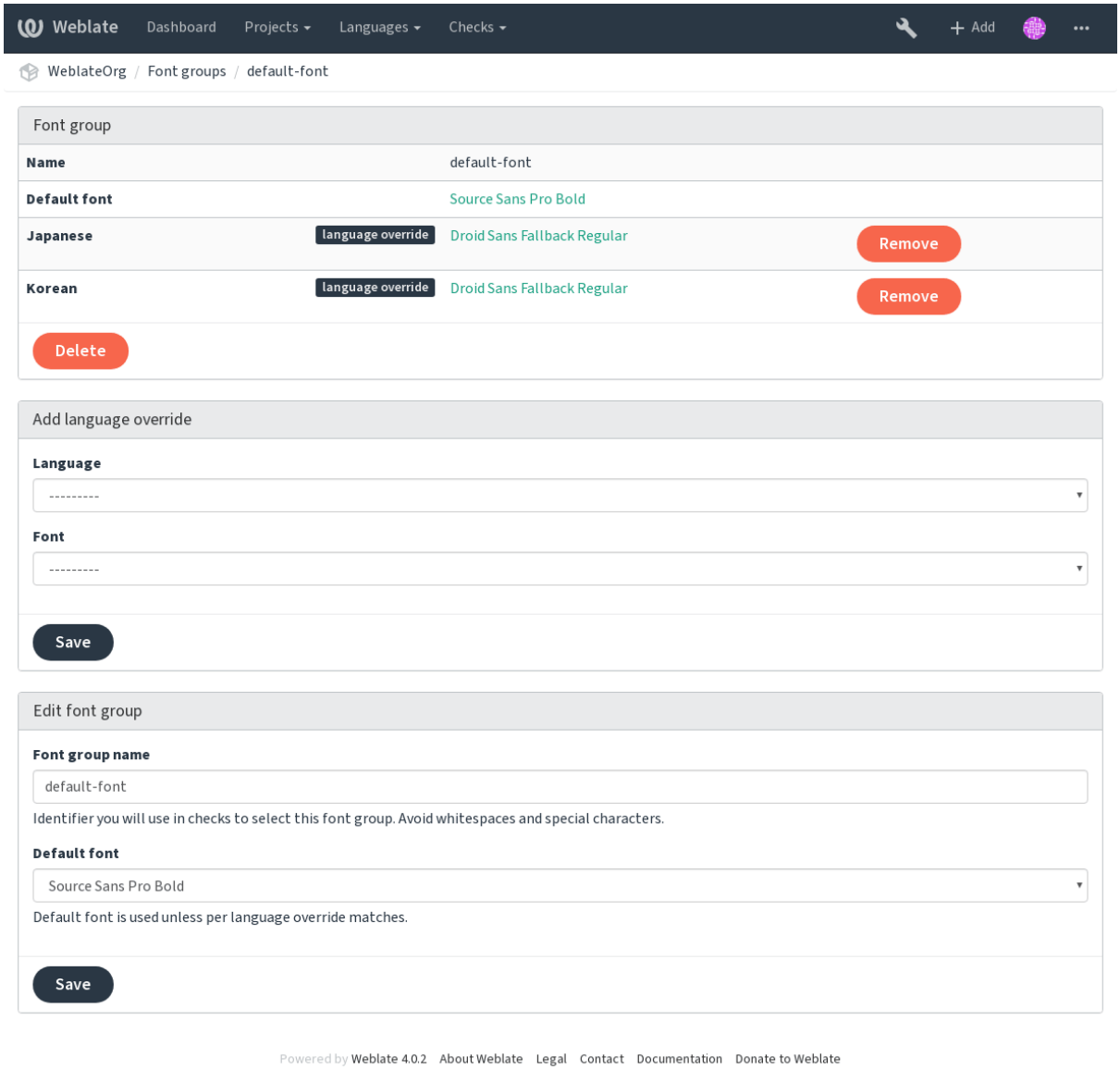
2.12.4 Managing fonts

New in version 3.7.

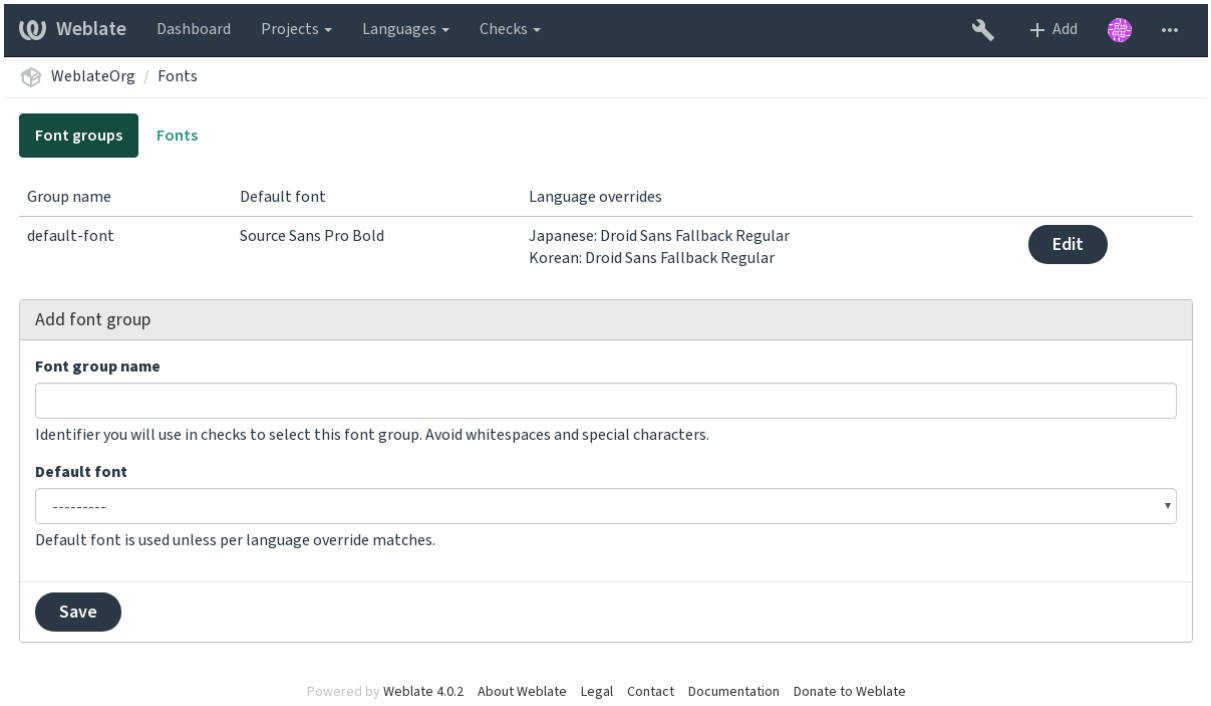
The *Maximum size of translation* check used to calculate dimensions of the rendered text needs font info to be selected, which can be done in the Weblate font management tool in *Fonts* under the *Manage* menu of your translation project.

TrueType or OpenType fonts can be uploaded, set up font-groups and use those in the the check.

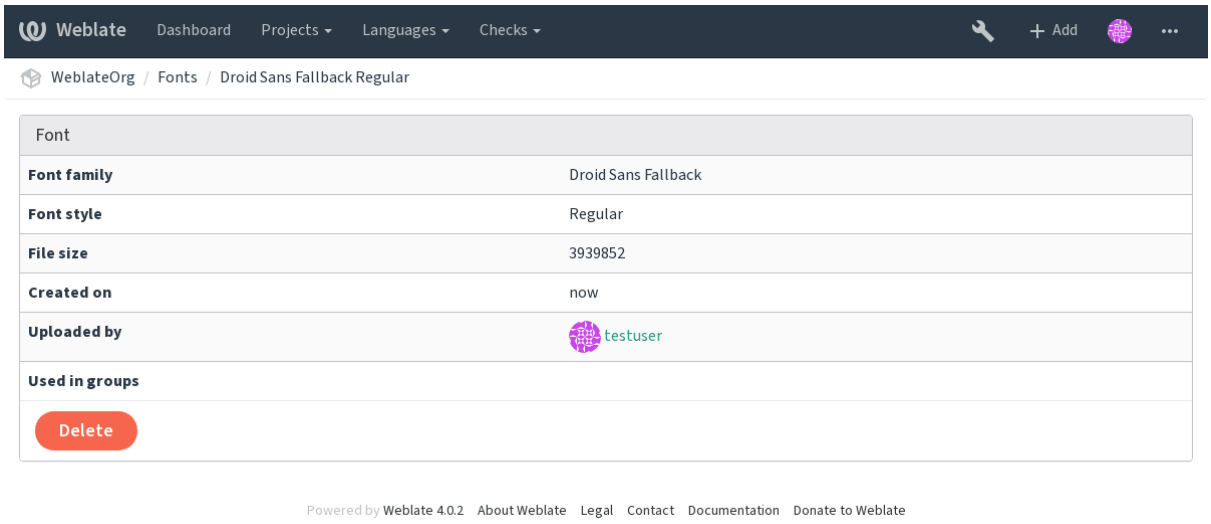
The font-groups allow you to define different fonts for different languages, which is typically needed for non-latin languages:



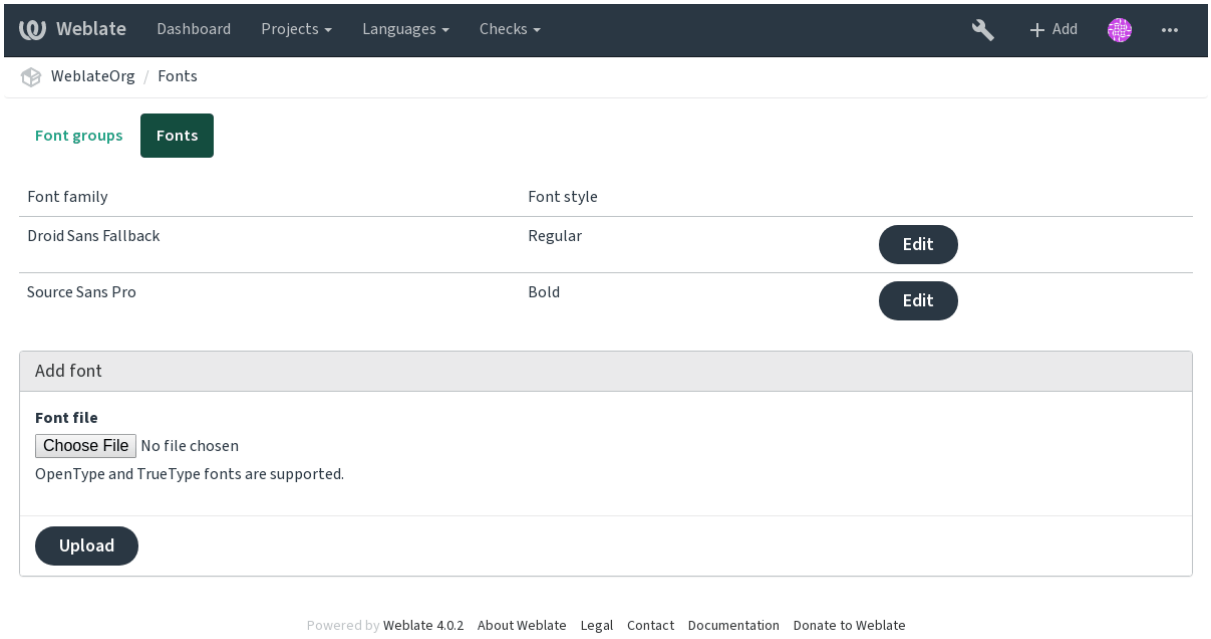
The font-groups are identified by name, which can not contain whitespace or special characters, so that it can be easily used in the check definition:



Font-family and style is automatically recognized after uploading them:



You can have a number of fonts loaded into Weblate:



To use the fonts for checking the string length, pass it the appropriate flags (see *Customizing behavior*). You will probably need the following ones:

`max-size:500` Defines maximal width.

`font-family:ubuntu` Defines font group to use by specifying its identifier.

`font-size:22` Defines font size.

2.12.5 Writing own checks

A wide range of quality checks are built-in, (see *Quality checks*), though they might not cover everything you want to check. The list of performed checks can be adjusted using *CHECK_LIST*, and you can also add custom checks.

1. Subclass the *weblate.checks.Check*
2. Set a few attributes.
3. Implement either the `check` (if you want to deal with plurals in your code) or the `check_single` method, (which does it for you).

Some examples:

To install custom checks, provide a fully-qualified path to the Python class in the *CHECK_LIST*, see *Custom quality checks, addons and auto-fixes*.

Checking translation text does not contain “foo”

This is a pretty simple check which just checks whether the translation is missing the string “foo”.

```
#
# Copyright © 2012 - 2020 Michal Čihař <michal@cihar.com>
#
# This file is part of Weblate <https://weblate.org/>
#
# This program is free software: you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation, either version 3 of the License, or
```

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```
# (at your option) any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
# GNU General Public License for more details.
#
# You should have received a copy of the GNU General Public License
# along with this program.  If not, see <https://www.gnu.org/licenses/>.
#
"""Simple quality check example."""

from django.utils.translation import gettext_lazy as _

from weblate.checks.base import TargetCheck


class FooCheck(TargetCheck):

    # Used as identifier for check, should be unique
    # Has to be shorter than 50 characters
    check_id = "foo"

    # Short name used to display failing check
    name = _("Foo check")

    # Description for failing check
    description = _("Your translation is foo")

    # Real check code
    def check_single(self, source, target, unit):
        return "foo" in target
```

Checking that Czech translation text plurals differ

Check using language info to verify the two plural forms in Czech language are not same.

```
#
# Copyright © 2012 - 2020 Michal Čihař <michal@cihar.com>
#
# This file is part of Weblate <https://weblate.org/>
#
# This program is free software: you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation, either version 3 of the License, or
# (at your option) any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
# GNU General Public License for more details.
#
# You should have received a copy of the GNU General Public License
# along with this program.  If not, see <https://www.gnu.org/licenses/>.
#
```

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```
"""Quality check example for Czech plurals."""

from django.utils.translation import gettext_lazy as _

from weblate.checks.base import TargetCheck


class PluralCzechCheck(TargetCheck):

    # Used as identifier for check, should be unique
    # Has to be shorter than 50 characters
    check_id = "foo"

    # Short name used to display failing check
    name = _("Foo check")

    # Description for failing check
    description = _("Your translation is foo")

    # Real check code
    def check_target_unit(self, sources, targets, unit):
        if self.is_language(unit, ("cs",)):
            return targets[1] == targets[2]
        return False

    def check_single(self, source, target, unit):
        """We don't check target strings here."""
        return False
```

2.13 Machine translation

Built-in support for several machine translation services and can be turned on by the administrator using *MT_SERVICES* for each one. They come subject to their terms of use, so ensure you are allowed to use them how you want.

The source language can be configured at *Project configuration*.

2.13.1 Amagama

Special installation of *tmserver* run by the authors of Virtaal.

Turn on this service by adding `weblate.machinery.tmserver.AmagamaTranslation` to *MT_SERVICES*.

See also:

Amagama, Amagama Translation Memory

2.13.2 Apertium

A libre software machine translation platform providing translations to a limited set of languages.

The recommended way to use Apertium is to run your own Apertium-APy server.

Turn on this service by adding `weblate.machinery.apertium.ApertiumAPYTranslation` to *MT_SERVICES* and set *MT_APERTIUM_APY*.

See also:

MT_APERTIUM_APY, Apertium website, Apertium APy documentation

2.13.3 AWS

New in version 3.1.

Amazon Translate is a neural machine translation service for translating text to and from English across a breadth of supported languages.

1. Turn on this service by adding `weblate.machinery.aws.AWSTranslation` to *MT_SERVICES*.
2. Install the *boto3* module.
3. Configure Weblate.

See also:

MT_AWS_REGION, *MT_AWS_ACCESS_KEY_ID*, *MT_AWS_SECRET_ACCESS_KEY* Amazon Translate Documentation

2.13.4 Baidu API machine translation

New in version 3.2.

Machine translation service provided by Baidu.

This service uses an API and you need to obtain an ID and API key from Baidu to use it.

Turn on this service by adding `weblate.machinery.baidu.BaiduTranslation` to *MT_SERVICES* and set *MT_BAIDU_ID* and *MT_BAIDU_SECRET*.

See also:

MT_BAIDU_ID, *MT_BAIDU_SECRET* Baidu Translate API

2.13.5 DeepL

New in version 2.20.

DeepL is paid service providing good machine translation for a few languages.

Turn on this service by adding `weblate.machinery.deepl.DeepLTranslation` to *MT_SERVICES* and set *MT_DEEPL_KEY*.

See also:

MT_DEEPL_KEY, DeepL website, DeepL API documentation

2.13.6 Glosbe

Free dictionary and translation memory for almost every living language.

The API is gratis to use, but subject to the used data source license. There is a limit of calls that may be done from one IP in a set period of time, to prevent abuse.

Turn on this service by adding `weblate.machinery.glosbe.GlosbeTranslation` to *MT_SERVICES*.

See also:

Glosbe website

2.13.7 Google Translate

Machine translation service provided by Google.

This service uses the Google Translation API, and you need to obtain an API key and turn on billing in the Google API console.

To turn on this service, add `weblate.machinery.google.GoogleTranslation` to *MT_SERVICES* and set *MT_GOOGLE_KEY*.

See also:

MT_GOOGLE_KEY, Google translate documentation

2.13.8 Microsoft Cognitive Services Translator

New in version 2.10.

Machine translation service provided by Microsoft in Azure portal as a one of Cognitive Services.

Weblate implements Translator API V3.

To enable this service, add `weblate.machinery.microsoft.MicrosoftCognitiveTranslation` to *MT_SERVICES* and set *MT_MICROSOFT_COGNITIVE_KEY*.

Translator Text API V2

The key you use with Translator API V2 can be used with API 3.

Translator Text API V3

You need to register at Azure portal and use the key you obtain there. With new Azure keys, you also need to set *MT_MICROSOFT_REGION* to locale of your service.

See also:

MT_MICROSOFT_COGNITIVE_KEY, *MT_MICROSOFT_REGION*, Cognitive Services - Text Translation API, Microsoft Azure Portal

2.13.9 Microsoft Terminology Service

New in version 2.19.

The Microsoft Terminology Service API allows you to programmatically access the terminology, definitions and user interface (UI) strings available in the Language Portal through a web service.

Turn this service on by adding `weblate.machinery.microsoftterminology.MicrosoftTerminologyService` to *MT_SERVICES*.

See also:

Microsoft Terminology Service API

2.13.10 MyMemory

Huge translation memory with machine translation.

Free, anonymous usage is currently limited to 100 requests/day, or to 1000 requests/day when you provide a contact e-mail address in *MT_MYMEMORY_EMAIL*. You can also ask them for more.

Turn on this service by adding `weblate.machinery.mymemory.MyMemoryTranslation` to *MT_SERVICES* and set *MT_MYMEMORY_EMAIL*.

See also:

MT_MYMEMORY_EMAIL, *MT_MYMEMORY_USER*, *MT_MYMEMORY_KEY*, MyMemory website

2.13.11 NetEase Sight API machine translation

New in version 3.3.

Machine translation service provided by Netease.

This service uses an API, and you need to obtain key and secret from NetEase.

Turn on this service by adding `weblate.machinery.youdao.NeteaseSightTranslation` to *MT_SERVICES* and set *MT_NETEASE_KEY* and *MT_NETEASE_SECRET*.

See also:

MT_NETEASE_KEY, *MT_NETEASE_SECRET* Netease Sight Translation Platform

2.13.12 tmserver

You can run your own translation memory server by using the one bundled with Translate-toolkit and let Weblate talk to it. You can also use it with an amaGama server, which is an enhanced version of tmserver.

1. First you will want to import some data to the translation memory:

2. Turn on this service by adding `weblate.machinery.tmserver.TMServerTranslation` to *MT_SERVICES*.

```
build_tmdb -d /var/lib/tm/db -s en -t cs locale/cs/LC_MESSAGES/django.po
build_tmdb -d /var/lib/tm/db -s en -t de locale/de/LC_MESSAGES/django.po
build_tmdb -d /var/lib/tm/db -s en -t fr locale/fr/LC_MESSAGES/django.po
```

3. Start tmserver to listen to your requests:

```
tmserver -d /var/lib/tm/db
```

4. Configure Weblate to talk to it:

```
MT_TMSERVER = 'http://localhost:8888/tmserver/'
```

See also:

MT_TMSERVER, tmserver Amagama, Amagama Translation Memory

2.13.13 Yandex Translate

Machine translation service provided by Yandex.

This service uses a Translation API, and you need to obtain an API key from Yandex.

Turn on this service by adding `weblate.machinery.yandex.YandexTranslation` to *MT_SERVICES*, and set *MT_YANDEX_KEY*.

See also:

MT_YANDEX_KEY, Yandex Translate API, Powered by Yandex.Translate

2.13.14 Youdao Zhiyun API machine translation

New in version 3.2.

Machine translation service provided by Youdao.

This service uses an API, and you need to obtain an ID and an API key from Youdao.

Turn on this service by adding `weblate.machinery.youdao.YoudaoTranslation` to *MT_SERVICES* and set *MT_YOUDAO_ID* and *MT_YOUDAO_SECRET*.

See also:

MT_YOUDAO_ID, *MT_YOUDAO_SECRET* Youdao Zhiyun Natural Language Translation Service

2.13.15 Weblate

Weblate can be the source of machine translations as well. It is based on the Woosh fulltext engine, and provides both exact and inexact matches.

Turn on these services by adding `weblate.machinery.weblatetm.WeblateTranslation` to *MT_SERVICES*.

2.13.16 Weblate Translation Memory

New in version 2.20.

The *Translation Memory* can be used as a source for machine translation suggestions as well.

Turn on these services by adding `weblate.memory.machine.WeblateMemory` to the *MT_SERVICES*. This service is turned on by default.

2.13.17 SAP Translation Hub

Machine translation service provided by SAP.

You need to have a SAP account (and enabled the SAP Translation Hub in the SAP Cloud Platform) to use this service.

Turn on this service by adding `weblate.machinery.saptranslationhub.SAPTranslationHub` to *MT_SERVICES* and set the appropriate access to either sandbox or the productive API.

Note: To access the Sandbox API, you need to set *MT_SAP_BASE_URL* and *MT_SAP_SANDBOX_APIKEY*.

To access the productive API, you need to set *MT_SAP_BASE_URL*, *MT_SAP_USERNAME* and *MT_SAP_PASSWORD*.

See also:

MT_SAP_BASE_URL, *MT_SAP_SANDBOX_APIKEY*, *MT_SAP_USERNAME*, *MT_SAP_PASSWORD*, *MT_SAP_USE_MT* SAP Translation Hub API

2.13.18 Custom machine translation

You can also implement your own machine translation services using a few lines of Python code. This example implements machine translation in a fixed list of languages using `dictionary` Python module:

```
#
# Copyright © 2012 - 2020 Michal Čihař <michal@cihar.com>
#
# This file is part of Weblate <https://weblate.org/>
#
# This program is free software: you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation, either version 3 of the License, or
# (at your option) any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
# GNU General Public License for more details.
#
# You should have received a copy of the GNU General Public License
# along with this program.  If not, see <https://www.gnu.org/licenses/>.
#
"""Machine translation example."""

import dictionary
from weblate.machinery.base import MachineTranslation


class SampleTranslation(MachineTranslation):
    """Sample machine translation interface."""

    name = "Sample"

    def download_languages(self):
        """Return list of languages your machine translation supports."""
        return {"cs"}

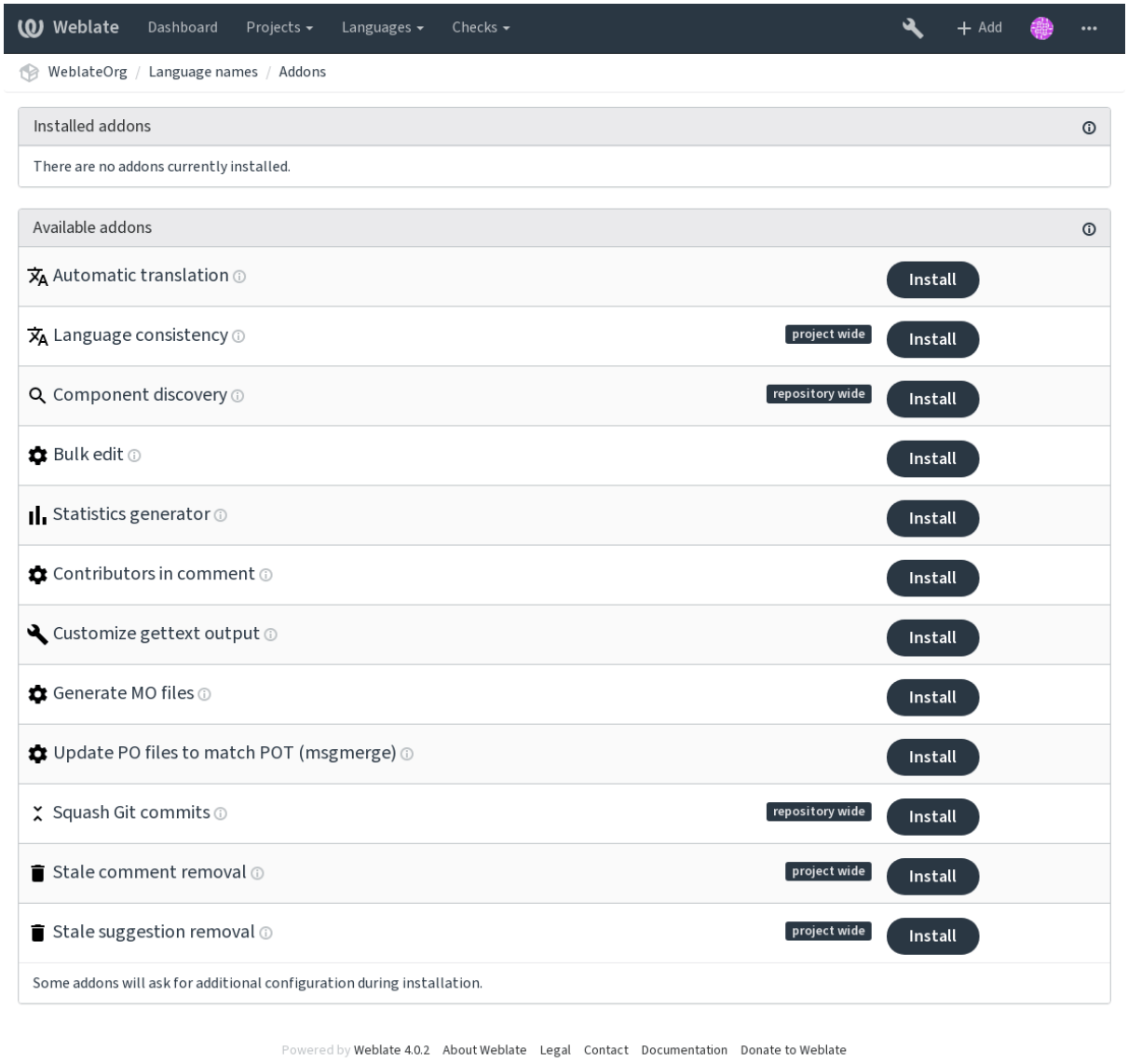
    def download_translations(self, source, language, text, unit, user, search):
        """Return tuple with translations."""
        for t in dictionary.translate(text):
            yield {"text": t, "quality": 100, "service": self.name, "source": text}
```

You can list own class in *MT_SERVICES* and Weblate will start using that.

2.14 Addons

New in version 2.19.

Addons provide ways to customize translation workflow. They can be installed in the translation component view, and work behind the scenes. Addon management is available from the *Manage* ↓ *Addons* menu of each respective translation component for admins.



2.14.1 Built-in addons

Automatic translation

New in version 3.9.

Automatically translates strings using machine translation or other components.

See also:

Automatic translation, *Keeping translations same across components*

Cleanup translation files

Update all translation files to match the monolingual base file. For most file formats, this means removing stale translation keys no longer present in the base file.

Language consistency

Ensures all components within one project have translations for every added language for translation. It creates empty translations in languages that have unadded components.

Missing languages are checked once every 24 hours and when a new language is added in Weblate.

Unlike most others, this addon affects the whole project.

Hint: Auto-translate the newly added strings with *Automatic translation*.

Component discovery

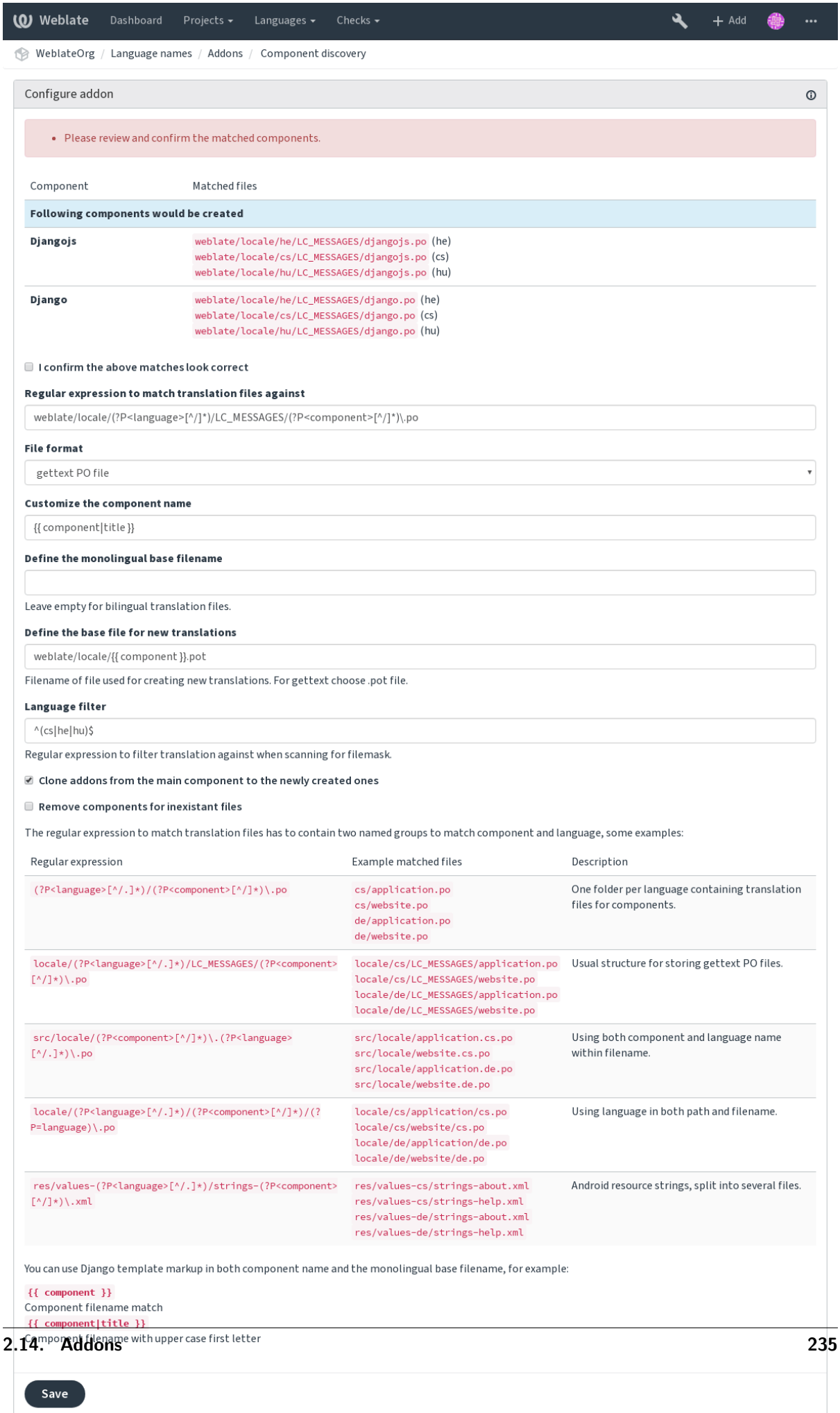
Automatically adds or removes project components based on file changes in the version control system.

It is triggered on every VCS update, and otherwise similar to the `import_project` management command. This way you can track multiple translation components within one VCS.

Create one master component least likely to disappear in the future, and others will employ *Weblate internal URLs* to it as a VCS configuration, and configure it to find all compoents in it.

The matching is done using regular expressions, where power is a tradeoff for complexity in configuration. Some examples for common use cases can be found in the addon help sectoin.

Once you hit *Save*, a preview of matching components will be presented, from where you can check whether the configuration actually matches your needs:


Weblate
Dashboard
Projects
Languages
Checks
Add
WeblateOrg / Language names / Addons / Component discovery
Configure addon
Please review and confirm the matched components.
Component
Matched files
Following components would be created
Djangojs
weblate/locale/he/LC_MESSAGES/djangojs.po (he)
weblate/locale/cs/LC_MESSAGES/djangojs.po (cs)
weblate/locale/hu/LC_MESSAGES/djangojs.po (hu)
Django
weblate/locale/he/LC_MESSAGES/django.po (he)
weblate/locale/cs/LC_MESSAGES/django.po (cs)
weblate/locale/hu/LC_MESSAGES/django.po (hu)
I confirm the above matches look correct
Regular expression to match translation files against
weblate/locale/(?P<language>[^/]*)/LC_MESSAGES/(?P<component>[^/]*)\.po
File format
gettext PO file
Customize the component name
{{ component|title }}
Define the monolingual base filename
Leave empty for bilingual translation files.
Define the base file for new translations
weblate/locale/{{ component }}.pot
Filename of file used for creating new translations. For gettext choose .pot file.
Language filter
^(cs|he|hu)$
Regular expression to filter translation against when scanning for filemask.
Clone addons from the main component to the newly created ones
Remove components for inexistant files
The regular expression to match translation files has to contain two named groups to match component and language, some examples:
Regular expression
Example matched files
Description
(?P<language>[^/.]*)/(?P<component>[^/]*)\.po
cs/application.po
cs/website.po
de/application.po
de/website.po
One folder per language containing translation files for components.
locale/(?P<language>[^/.]*)/LC_MESSAGES/(?P<component>[^/]*)\.po
locale/cs/LC_MESSAGES/application.po
locale/cs/LC_MESSAGES/website.po
locale/de/LC_MESSAGES/application.po
locale/de/LC_MESSAGES/website.po
Usual structure for storing gettext PO files.
src/locale/(?P<component>[^/]*)\.(?P<language>[^/.]*)\.po
src/locale/application.cs.po
src/locale/website.cs.po
src/locale/application.de.po
src/locale/website.de.po
Using both component and language name within filename.
locale/(?P<language>[^/.]*)/(?P<component>[^/]*)/(?P=language)\.po
locale/cs/application/cs.po
locale/cs/website/cs.po
locale/de/application/de.po
locale/de/website/de.po
Using language in both path and filename.
res/values-(?P<language>[^/.]*)/strings-(?P<component>[^/]*)\.xml
res/values-cs/strings-about.xml
res/values-cs/strings-help.xml
res/values-de/strings-about.xml
res/values-de/strings-help.xml
Android resource strings, split into several files.
You can use Django template markup in both component name and the monolingual base filename, for example:
{{ component }}
Component filename match
{{ component|title }}
Component filename with upper case first letter
Save

See also:

Template markup

Bulk edit

New in version 3.11.

Bulk edit flags, labels or state for strings.

Automating the labeling of new strings can be useful (start out with search query `NOT has:label` and add desired labels till all strings are properly labeled). You can also carry out any other automated operations for Weblate metadata.

Flag unchanged translations as "Needs editing"

New in version 3.1.

Whenever a new translatable string is imported from the VCS and it matches a source string, it is flagged as needing editing in Weblate. This is especially useful for file formats that include all strings even if not translated.

Flag new source strings as "Needs editing"

Whenever a new source string is imported from the VCS, it is flagged as needing editing in Weblate. This way you can easily filter and edit source strings written by the developers.

Flag new translations as "Needs editing"

Whenever a new translatable string is imported from the VCS, it is flagged as needing editing in Weblate. This way you can easily filter and edit translations created by the developers.

Statistics generator

Generates a file containing detailed info about the translation. You can use Django template in both filename and content, see *Template markup* for a detailed markup description.

For example generating summary file for each translation:

Name of generated file `locale/{{ language_code }}.json`

Content

```
{
   "language": "{{ language_code }}",
   "strings": "{{ stats.all }}",
   "translated": "{{ stats.translated }}",
   "last_changed": "{{ stats.last_changed }}",
   "last_author": "{{ stats.last_author }}",
}
```

See also:

Template markup

Contributors in comment

Update the comment in the PO file header to include contributor names and years of contributions.

The PO file header will contain a list of contributors and years contributed:

```
# Michal Čihař <michal@cihar.com>, 2012, 2018, 2019, 2020.
# Pavel Borecki <pavel@example.com>, 2018, 2019.
# Filip Hron <filip@example.com>, 2018, 2019.
# anonymous <noreply@weblate.org>, 2019.
```

Update ALL_LINGUAS variable in the "configure" file

Updates the ALL_LINGUAS variable in `configure`, `configure.in` or any `configure.ac` files, when a new translation is added.

Customize gettext output

Allows customization of gettext output behavior, for example line wrapping.

It offers the following options:

- Wrap lines at 77 characters and at newlines
- Only wrap lines at newlines
- No line wrapping

Note: By default gettext wraps lines at 77 characters and for newlines. With the `--no-wrap` parameter, it wraps only at newlines.

Update LINGUAS file

Updates the LINGUAS file when a new translation is added.

Generate MO files

Automatically generates a MO file for every changed PO file.

Update PO files to match POT (msgmerge)

Updates all PO files to match the POT file using msgmerge. Triggered whenever new changes are pulled from the upstream repository.

Squash Git commits

Squash Git commits prior to pushing changes. You can choose one of following modes:

New in version 3.4.

- All commits into one
- Per language
- Per file

New in version 3.5.

- Per author

Original commit messages are kept, but authorship is lost unless “Per author” is selected, or the commit message is customized to include it.

Customize JSON output

Allows adjusting JSON output behavior, for example indentation or sorting.

Formats the Java properties file

Sorts the Java properties file. Available only if applicable.

Stale comment removal

New in version 3.7.

Set a timeframe for removal of comments. This can be useful to remove old comments which might have become outdated. Use with care as comment being old does not mean they have lost their importance.

Stale suggestion removal

New in version 3.7.

Set a timeframe for removal of suggestions. This can be very useful in connection with suggestion voting (see *Peer review*) to remove suggestions which don't receive enough positive votes in a given timeframe.

Update RESX files

New in version 3.9.

Update all translation files to match the monolingual upstream base file. Unused strings are removed, and new ones added as copies of the source string. Available only if applicable.

Hint: Use *Cleanup translation files* if you only want to remove stale translation keys.

Customize YAML output

New in version 3.10.2.

Allows adjusting YAML output behavior, for example line-length or newlines.

2.14.2 Customizing list of addons

The list of addons is configured by `WEBLATE_ADDONS`. To add another addon, simply include class absolute name in this setting.

2.14.3 Writing addon

You can write your own addons too, all you need to do is subclass `BaseAddon`, define the addon metadata and implement a callback which will do the processing.

Here is an example addon:

```
#
# Copyright © 2012 - 2020 Michal Čihař <michal@cihar.com>
#
# This file is part of Weblate <https://weblate.org/>
#
# This program is free software: you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation, either version 3 of the License, or
# (at your option) any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
# GNU General Public License for more details.
#
# You should have received a copy of the GNU General Public License
# along with this program.  If not, see <https://www.gnu.org/licenses/>.
#


from django.utils.translation import gettext_lazy as _

from weblate.addons.base import BaseAddon
from weblate.addons.events import EVENT_PRE_COMMIT


class ExampleAddon(BaseAddon):
    # Filter for compatible components, every key is
    # matched against property of component
    compat = {"file_format": frozenset(("po", "po-mono"))}
    # List of events addon should receive
    events = (EVENT_PRE_COMMIT,)
    # Addon unique identifier
    name = "weblate.example.example"
    # Verbose name shown in the user interface
    verbose = _("Example addon")
    # Detailed addon description
    description = _("This addon does nothing it is just an example.")

    # Callback to implement custom behavior
    def pre_commit(self, translation, author):
        return
```

2.14.4 Executing scripts from addon

Addons can also be used to execute external scripts. This used to be integrated in Weblate, but now you have to write some code to wrap your script with an addon.

```
#
# Copyright © 2012 - 2020 Michal Čihař <michal@cihar.com>
```

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```
#
# This file is part of Weblate <https://weblate.org/>
#
# This program is free software: you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation, either version 3 of the License, or
# (at your option) any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
# GNU General Public License for more details.
#
# You should have received a copy of the GNU General Public License
# along with this program.  If not, see <https://www.gnu.org/licenses/>.
#
"""Example pre commit script."""


from django.utils.translation import gettext_lazy as _

from weblate.addons.events import EVENT_PRE_COMMIT
from weblate.addons.scripts import BaseScriptAddon


class ExamplePreAddon(BaseScriptAddon):
    # Event used to trigger the script
    events = (EVENT_PRE_COMMIT,)
    # Name of the addon, has to be unique
    name = "weblate.example.pre"
    # Verbose name and long descrption
    verbose = _("Execute script before commit")
    description = _("This addon executes a script.")

    # Script to execute
    script = "/bin/true"
    # File to add in commit (for pre commit event)
    # does not have to be set
    add_file = "po/{{ language_code }}.po"
```

For installation instructions see *Custom quality checks, addons and auto-fixes*.

The script is executed with the current directory set to the root of the VCS repository for any given component.

Additionally, the following environment variables are available:

`WL_VCS`
: Version control system used.

`WL_REPO`
: Upstream repository URL.

`WL_PATH`
: Absolute path to VCS repository.

`WL_BRANCH`
: New in version 2.11.

  Repository branch configured in the current component.

`WL_FILEMASK`
: Filemask for current component.

`WL_TEMPLATE`
: Filename of template for monolingual translations (can be empty).

`WL_NEW_BASE`
: New in version 2.14.

  Filename of the file used for creating new translations (can be empty).

`WL_FILE_FORMAT`
: Fileformat used in current component.

`WL_LANGUAGE`
: Language of currently processed translation (not available for component level hooks).

`WL_PREVIOUS_HEAD`
: Previous HEAD on update (available only available when running post update hook).

`WL_COMPONENT_SLUG`
: New in version 3.9.

  Component slug used to contruct URL.

`WL_PROJECT_SLUG`
: New in version 3.9.

  Project slug used to contruct URL.

`WL_COMPONENT_NAME`
: New in version 3.9.

  Component name.

`WL_PROJECT_NAME`
: New in version 3.9.

  Project name.

`WL_COMPONENT_URL`
: New in version 3.9.

  Component URL.

`WL_ENGAGE_URL`
: New in version 3.9.

  Project engage URL.

See also:

Component configuration

Post update repository processing

Post update repository processing can be used to update translation files when the VCS upstream source changes. To achieve this, please remember that Weblate only sees files committed to the VCS, so you need to commit changes as a part of the script.

For example with Gulp you can do it using following code:

```
#! /bin/sh
gulp --gulpfile gulp-i18n-extract.js
git commit -m 'Update source strings' src/languages/en.lang.json
```

Pre commit processing of translations

Use the commit script to automatically make changes to the translation before it is committed to the repository.

It is passed as a single parameter consisting of the filename of a current translation.

2.15 Translation Memory

New in version 2.20.

Weblate comes with a built-in translation memory consisting of the following:

- Manually imported translation memory (see *User interface*).
- Automatically stored translations performed in Weblate (depending on *Translation memory scopes*).
- Automatically imported past translations.

Content in the translation memory can be applied one of two ways:

- Manually, *Machine translation* view while translating.
- Automatically, by translating strings using *Automatic translation*, or *Automatic translation* addon.

For installation tips, see *Weblate Translation Memory*, which is turned on by default.

2.15.1 Translation memory scopes

New in version 3.2: In earlier versions translation memory could be only loaded from a file corresponding to the current imported translation memory scope.

The translation memory scopes are there to allow both privacy and sharing of translations, to suit the desired behavior.

Imported translation memory

Importing arbitrary translation memory data using the `import_memory` command makes memory content available to all users and projects.

Per user translation memory

Stores all user translations automatically in the personal translation memory of each respective user.

Per project translation memory

All translations within a project are automatically stored in a project translation memory only available for this project.

Shared translation memory

All translation within projects with shared translation memory turned on are stored in a shared translation memory available to all projects.

Please consider carefully whether to turn this this feature on for shared Weblate installations, as it can have severe implications:

- The translations can be used by anybody else.

- This might lead to disclosing secret information.

2.15.2 Managing translation memory

User interface

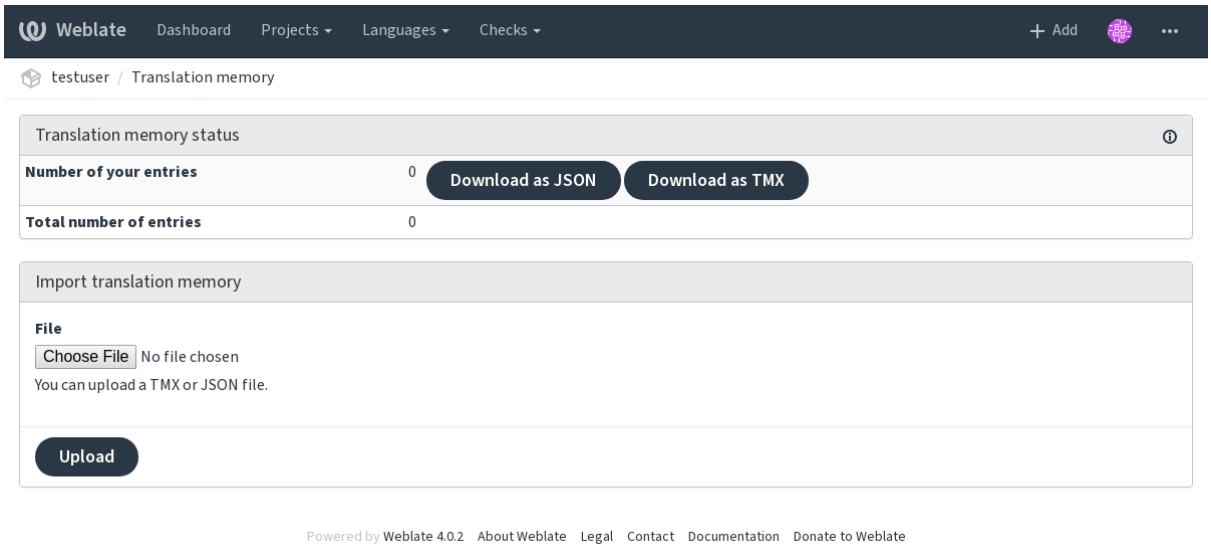
New in version 3.2.

In the basic user interface you can manage per user and per project translation memories. It can be used to download or import translation memory.

Hint: Translation memory in JSON can be imported into Weblate, TMX is provided for interoperability with other tools.

See also:

Weblate Translation Memory Schema



Management interface

There are several management commands to manipulate the translation memory content. These operate on the translation memory as whole, unfiltered by scopes (unless requested by parameters):

`dump_memory` Exports the memory into JSON

`import_memory` Imports TMX or JSON files into the translation memory

2.16 Configuration

All settings are stored in `settings.py` (as is usual for Django).

Note: After changing any of these settings, you need to restart Weblate. In case it is run as mod_wsgi, you need to restart Apache to reload the configuration.

See also:

Please also check Django's documentation for parameters configuring Django itself.

2.16.1 AKISMET_API_KEY

Weblate can use Akismet to check incoming anonymous suggestions for spam. Visit akismet.com to purchase an API key and associate it with a site.

2.16.2 ANONYMOUS_USER_NAME

Username of users that are not signed in.

See also:

Access control

2.16.3 AUDITLOG_EXPIRY

New in version 3.6.

How many days Weblate should keep audit logs, which contain info about account activity.

Defaults to 180 days.

2.16.4 AUTH_LOCK_ATTEMPTS

New in version 2.14.

Maximum number of failed authentication attempts before rate limiting is applied.

This is currently applied in the following locations:

- Logins. Deletes the account password, preventing the user from loggin in without requesting a new password.
- Password resets. Prevents new e-mails from being sent, avoiding spamming users with too many password reset attempts.

Defaults to 10.

See also:

Rate limiting,

2.16.5 AUTO_UPDATE

New in version 3.2.

Changed in version 3.11: The original on/off option was changed to differentiate which strings are accepted.

Updates all repositories on a daily basis.

Hint: Useful if you are not using *Notification hooks* to update Weblate repositories automatically.

Note: On/off options exist in addition to string selection for backward compatibility.

Options are:

`"none"` No daily updates.

`"remote"` also `False` Only update remotes.

"full" also True Update remotes and merge working copy.

Note: This requires that *Background tasks using Celery* is working, and will take effect after it is restarted.

2.16.6 AVATAR_URL_PREFIX

Prefix for constructing avatar URLs as: `${AVATAR_URL_PREFIX}/avatar/${MAIL_HASH}?${PARAMS}`. The following services are known to work:

Gravatar (default), see https://gravatar.com/ `AVATAR_URL_PREFIX = 'https://www.gravatar.com/'`

Libravatar, see https://www.libravatar.org/ `AVATAR_URL_PREFIX = 'https://seccdn.libravatar.org/'`

See also:

Avatar caching, *ENABLE_AVATARS*, *Avatars*

2.16.7 AUTH_TOKEN_VALID

New in version 2.14.

How long the authentication token and temporary password from password reset e-mails is valid for.

An amount of seconds defaulting to 172800 (2 days).

2.16.8 AUTH_PASSWORD_DAYS

New in version 2.15.

How many days using the same password should be allowed.

Note: Password changes made prior to Weblate 2.15 will not be accounted for in this policy.

Defaults to 180 days.

2.16.9 AUTOFIX_LIST

List of automatic fixes to apply when saving a string.

Note: Provide a fully-qualified path to the Python class that implementing the autofixer interface.

Available fixes:

weblate.trans.autofixes.whitespace.SameBookendingWhitespace Matches whitespace at the strt and end of the string to the source.

weblate.trans.autofixes.chars.ReplaceTrailingDotsWithEllipsis Replaces trailing dots (...) if the source string has ellipsis (…).

weblate.trans.autofixes.chars.RemoveZeroSpace Removes zero-width space characters if the source does not contain any.

weblate.trans.autofixes.chars.RemoveControlChars Removes control characters if the source does not contain any.

weblate.trans.autofixes.html.BleachHTML Removes unsafe HTML markup from strings flagged as `safe-html` (see *Unsafe HTML*).

You can select which ones to use:

```
AUTOFIX_LIST = (
    'weblate.trans.autofixes.whitespace.SameBookendingWhitespace',
    'weblate.trans.autofixes.chars.ReplaceTrailingDotsWithEllipsis',
)
```

See also:

Automatic fixups, *Custom automatic fixups*

2.16.10 BASE_DIR

Base directory where Weblate sources are located. Used to derive several other paths by default:

- *DATA_DIR*

Default value: Top level directory of Weblate sources.

2.16.11 CHECK_LIST

List of quality checks to perform on a translation.

Note: Provide a fully-qualified path to the Python class implementing the check interface.

Adjust the list list of checks to include the ones you want to have performed.

All built-in quality *Quality checks* are turned on by default, from where you can change these settings. They are also commented out in *Sample configuration* to use default values, which is to have new checks carried out when going to a new Weblate version.

You can turn off all checks:

```
CHECK_LIST = ()
```

You can turn on only a few:

```
CHECK_LIST = (
    'weblate.checks.chars.BeginNewlineCheck',
    'weblate.checks.chars.EndNewlineCheck',
    'weblate.checks.chars.MaxLengthCheck',
)
```

Note: Changing this setting only affects newly changed translations, existing checks will still be stored in the database. To also apply changes to the stored translations, run *updatechecks*.

See also:

Quality checks, *Customizing behavior*

2.16.12 COMMENT_CLEANUP_DAYS

New in version 3.6.

Delete comments after a given number of days. Defaults to `None`, meaning no deletion at all.

2.16.13 COMMIT_PENDING_HOURS

New in version 2.10.

Number of hours between committing pending changes with *commit_pending*.

See also:

Running maintenance tasks, *commit_pending*

2.16.14 DATA_DIR

The folder Weblate stores all data in. it contains links to VCS repositories, a fulltext index and various configuration files for external tools.

The following subdirectories usually exist:

home Home directory used for invoking scripts.

ssh SSH keys and configuration.

static Default location for static Django files, specified by STATIC_ROOT.

media Default location for Django media files, specified by MEDIA_ROOT.

vcs Version control repositories.

backups Daily backup data, see *Dumped data for backups*.

Note: This directory has to be writable by Weblate. If if running it as uWSGI means the www-data user should have write access to it.

The easiest way to achieve this is to make the user the owner of the directory:

```
sudo chown www-data:www-data -R $DATA_DIR
```

Defaults to $BASE_DIR/data.

See also:

BASE_DIR, *Backing up and moving Weblate*

2.16.15 DATABASE_BACKUP

New in version 3.1.

Whether the database backups should be stored as plain text, compressed or skipped. The authorized values are: * "plain" * "compressed" * "none"

See also:

Backing up and moving Weblate

2.16.16 DEFAULT_ACCESS_CONTROL

New in version 3.3.

The default access control setting for new projects:

0 *Public*

1 *Protected*

100 *Private*

200 *Custom*

Use *Custom* if you managing ACL manually, which means not realying on the internal Weblate management.

See also:

Per project access control, *Access control*

2.16.17 DEFAULT_ADD_MESSAGE, DEFAULT_ADDON_MESSAGE, DEFAULT_COMMIT_MESSAGE, DEFAULT_DELETE_MESSAGE, DEFAULT_MERGE_MESSAGE

Default commit messages for different operations, see *Component configuration*.

See also:

Template markup, *Component configuration*

2.16.18 DEFAULT_COMMITER_EMAIL

New in version 2.4.

Committer e-mail address for created translation components defaulting to `noreply@weblate.org`, (see *Component configuration*).

See also:

DEFAULT_COMMITER_NAME, *Component configuration*

2.16.19 DEFAULT_COMMITER_NAME

New in version 2.4.

Committer name for created translation components defualting to `Weblate`, (see *Component configuration*).

See also:

DEFAULT_COMMITER_EMAIL, *Component configuration*

2.16.20 DEFAULT_MERGE_STYLE

New in version 3.4.

Merge style for any new components (see *Component configuration*):

- *rebase* - default
- *merge*

2.16.21 DEFAULT_TRANSLATION_PROPAGATION

New in version 2.5.

Default setting for translation propagation (see *Component configuration*), defaults to `True`.

See also:

Component configuration

2.16.22 DEFAULT_PULL_MESSAGE

Title for new pull requests, defaulting to `'Update from Weblate'`.

2.16.23 ENABLE_AVATARS

Whether to enable Gravatar based avatars for users. By default this is enabled.

Avatars are fetched and cached on the server, lowering the risk of leaking private info, speeding up the user experience.

See also:

Avatar caching, *AVATAR_URL_PREFIX*, *Avatars*

2.16.24 ENABLE_HOOKS

Whether to enable anonymous remote hooks.

See also:

Notification hooks

2.16.25 ENABLE_HTTPS

Whether to send links to Weblate as HTTPS or HTTP. This setting affects sent e-mails and generated absolute URLs.

Hint: In the default configuration this is also used for several Django settings related to HTTPS.

See also:

SESSION_COOKIE_SECURE, CSRF_COOKIE_SECURE, SECURE_SSL_REDIRECT, *Set correct site domain*

2.16.26 ENABLE_SHARING

Enable/disable the Share menu so users can share translation progress on social networks.

2.16.27 GITLAB_USERNAME

GitLab username used to send merge requests for translation updates.

See also:

Pushing changes to GitLab as merge requests, *Setting up Lab*

2.16.28 GITHUB_USERNAME

GitHub username used to send pull requests for translation updates.

See also:

Pushing changes to GitHub as pull requests, *Setting up hub*

2.16.29 GOOGLE_ANALYTICS_ID

Google Analytics ID to turn on monitoring of Weblate using Google Analytics.

2.16.30 HIDE_REPO_CREDENTIALS

Hide repository credentials from appearing in the web interface. In case you have repository URL with user and password, Weblate will hide it when related info is shown to users.

For example instead of `https://user:password@git.example.com/repo.git` it will show just `https://git.example.com/repo.git`. It tries to clean up VCS error messages too in a similar manner.

Note: This is turned on by default.

2.16.31 IP_BEHIND_REVERSE_PROXY

New in version 2.14.

Indicates whether Weblate is running behind a reverse proxy.

If set to "True", Weblate gets IP address from a header defined by *IP_BEHIND_REVERSE_PROXY*. Ensure you are actually using a reverse proxy and that it sets this header, otherwise users will be able to fake the IP address.

Note: This is not on by default.

See also:

Rate limiting, *IP address for rate limiting*

2.16.32 IP_PROXY_HEADER

New in version 2.14.

Indicates which header Weblate should obtain the IP address from when *IP_BEHIND_REVERSE_PROXY* is turned on.

Defaults to `HTTP_X_FORWARDED_FOR`.

See also:

Rate limiting, *IP address for rate limiting*

2.16.33 IP_PROXY_OFFSET

New in version 2.14.

Indicates which part of *IP_BEHIND_REVERSE_PROXY* is used as client IP address.

Depending on your setup, this header might consist of several IP addresses, (for example `X-Forwarded-For: a, b, client-ip`) and you can configure which address from the header is used as client IP address here.

Warning: Setting this affects the security of your installation, you should only configure it to use trusted proxies for determining IP address.

Defaults to 0.

See also:

Rate limiting, *IP address for rate limiting*

2.16.34 LEGAL_URL

New in version 3.5.

URL where your Weblate instance shows its legal documents.

Hint: Useful if you host your legal documents outside Weblate for embedding them inside Weblate, please see *Legal*.

Example:

```
LEGAL_URL = "https://weblate.org/terms/"
```

2.16.35 LICENSE_EXTRA

Additional licenses to include in the license choices.

Note: Each license definition should be tuple of its short name, a long name and an URL.

For example:

```
LICENSE_EXTRA = [
    (
        "GPL-3.0-only",
        "GNU General Public License v3.0 only",
        "https://www.gnu.org/licenses/gpl-3.0-standalone.html",
    ),
]
```

2.16.36 LICENSE_FILTER

Optional addition of licenses to show.

Note: This filter uses the short license names.

For example:

```
LICENSE_FILTER = {"GPL-3.0-only", "GPL-3.0-or-later"}
```

2.16.37 LICENSE_REQUIRED

Defines whether the license attribute in *Component configuration* is required.

Note: This is off by default.

2.16.38 LIMIT_TRANSLATION_LENGTH_BY_SOURCE_LENGTH

Whether the length of a given translation should be limited. The restriction is the length of the source string * 10 characters.

Hint: Set this to `False` to allow longer translations (up to 10.000 characters) irrespective of source string length.

Note: Defaults to `True`.

2.16.39 LOGIN_REQUIRED_URLS

A list of URLs you want to require logging into. (Besides the standard rules built into Weblate).

Hint: This allows you to password protect a whole installation using:

```
LOGIN_REQUIRED_URLS = (
    r'/(.*)$',
)
REST_FRAMEWORK["DEFAULT_PERMISSION_CLASSES"] = [
    "rest_framework.permissions.IsAuthenticated"
]
```

Hint: It is desirable to lock down API access as well, as shown in the above example.

2.16.40 LOGIN_REQUIRED_URLS_EXCEPTIONS

List of exceptions for *LOGIN_REQUIRED_URLS*. If not specified, users are allowed to access the login page.

Some of exceptions you might want to include:

```
LOGIN_REQUIRED_URLS_EXCEPTIONS = (
    r'/accounts/(.*)$', # Required for login
    r'/static/(.*)$',   # Required for development mode
    r'/widgets/(.*)$',  # Allowing public access to widgets
    r'/data/(.*)$',     # Allowing public access to data exports
    r'/hooks/(.*)$',    # Allowing public access to notification hooks
    r'/api/(.*)$',      # Allowing access to API
    r'/js/i18n/$',      # JavaScript localization
)
```

2.16.41 MATOMO_SITE_ID

ID of a site in Matomo (formerly Piwik) you want to track.

Note: This integration does not support the Matomo Tag Manager.

See also:

MATOMO_URL

2.16.42 MATOMO_URL

Full URL (including trailing slash) of a Matomo (formerly Piwik) installation you want to use to track Weblate use. For more info about Matomo, see <https://matomo.org/>.

Hint: This integration does not support the Matomo Tag Manager.

For example:

```
MATOMO_SITE_ID = 1
MATOMO_URL = "https://example.matomo.cloud/"
```

See also:

MATOMO_SITE_ID

2.16.43 MT_SERVICES

Changed in version 3.0: The setting was renamed from `MACHINE_TRANSLATION_SERVICES` to `MT_SERVICES` to be consistent with other machine translation settings.

List of enabled machine translation services to use.

Note: Many of the services need additional configuration like API keys, please check their documentation ref: *machine* for more details.

```
MT_SERVICES = (
    'weblate.machinery.apertium.ApertiumAPYTranslation',
    'weblate.machinery.deepl.DeepLTranslation',
    'weblate.machinery.glosbe.GlosbeTranslation',
    'weblate.machinery.google.GoogleTranslation',
    'weblate.machinery.microsoft.MicrosoftCognitiveTranslation',
    'weblate.machinery.microsoftterminology.MicrosoftTerminologyService',
    'weblate.machinery.mymemory.MyMemoryTranslation',
    'weblate.machinery.tmserver.AmagamaTranslation',
    'weblate.machinery.tmserver.TMServerTranslation',
    'weblate.machinery.yandex.YandexTranslation',
    'weblate.machinery.weblatetm.WeblateTranslation',
    'weblate.machinery.saptranslationhub.SAPTranslationHub',
    'weblate.memory.machine.WeblateMemory',
)
```

See also:

Machine translation, *Machine translation*

2.16.44 MT_APERTIUM_APY

URL of the Apertium-APy server, see http://wiki.apertium.org/wiki/Apertium-apy

See also:

Apertium, *Machine translation*, *Machine translation*

2.16.45 MT_AWS_ACCESS_KEY_ID

Access key ID for Amazon Translate.

See also:

AWS, *Machine translation*, *Machine translation*

2.16.46 MT_AWS_SECRET_ACCESS_KEY

API secret key for Amazon Translate.

See also:

AWS, *Machine translation*, *Machine translation*

2.16.47 MT_AWS_REGION

Region name to use for Amazon Translate.

See also:

AWS, *Machine translation*, *Machine translation*

2.16.48 MT_BAIDU_ID

Client ID for the Baidu Zhiyun API, you can register at https://api.fanyi.baidu.com/api/trans/product/index

See also:

Baidu API machine translation, *Machine translation*, *Machine translation*

2.16.49 MT_BAIDU_SECRET

Client secret for the Baidu Zhiyun API, you can register at https://api.fanyi.baidu.com/api/trans/product/index

See also:

Baidu API machine translation, *Machine translation*, *Machine translation*

2.16.50 MT_DEEPL_KEY

API key for the DeepL API, you can register at https://www.deepl.com/pro.html

See also:

DeepL, *Machine translation*, *Machine translation*

2.16.51 MT_GOOGLE_KEY

API key for the Google Translate API, you can register at https://cloud.google.com/translate/docs

See also:

Google Translate, *Machine translation*, *Machine translation*

2.16.52 MT_MICROSOFT_BASE_URL

Region base url domain as defined in the Base URLs section.

Defaults to `api.cognitive.microsofttranslator.com`.

2.16.53 MT_MICROSOFT_COGNITIVE_KEY

Client key for the Microsoft Cognitive Services Translator API.

See also:

Microsoft Cognitive Services Translator, *Machine translation*, *Machine translation*, Cognitive Services - Text Translation API, Microsoft Azure Portal

2.16.54 MT_MICROSOFT_REGION

Region prefix as defined in Multi service subscription.

2.16.55 MT_MYMEMORY_EMAIL

MyMemory identification e-mail address, you can get 1000 requests per day with this.

See also:

MyMemory, *Machine translation*, *Machine translation*, MyMemory: API technical specifications

2.16.56 MT_MYMEMORY_KEY

MyMemory access key for private translation memory, use together with *MT_MYMEMORY_USER*.

See also:

MyMemory, *Machine translation*, *Machine translation*, MyMemory: API key generator

2.16.57 MT_MYMEMORY_USER

MyMemory user ID for private translation memory, use together with *MT_MYMEMORY_KEY*.

See also:

MyMemory, *Machine translation*, *Machine translation*, MyMemory: API key generator

2.16.58 MT_NETEASE_KEY

App key for NetEase Sight API, you can register at https://sight.netease.com/

See also:

NetEase Sight API machine translation, *Machine translation*, *Machine translation*

2.16.59 MT_NETEASE_SECRET

App secret for the NetEase Sight API, you can register at https://sight.netease.com/

See also:

NetEase Sight API machine translation, *Machine translation*, *Machine translation*

2.16.60 MT_TMSERVER

URL where tmserver is running.

See also:

tmserver, *Machine translation*, *Machine translation*, tmserver

2.16.61 MT_YANDEX_KEY

API key for the Yandex Translate API, you can register at https://tech.yandex.com/translate/

See also:

Yandex Translate, *Machine translation*, *Machine translation*

2.16.62 MT_YOUDAO_ID

Client ID for the Youdao Zhiyun API, you can register at https://ai.youdao.com/product-fanyi.s

See also:

Youdao Zhiyun API machine translation, *Machine translation*, *Machine translation*

2.16.63 MT_YOUDAO_SECRET

Client secret for the Youdao Zhiyun API, you can register at https://ai.youdao.com/product-fanyi.s

See also:

Youdao Zhiyun API machine translation, *Machine translation*, *Machine translation*

2.16.64 MT_SAP_BASE_URL

API URL to the SAP Translation Hub service.

See also:

SAP Translation Hub, *Machine translation*, *Machine translation*

2.16.65 MT_SAP_SANDBOX_APIKEY

API key for sandbox API usage

See also:

SAP Translation Hub, *Machine translation*, *Machine translation*

2.16.66 MT_SAP_USERNAME

Your SAP username

See also:

SAP Translation Hub, *Machine translation*, *Machine translation*

2.16.67 MT_SAP_PASSWORD

Your SAP password

See also:

SAP Translation Hub, *Machine translation*, *Machine translation*

2.16.68 MT_SAP_USE_MT

Whether to also use machine translation services, in addition to the term database. Possible values: True / False

See also:

SAP Translation Hub, *Machine translation*, *Machine translation*

2.16.69 NEARBY_MESSAGES

How many messages to show around the currently translated string.

2.16.70 RATELIMIT_ATTEMPTS

New in version 3.2.

Maximum number of authentication attempts before rate limiting is applied.

Defaults to 5.

See also:

Rate limiting, *RATELIMIT_WINDOW*, *RATELIMIT_LOCKOUT*

2.16.71 RATELIMIT_WINDOW

New in version 3.2.

How long authentication is accepted after rate limiting applies.

An amount of seconds defaulting to 300 (5 minutes).

See also:

Rate limiting, *RATELIMIT_ATTEMPTS*, *RATELIMIT_LOCKOUT*

2.16.72 RATELIMIT_LOCKOUT

New in version 3.2.

How long authentication is locked after rate limiting applies.

An amount of seconds defaulting to 600 (10 minutes).

See also:

Rate limiting, *RATELIMIT_ATTEMPTS*, *RATELIMIT_WINDOW*

2.16.73 REGISTRATION_CAPTCHA

A value of either `True` or `False` indicating whether registration of new accounts is protected by CAPTCHA. This setting is optional, and a default of `True` will be assumed if it is not supplied.

If turned on, a CAPTCHA is added to all pages where a users enters their e-mail address:

- New account registration.
- Password recovery.
- Adding e-mail to an account.
- Contact form for users that are not signed in.

2.16.74 REGISTRATION_EMAIL_MATCH

New in version 2.17.

Allows you to filter which e-mail addresses can register.

Defaults to `.*`, which allows any e-mail address to be registered.

You can use it to restrict registration to a single e-mail domain:

```
REGISTRATION_EMAIL_MATCH = r'^.*@weblate\.org$'
```

2.16.75 REGISTRATION_OPEN

Whether registration of new accounts is currently permitted. This optional setting can be be the default‘‘True‘‘ or changed to `False`.

Note: This setting affects built-in authentication by e-mail address or through the Python Social Auth. If using third-party authentication methods such as *LDAP authentication*, it just hides the registration form, but new users might still be able to sign in and create accounts.

2.16.76 REPOSITORY_ALERT_THRESHOLD

New in version 4.0.2.

Threshold for triggering an alert for outdated repositories, or ones that contain too many changes. Defaults to 25.

See also:

Translation component alerts

2.16.77 SENTRY_DSN

New in version 3.9.

Sentry DSN to use for *Collecting error reports*.

See also:

Django integration for Sentry

2.16.78 SIMPLIFY_LANGUAGES

Use simple language codes for default language/country combinations. For example an `fr_FR` translation will use the `fr` language code. This is usually the desired behavior, as it simplifies listing languages for these default combinations.

Turn this off if you want to different translations for each variant.

2.16.79 SITE_TITLE

Site title to be used for the website and sent e-mails.

2.16.80 SPECIAL_CHARS

Additional characters to include in the visual keyboard, see *Visual keyboard*.

The default value is:

```
SPECIAL_CHARS = ('\t', '\n', '…')
```

2.16.81 SINGLE_PROJECT

New in version 3.8.

Redirects users directly to a project or component instead of showing the dashboard. You can either set it to `True` and in this case it only works in case there is actually only single project in Weblate. Alternatively set the project slug, and it will redirect unconditionally to this project.

Changed in version 3.11: The setting now also accepts a project slug, to force displaying that that single project.

Example:

```
SINGLE_PROJECT = "test"
```

2.16.82 STATUS_URL

The URL where your Weblate instance reports it's status.

2.16.83 SUGGESTION_CLEANUP_DAYS

New in version 3.2.1.

Automatically deletes suggestions after a given number of days. Defaults to `None`, meaning no deletions.

2.16.84 URL_PREFIX

This settings allows you to run Weblate under some path (otherwise it relies on being run from the webserver root).

Note: To use this setting, you also need to configure your server to strip this prefix. For example with WSGI, this can be achieved by setting `WSGIScriptAlias`.

Hint: The prefix should start with a /.

Example:

```
URL_PREFIX = '/translations'
```

Note: This setting does not work with Django's built-in server, you would have to adjust `urls.py` to contain this prefix.

2.16.85 VCS_BACKENDS

Configuration of available VCS backends.

Note: Weblate tries to use all supported backends you have the tools for.

Hint: You can limit choices or add custom VCS back-ends by using this.

```
VCS_BACKENDS = (
    'weblate.vcs.git.GitRepository',
)
```

See also:

Version control integration

2.16.86 VCS_CLONE_DEPTH

New in version 3.10.2.

Configures how deep cloning of repositories Weblate should do.

Note: Currently this is only supported in *Git*. By default Weblate does shallow clones of the repositories to make cloning faster and save disk space. Depending on your usage (for example when using custom *Addons*), you might want to increase the depth or turn off shallow clones completely by setting this to 0.

Hint: In case you get `fatal: protocol error: expected old/new/ref, got 'shallow <commit hash>'` error when pushing from Weblate, turn off shallow clones completely by setting:

```
VCS_CLONE_DEPTH = 0
```

2.16.87 WEBLATE_ADDONS

List of addons available for use. To use them, they have to be enabled for a given translation component. By default this includes all built-in addons, when extending the list you will probably want to keep existing ones enabled, for example:

```
WEBLATE_ADDONS = (
    # Built in addons
    'weblate.addons.gettext.GenerateMoAddon',
    'weblate.addons.gettext.UpdateLinguasAddon',
    'weblate.addons.gettext.UpdateConfigureAddon',
    'weblate.addons.gettext.MsgmergeAddon',
    'weblate.addons.gettext.GettextCustomizeAddon',
    'weblate.addons.gettext.GettextAuthorComments',
    'weblate.addons.cleanup.CleanupAddon',
    'weblate.addons.consistency.LangaugeConsistencyAddon',
    'weblate.addons.discovery.DiscoveryAddon',
    'weblate.addons.flags.SourceEditAddon',
    'weblate.addons.flags.TargetEditAddon',
    'weblate.addons.flags.SameEditAddon',
    'weblate.addons.flags.BulkEditAddon',
    'weblate.addons.generate.GenerateFileAddon',
    'weblate.addons.json.JSONCustomizeAddon',
    'weblate.addons.properties.PropertiesSortAddon',
    'weblate.addons.git.GitSquashAddon',
    'weblate.addons.removal.RemoveComments',
    'weblate.addons.removal.RemoveSuggestions',
    'weblate.addons.resx.ResxUpdateAddon',
    'weblate.addons.autotranslate.AutoTranslateAddon',
    'weblate.addons.yaml.YAMLCustomizeAddon',

    # Addon you want to include
    'weblate.addons.example.ExampleAddon',
)
```

See also:

Addons

2.16.88 WEBLATE_FORMATS

New in version 3.0.

List of file formats available for use.

Note: The default list already has the common formats.

See also:

Supported file formats

2.16.89 WEBLATE_GPG_IDENTITY

New in version 3.1.

Identity used by Weblate to sign Git commits, for example:

```
WEBLATE_GPG_IDENTITY = 'Weblate <weblate@example.com>'
```

Warning: Clean the cache if you change this setting, to clear info about its key is otherwise being cached for seven days. This does not apply for initial setup, as nothing is cached if this feature is not configured.

See also:

Signing Git commits by GnuPG

2.17 Sample configuration

The following example is shipped as `weblate/settings_example.py` with Weblate:

```
#
# Copyright © 2012 - 2020 Michal Čihař <michal@cihar.com>
#
# This file is part of Weblate <https://weblate.org/>
#
# This program is free software: you can redistribute it and/or modify
# it under the terms of the GNU General Public License as published by
# the Free Software Foundation, either version 3 of the License, or
# (at your option) any later version.
#
# This program is distributed in the hope that it will be useful,
# but WITHOUT ANY WARRANTY; without even the implied warranty of
# MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.  See the
# GNU General Public License for more details.
#
# You should have received a copy of the GNU General Public License
# along with this program.  If not, see <https://www.gnu.org/licenses/>.
#


import os
import platform
from logging.handlers import SysLogHandler

#
# Django settings for Weblate project.
#

DEBUG = True

ADMINS = (
    # ("Your Name", "your_email@example.com"),
)

MANAGERS = ADMINS

DATABASES = {
    "default": {
        # Use 'postgresql' or 'mysql'.
        "ENGINE": "django.db.backends.postgresql",
        # Database name.
        "NAME": "weblate",
        # Database user.
```

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```
        "USER": "weblate",
        # Database password.
        "PASSWORD": "",
        # Set to empty string for localhost.
        "HOST": "127.0.0.1",
        # Set to empty string for default.
        "PORT": "",
        # Customizations for databases.
        "OPTIONS": {
            # In case of using an older MySQL server,
            # which has MyISAM as a default storage
            # 'init_command': 'SET storage_engine=INNODB',
            # Uncomment for MySQL older than 5.7:
            # 'init_command': "SET sql_mode='STRICT_TRANS_TABLES'",
            # Set emoji capable charset for MySQL:
            # 'charset': 'utf8mb4',
            # Change connection timeout in case you get MySQL gone away error:
            # 'connect_timeout': 28800,
        },
    }
}

BASE_DIR = os.path.dirname(os.path.dirname(os.path.abspath(__file__)))

# Data directory
DATA_DIR = os.path.join(BASE_DIR, "data")

# Local time zone for this installation. Choices can be found here:
# http://en.wikipedia.org/wiki/List_of_tz_zones_by_name
# although not all choices may be available on all operating systems.
# In a Windows environment this must be set to your system time zone.
TIME_ZONE = "UTC"

# Language code for this installation. All choices can be found here:
# http://www.i18nguy.com/unicode/language-identifiers.html
LANGUAGE_CODE = "en-us"

LANGUAGES = (
    ("ar", "    "),
    ("az", "Azərbaycan"),
    ("be", "      "),
    ("be@latin", "Biełaruskaja"),
    ("bg", "     "),
    ("br", "Brezhoneg"),
    ("ca", "Català"),
    ("cs", "Čeština"),
    ("da", "Dansk"),
    ("de", "Deutsch"),
    ("en", "English"),
    ("el", "Ελληνικ "),
    ("en-gb", "English (United Kingdom)"),
    ("es", "Español"),
    ("fi", "Suomi"),
    ("fr", "Français"),
    ("gl", "Galego"),
    ("he", "   "),
```

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```
    ("hu", "Magyar"),
    ("hr", "Hrvatski"),
    ("id", "Indonesia"),
    ("it", "Italiano"),
    ("ja", "  "),
    ("kab", "Taqbaylit"),
    ("kk", "      "),
    ("ko", "  "),
    ("nb", "Norsk bokmål"),
    ("nl", "Nederlands"),
    ("pl", "Polski"),
    ("pt", "Português"),
    ("pt-br", "Português brasileiro"),
    ("ru", "    "),
    ("sk", "Slovenčina"),
    ("sl", "Slovenščina"),
    ("sq", "Shqip"),
    ("sr", "    "),
    ("sv", "Svenska"),
    ("tr", "Türkçe"),
    ("uk", "      "),
    ("zh-hans", "  "),
    ("zh-hant", "  "),
)

SITE_ID = 1

# If you set this to False, Django will make some optimizations so as not
# to load the internationalization machinery.
USE_I18N = True

# If you set this to False, Django will not format dates, numbers and
# calendars according to the current locale.
USE_L10N = True

# If you set this to False, Django will not use timezone-aware datetimes.
USE_TZ = True

# URL prefix to use, please see documentation for more details
URL_PREFIX = ""

# Absolute filesystem path to the directory that will hold user-uploaded files.
MEDIA_ROOT = os.path.join(DATA_DIR, "media")

# URL that handles the media served from MEDIA_ROOT. Make sure to use a
# trailing slash.
MEDIA_URL = f"{URL_PREFIX}/media/"

# Absolute path to the directory static files should be collected to.
# Don't put anything in this directory yourself; store your static files
# in apps' "static/" subdirectories and in STATICFILES_DIRS.
STATIC_ROOT = os.path.join(DATA_DIR, "static")

# URL prefix for static files.
STATIC_URL = f"{URL_PREFIX}/static/"
```

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```
# Additional locations of static files
STATICFILES_DIRS = (
    # Put strings here, like "/home/html/static" or "C:/www/django/static".
    # Always use forward slashes, even on Windows.
    # Don't forget to use absolute paths, not relative paths.
)

# List of finder classes that know how to find static files in
# various locations.
STATICFILES_FINDERS = (
    "django.contrib.staticfiles.finders.FileSystemFinder",
    "django.contrib.staticfiles.finders.AppDirectoriesFinder",
    "compressor.finders.CompressorFinder",
)

# Make this unique, and don't share it with anybody.
# You can generate it using weblate/examples/generate-secret-key
SECRET_KEY = "jm8fqjlg+5!#xu%e-oh#7!$aa7!6avf7ud*_v=chdrb9qdco6("  # noqa

_TEMPLATE_LOADERS = [
    "django.template.loaders.filesystem.Loader",
    "django.template.loaders.app_directories.Loader",
]
if not DEBUG:
    _TEMPLATE_LOADERS = [("django.template.loaders.cached.Loader", _TEMPLATE_LOADERS)]
TEMPLATES = [
    {
        "BACKEND": "django.template.backends.django.DjangoTemplates",
        "OPTIONS": {
            "context_processors": [
                "django.contrib.auth.context_processors.auth",
                "django.template.context_processors.debug",
                "django.template.context_processors.i18n",
                "django.template.context_processors.request",
                "django.template.context_processors.csrf",
                "django.contrib.messages.context_processors.messages",
                "weblate.trans.context_processors.weblate_context",
            ],
            "loaders": _TEMPLATE_LOADERS,
        },
    }
]


# GitHub username for sending pull requests.
# Please see the documentation for more details.
GITHUB_USERNAME = None

# GitLab username for sending merge requests.
# Please see the documentation for more details.
GITLAB_USERNAME = None

# Authentication configuration
AUTHENTICATION_BACKENDS = (
    "social_core.backends.email.EmailAuth",
    # "social_core.backends.google.GoogleOAuth2",
```

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```
    # "social_core.backends.github.GithubOAuth2",
    # "social_core.backends.bitbucket.BitbucketOAuth",
    # "social_core.backends.suse.OpenSUSEOpenId",
    # "social_core.backends.ubuntu.UbuntuOpenId",
    # "social_core.backends.fedora.FedoraOpenId",
    # "social_core.backends.facebook.FacebookOAuth2",
    "weblate.accounts.auth.WeblateUserBackend",
)

# Custom user model
AUTH_USER_MODEL = "weblate_auth.User"

# Social auth backends setup
SOCIAL_AUTH_GITHUB_KEY = ""
SOCIAL_AUTH_GITHUB_SECRET = ""
SOCIAL_AUTH_GITHUB_SCOPE = ["user:email"]

SOCIAL_AUTH_BITBUCKET_KEY = ""
SOCIAL_AUTH_BITBUCKET_SECRET = ""
SOCIAL_AUTH_BITBUCKET_VERIFIED_EMAILS_ONLY = True

SOCIAL_AUTH_FACEBOOK_KEY = ""
SOCIAL_AUTH_FACEBOOK_SECRET = ""
SOCIAL_AUTH_FACEBOOK_SCOPE = ["email", "public_profile"]
SOCIAL_AUTH_FACEBOOK_PROFILE_EXTRA_PARAMS = {"fields": "id,name,email"}
SOCIAL_AUTH_FACEBOOK_API_VERSION = "3.1"

SOCIAL_AUTH_GOOGLE_OAUTH2_KEY = ""
SOCIAL_AUTH_GOOGLE_OAUTH2_SECRET = ""

# Social auth settings
SOCIAL_AUTH_PIPELINE = (
    "social_core.pipeline.social_auth.social_details",
    "social_core.pipeline.social_auth.social_uid",
    "social_core.pipeline.social_auth.auth_allowed",
    "social_core.pipeline.social_auth.social_user",
    "weblate.accounts.pipeline.store_params",
    "weblate.accounts.pipeline.verify_open",
    "social_core.pipeline.user.get_username",
    "weblate.accounts.pipeline.require_email",
    "social_core.pipeline.mail.mail_validation",
    "weblate.accounts.pipeline.revoke_mail_code",
    "weblate.accounts.pipeline.ensure_valid",
    "weblate.accounts.pipeline.remove_account",
    "social_core.pipeline.social_auth.associate_by_email",
    "weblate.accounts.pipeline.reauthenticate",
    "weblate.accounts.pipeline.verify_username",
    "social_core.pipeline.user.create_user",
    "social_core.pipeline.social_auth.associate_user",
    "social_core.pipeline.social_auth.load_extra_data",
    "weblate.accounts.pipeline.cleanup_next",
    "weblate.accounts.pipeline.user_full_name",
    "weblate.accounts.pipeline.store_email",
    "weblate.accounts.pipeline.notify_connect",
    "weblate.accounts.pipeline.password_reset",
)
```

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```
SOCIAL_AUTH_DISCONNECT_PIPELINE = (
    "social_core.pipeline.disconnect.allowed_to_disconnect",
    "social_core.pipeline.disconnect.get_entries",
    "social_core.pipeline.disconnect.revoke_tokens",
    "weblate.accounts.pipeline.cycle_session",
    "weblate.accounts.pipeline.adjust_primary_mail",
    "weblate.accounts.pipeline.notify_disconnect",
    "social_core.pipeline.disconnect.disconnect",
    "weblate.accounts.pipeline.cleanup_next",
)

# Custom authentication strategy
SOCIAL_AUTH_STRATEGY = "weblate.accounts.strategy.WeblateStrategy"

# Raise exceptions so that we can handle them later
SOCIAL_AUTH_RAISE_EXCEPTIONS = True

SOCIAL_AUTH_EMAIL_VALIDATION_FUNCTION = "weblate.accounts.pipeline.send_validation"
SOCIAL_AUTH_EMAIL_VALIDATION_URL = "{0}/accounts/email-sent/".format(URL_PREFIX)
SOCIAL_AUTH_LOGIN_ERROR_URL = "{0}/accounts/login/".format(URL_PREFIX)
SOCIAL_AUTH_EMAIL_FORM_URL = "{0}/accounts/email/".format(URL_PREFIX)
SOCIAL_AUTH_NEW_ASSOCIATION_REDIRECT_URL = "{0}/accounts/profile/#account".format(
    URL_PREFIX
)
SOCIAL_AUTH_PROTECTED_USER_FIELDS = ("email",)
SOCIAL_AUTH_SLUGIFY_USERNAMES = True
SOCIAL_AUTH_SLUGIFY_FUNCTION = "weblate.accounts.pipeline.slugify_username"

# Password validation configuration
AUTH_PASSWORD_VALIDATORS = [
    {
        "NAME": "django.contrib.auth.password_validation.
↪UserAttributeSimilarityValidator"  # noqa: E501, pylint: disable=line-too-long
    },
    {
        "NAME": "django.contrib.auth.password_validation.MinimumLengthValidator",
        "OPTIONS": {"min_length": 6},
    },
    {"NAME": "django.contrib.auth.password_validation.CommonPasswordValidator"},
    {"NAME": "django.contrib.auth.password_validation.NumericPasswordValidator"},
    {"NAME": "weblate.accounts.password_validation.CharsPasswordValidator"},
    {"NAME": "weblate.accounts.password_validation.PastPasswordsValidator"},
    # Optional password strength validation by django-zxcvbn-password
    # {
    #     "NAME": "zxcvbn_password.ZXCVBNValidator",
    #     "OPTIONS": {
    #         "min_score": 3,
    #         "user_attributes": ("username", "email", "full_name")
    #     }
    # },
]

# Allow new user registrations
REGISTRATION_OPEN = True

# Shortcut for login required setting
```

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```
LOGIN_REQUIRED = False

# Middleware
MIDDLEWARE = [
    "weblate.middleware.ProxyMiddleware",
    "django.middleware.security.SecurityMiddleware",
    "django.contrib.sessions.middleware.SessionMiddleware",
    "django.middleware.common.CommonMiddleware",
    "django.middleware.locale.LocaleMiddleware",
    "django.middleware.csrf.CsrfViewMiddleware",
    "weblate.accounts.middleware.AuthenticationMiddleware",
    "django.contrib.messages.middleware.MessageMiddleware",
    "django.middleware.clickjacking.XFrameOptionsMiddleware",
    "social_django.middleware.SocialAuthExceptionMiddleware",
    "weblate.accounts.middleware.RequireLoginMiddleware",
    "weblate.middleware.SecurityMiddleware",
]

ROOT_URLCONF = "weblate.urls"

# Django and Weblate apps
INSTALLED_APPS = [
    # Weblate apps on top to override Django locales and templates
    "weblate.addons",
    "weblate.auth",
    "weblate.checks",
    "weblate.formats",
    "weblate.machinery",
    "weblate.trans",
    "weblate.lang",
    "weblate.langdata",
    "weblate.memory",
    "weblate.screenshots",
    "weblate.fonts",
    "weblate.accounts",
    "weblate.utils",
    "weblate.vcs",
    "weblate.wladmin",
    "weblate",
    # Optional: Git exporter
    "weblate.gitexport",
    # Standard Django modules
    "django.contrib.auth",
    "django.contrib.contenttypes",
    "django.contrib.sessions",
    "django.contrib.sites",
    "django.contrib.messages",
    "django.contrib.staticfiles",
    "django.contrib.admin.apps.SimpleAdminConfig",
    "django.contrib.admindocs",
    "django.contrib.sitemaps",
    "django.contrib.humanize",
    # Third party Django modules
    "social_django",
    "crispy_forms",
    "compressor",
```

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```
    "rest_framework",
    "rest_framework.authtoken",
]

# Custom exception reporter to include some details
DEFAULT_EXCEPTION_REPORTER_FILTER = "weblate.trans.debug.
↪WeblateExceptionReporterFilter"

# Default logging of Weblate messages
# - to syslog in production (if available)
# - otherwise to console
# - you can also choose "logfile" to log into separate file
#   after configuring it below

# Detect if we can connect to syslog
HAVE_SYSLOG = False
if platform.system() != "Windows":
    try:
        handler = SysLogHandler(address="/dev/log", facility=SysLogHandler.LOG_LOCAL2)
        handler.close()
        HAVE_SYSLOG = True
    except IOError:
        HAVE_SYSLOG = False

if DEBUG or not HAVE_SYSLOG:
    DEFAULT_LOG = "console"
else:
    DEFAULT_LOG = "syslog"

# A sample logging configuration. The only tangible logging
# performed by this configuration is to send an email to
# the site admins on every HTTP 500 error when DEBUG=False.
# See http://docs.djangoproject.com/en/stable/topics/logging for
# more details on how to customize your logging configuration.
LOGGING = {
    "version": 1,
    "disable_existing_loggers": True,
    "filters": {"require_debug_false": {"()": "django.utils.log.RequireDebugFalse"}},
    "formatters": {
        "syslog": {"format": "weblate[%(process)d]: %(levelname)s %(message)s"},
        "simple": {"format": "%(levelname)s %(message)s"},
        "logfile": {"format": "%(asctime)s %(levelname)s %(message)s"},
        "django.server": {
            "()": "django.utils.log.ServerFormatter",
            "format": "[%(server_time)s] %(message)s",
        },
    },
    "handlers": {
        "mail_admins": {
            "level": "ERROR",
            "filters": ["require_debug_false"],
            "class": "django.utils.log.AdminEmailHandler",
            "include_html": True,
        },
        "console": {
            "level": "DEBUG",
```

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```
            "class": "logging.StreamHandler",
            "formatter": "simple",
        },
        "django.server": {
            "level": "INFO",
            "class": "logging.StreamHandler",
            "formatter": "django.server",
        },
        "syslog": {
            "level": "DEBUG",
            "class": "logging.handlers.SysLogHandler",
            "formatter": "syslog",
            "address": "/dev/log",
            "facility": SysLogHandler.LOG_LOCAL2,
        },
        # Logging to a file
        # 'logfile': {
        #     'level':'DEBUG',
        #     'class':'logging.handlers.RotatingFileHandler',
        #     'filename': "/var/log/weblate/weblate.log",
        #     'maxBytes': 100000,
        #     'backupCount': 3,
        #     'formatter': 'logfile',
        # },
    },
    "loggers": {
        "django.request": {
            "handlers": ["mail_admins", DEFAULT_LOG],
            "level": "ERROR",
            "propagate": True,
        },
        "django.server": {
            "handlers": ["django.server"],
            "level": "INFO",
            "propagate": False,
        },
        # Logging database queries
        # "django.db.backends": {
        #     "handlers": [DEFAULT_LOG],
        #     "level": "DEBUG",
        # },
        "weblate": {"handlers": [DEFAULT_LOG], "level": "DEBUG"},
        # Logging search operations
        "weblate.search": {"handlers": [DEFAULT_LOG], "level": "INFO"},
        # Logging VCS operations
        "weblate.vcs": {"handlers": [DEFAULT_LOG], "level": "WARNING"},
        # Python Social Auth
        "social": {"handlers": [DEFAULT_LOG], "level": "DEBUG" if DEBUG else "WARNING
↪"},
        # Django Authentication Using LDAP
        "django_auth_ldap": {
            "level": "DEBUG" if DEBUG else "WARNING",
            "handlers": [DEFAULT_LOG],
        },
    },
}
```

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```
# Remove syslog setup if it's not present
if not HAVE_SYSLOG:
    del LOGGING["handlers"]["syslog"]

# List of machine translations
# MT_SERVICES = (
#     "weblate.machinery.apertium.ApertiumAPYTranslation",
#     "weblate.machinery.baidu.BaiduTranslation",
#     "weblate.machinery.deepl.DeepLTranslation",
#     "weblate.machinery.glosbe.GlosbeTranslation",
#     "weblate.machinery.google.GoogleTranslation",
#     "weblate.machinery.microsoft.MicrosoftCognitiveTranslation",
#     "weblate.machinery.microsoftterminology.MicrosoftTerminologyService",
#     "weblate.machinery.mymemory.MyMemoryTranslation",
#     "weblate.machinery.netease.NeteaseSightTranslation",
#     "weblate.machinery.tmserver.AmagamaTranslation",
#     "weblate.machinery.tmserver.TMServerTranslation",
#     "weblate.machinery.yandex.YandexTranslation",
#     "weblate.machinery.saptranslationhub.SAPTranslationHub",
#     "weblate.machinery.youdao.YoudaoTranslation",
#     "weblate.machinery.weblatetm.WeblateTranslation",
#     "weblate.memory.machine.WeblateMemory",
# )

# Machine translation API keys

# URL of the Apertium APy server
MT_APERTIUM_APY = None

# DeepL API key
MT_DEEPL_KEY = None

# Microsoft Cognitive Services Translator API, register at
# https://portal.azure.com/
MT_MICROSOFT_COGNITIVE_KEY = None
MT_MICROSOFT_REGION = None

# MyMemory identification email, see
# https://mymemory.translated.net/doc/spec.php
MT_MYMEMORY_EMAIL = None

# Optional MyMemory credentials to access private translation memory
MT_MYMEMORY_USER = None
MT_MYMEMORY_KEY = None

# Google API key for Google Translate API
MT_GOOGLE_KEY = None

# Baidu app key and secret
MT_BAIDU_ID = None
MT_BAIDU_SECRET = None

# Youdao Zhiyun app key and secret
MT_YOUDAO_ID = None
MT_YOUDAO_SECRET = None
```

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```
# Netease Sight (Jianwai) app key and secret
MT_NETEASE_KEY = None
MT_NETEASE_SECRET = None

# API key for Yandex Translate API
MT_YANDEX_KEY = None

# tmserver URL
MT_TMSERVER = None

# SAP Translation Hub
MT_SAP_BASE_URL = None
MT_SAP_SANDBOX_APIKEY = None
MT_SAP_USERNAME = None
MT_SAP_PASSWORD = None
MT_SAP_USE_MT = True

# Title of site to use
SITE_TITLE = "Weblate"

# Whether site uses https
ENABLE_HTTPS = False

# Use HTTPS when creating redirect URLs for social authentication, see
# documentation for more details:
# https://python-social-auth-docs.readthedocs.io/en/latest/configuration/settings.html
↪#processing-redirects-and-urlopen
SOCIAL_AUTH_REDIRECT_IS_HTTPS = ENABLE_HTTPS

# Make CSRF cookie HttpOnly, see documentation for more details:
# https://docs.djangoproject.com/en/1.11/ref/settings/#csrf-cookie-httponly
CSRF_COOKIE_HTTPONLY = True
CSRF_COOKIE_SECURE = ENABLE_HTTPS
# Store CSRF token in session
CSRF_USE_SESSIONS = True
# Customize CSRF failure view
CSRF_FAILURE_VIEW = "weblate.trans.views.error.csrf_failure"
SESSION_COOKIE_SECURE = ENABLE_HTTPS
# SSL redirect
SECURE_SSL_REDIRECT = ENABLE_HTTPS
# Sent referrrer only for same origin links
SECURE_REFERRER_POLICY = "same-origin"
# SSL redirect URL exemption list
SECURE_REDIRECT_EXEMPT = (r"healthz/$",)  # Allowing HTTP access to health check
# Session cookie age (in seconds)
SESSION_COOKIE_AGE = 1209600
# Increase allowed upload size
DATA_UPLOAD_MAX_MEMORY_SIZE = 50000000

# Some security headers
SECURE_BROWSER_XSS_FILTER = True
X_FRAME_OPTIONS = "DENY"
SECURE_CONTENT_TYPE_NOSNIFF = True

# Optionally enable HSTS
```

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```
SECURE_HSTS_SECONDS = 0
SECURE_HSTS_PRELOAD = False
SECURE_HSTS_INCLUDE_SUBDOMAINS = False

# URL of login
LOGIN_URL = "{0}/accounts/login/".format(URL_PREFIX)

# URL of logout
LOGOUT_URL = "{0}/accounts/logout/".format(URL_PREFIX)

# Default location for login
LOGIN_REDIRECT_URL = "{0}/".format(URL_PREFIX)

# Anonymous user name
ANONYMOUS_USER_NAME = "anonymous"

# Reverse proxy settings
IP_PROXY_HEADER = "HTTP_X_FORWARDED_FOR"
IP_BEHIND_REVERSE_PROXY = False
IP_PROXY_OFFSET = 0

# Sending HTML in mails
EMAIL_SEND_HTML = True

# Subject of emails includes site title
EMAIL_SUBJECT_PREFIX = "[{0}] ".format(SITE_TITLE)

# Enable remote hooks
ENABLE_HOOKS = True

# Number of nearby messages to show in each direction
NEARBY_MESSAGES = 5

# By default the length of a given translation is limited to the length of
# the source string * 10 characters. Set this option to False to allow longer
# translations (up to 10.000 characters)
LIMIT_TRANSLATION_LENGTH_BY_SOURCE_LENGTH = True

# Use simple language codes for default language/country combinations
SIMPLIFY_LANGUAGES = True

# Render forms using bootstrap
CRISPY_TEMPLATE_PACK = "bootstrap3"

# List of quality checks
# CHECK_LIST = (
#     "weblate.checks.same.SameCheck",
#     "weblate.checks.chars.BeginNewlineCheck",
#     "weblate.checks.chars.EndNewlineCheck",
#     "weblate.checks.chars.BeginSpaceCheck",
#     "weblate.checks.chars.EndSpaceCheck",
#     "weblate.checks.chars.DoubleSpaceCheck",
#     "weblate.checks.chars.EndStopCheck",
#     "weblate.checks.chars.EndColonCheck",
#     "weblate.checks.chars.EndQuestionCheck",
#     "weblate.checks.chars.EndExclamationCheck",
```

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```
#     "weblate.checks.chars.EndEllipsisCheck",
#     "weblate.checks.chars.EndSemicolonCheck",
#     "weblate.checks.chars.MaxLengthCheck",
#     "weblate.checks.chars.KashidaCheck",
#     "weblate.checks.chars.PuctuationSpacingCheck",
#     "weblate.checks.format.PythonFormatCheck",
#     "weblate.checks.format.PythonBraceFormatCheck",
#     "weblate.checks.format.PHPFormatCheck",
#     "weblate.checks.format.CFormatCheck",
#     "weblate.checks.format.PerlFormatCheck",
#     "weblate.checks.format.JavaScriptFormatCheck",
#     "weblate.checks.format.CSharpFormatCheck",
#     "weblate.checks.format.JavaFormatCheck",
#     "weblate.checks.format.JavaMessageFormatCheck",
#     "weblate.checks.format.PercentPlaceholdersCheck",
#     "weblate.checks.format.I18NextInterpolationCheck",
#     "weblate.checks.angularjs.AngularJSInterpolationCheck",
#     "weblate.checks.qt.QtFormatCheck",
#     "weblate.checks.qt.QtPluralCheck",
#     "weblate.checks.ruby.RubyFormatCheck",
#     "weblate.checks.consistency.PluralsCheck",
#     "weblate.checks.consistency.SamePluralsCheck",
#     "weblate.checks.consistency.ConsistencyCheck",
#     "weblate.checks.consistency.TranslatedCheck",
#     "weblate.checks.chars.EscapedNewlineCountingCheck",
#     "weblate.checks.chars.NewLineCountCheck",
#     "weblate.checks.markup.BBCodeCheck",
#     "weblate.checks.chars.ZeroWidthSpaceCheck",
#     "weblate.checks.render.MaxSizeCheck",
#     "weblate.checks.markup.XMLValidityCheck",
#     "weblate.checks.markup.XMLTagsCheck",
#     "weblate.checks.markup.MarkdownRefLinkCheck",
#     "weblate.checks.markup.MarkdownLinkCheck",
#     "weblate.checks.markup.MarkdownSyntaxCheck",
#     "weblate.checks.markup.URLCheck",
#     "weblate.checks.markup.SafeHTMLCheck",
#     "weblate.checks.placeholders.PlaceholderCheck",
#     "weblate.checks.placeholders.RegexCheck",
#     "weblate.checks.source.OptionalPluralCheck",
#     "weblate.checks.source.EllipsisCheck",
#     "weblate.checks.source.MultipleFailingCheck",
# )

# List of automatic fixups
# AUTOFIX_LIST = (
#     "weblate.trans.autofixes.whitespace.SameBookendingWhitespace",
#     "weblate.trans.autofixes.chars.ReplaceTrailingDotsWithEllipsis",
#     "weblate.trans.autofixes.chars.RemoveZeroSpace",
#     "weblate.trans.autofixes.chars.RemoveControlChars",
# )

# List of enabled addons
# WEBLATE_ADDONS = (
#     "weblate.addons.gettext.GenerateMoAddon",
#     "weblate.addons.gettext.UpdateLinguasAddon",
#     "weblate.addons.gettext.UpdateConfigureAddon",
```

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```
#     "weblate.addons.gettext.MsgmergeAddon",
#     "weblate.addons.gettext.GettextCustomizeAddon",
#     "weblate.addons.gettext.GettextAuthorComments",
#     "weblate.addons.cleanup.CleanupAddon",
#     "weblate.addons.consistency.LangaugeConsistencyAddon",
#     "weblate.addons.discovery.DiscoveryAddon",
#     "weblate.addons.flags.SourceEditAddon",
#     "weblate.addons.flags.TargetEditAddon",
#     "weblate.addons.flags.SameEditAddon",
#     "weblate.addons.flags.BulkEditAddon",
#     "weblate.addons.generate.GenerateFileAddon",
#     "weblate.addons.json.JSONCustomizeAddon",
#     "weblate.addons.properties.PropertiesSortAddon",
#     "weblate.addons.git.GitSquashAddon",
#     "weblate.addons.removal.RemoveComments",
#     "weblate.addons.removal.RemoveSuggestions",
#     "weblate.addons.resx.ResxUpdateAddon",
#     "weblate.addons.yaml.YAMLCustomizeAddon",
#     "weblate.addons.autotranslate.AutoTranslateAddon",
# )

# E-mail address that error messages come from.
SERVER_EMAIL = "noreply@example.com"

# Default email address to use for various automated correspondence from
# the site managers. Used for registration emails.
DEFAULT_FROM_EMAIL = "noreply@example.com"

# List of URLs your site is supposed to serve
ALLOWED_HOSTS = ["*"]

# Configuration for caching
CACHES = {
    "default": {
        "BACKEND": "django_redis.cache.RedisCache",
        "LOCATION": "redis://127.0.0.1:6379/1",
        # If redis is running on same host as Weblate, you might
        # want to use unix sockets instead:
        # "LOCATION": "unix:///var/run/redis/redis.sock?db=1",
        "OPTIONS": {
            "CLIENT_CLASS": "django_redis.client.DefaultClient",
            "PARSER_CLASS": "redis.connection.HiredisParser",
            "PASSWORD": None,
            "CONNECTION_POOL_KWARGS": {},
        },
        "KEY_PREFIX": "weblate",
    },
    "avatar": {
        "BACKEND": "django.core.cache.backends.filebased.FileBasedCache",
        "LOCATION": os.path.join(DATA_DIR, "avatar-cache"),
        "TIMEOUT": 86400,
        "OPTIONS": {"MAX_ENTRIES": 1000},
    },
}

# Store sessions in cache
```

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```
SESSION_ENGINE = "django.contrib.sessions.backends.cache"
# Store messages in session
MESSAGE_STORAGE = "django.contrib.messages.storage.session.SessionStorage"

# REST framework settings for API
REST_FRAMEWORK = {
    # Use Django's standard `django.contrib.auth` permissions,
    # or allow read-only access for unauthenticated users.
    "DEFAULT_PERMISSION_CLASSES": [
        # Require authentication for login required sites
        "rest_framework.permissions.IsAuthenticated"
        if LOGIN_REQUIRED
        else "rest_framework.permissions.IsAuthenticatedOrReadOnly"
    ],
    "DEFAULT_AUTHENTICATION_CLASSES": (
        "rest_framework.authentication.TokenAuthentication",
        "weblate.api.authentication.BearerAuthentication",
        "rest_framework.authentication.SessionAuthentication",
    ),
    "DEFAULT_THROTTLE_CLASSES": (
        "rest_framework.throttling.AnonRateThrottle",
        "rest_framework.throttling.UserRateThrottle",
    ),
    "DEFAULT_THROTTLE_RATES": {"anon": "100/day", "user": "5000/hour"},
    "DEFAULT_PAGINATION_CLASS": ("rest_framework.pagination.PageNumberPagination"),
    "PAGE_SIZE": 20,
    "VIEW_DESCRIPTION_FUNCTION": "weblate.api.views.get_view_description",
    "UNAUTHENTICATED_USER": "weblate.auth.models.get_anonymous",
}

# Example for restricting access to logged in users
if LOGIN_REQUIRED:
    LOGIN_REQUIRED_URLS = (r"/(.*)$",)

# In such case you will want to include some of the exceptions
# LOGIN_REQUIRED_URLS_EXCEPTIONS = (
#     rf"{URL_PREFIX}/accounts/(.*)$",  # Required for login
#     rf"{URL_PREFIX}/admin/login/(.*)$",  # Required for admin login
#     rf"{URL_PREFIX}/static/(.*)$",  # Required for development mode
#     rf"{URL_PREFIX}/widgets/(.*)$",  # Allowing public access to widgets
#     rf"{URL_PREFIX}/data/(.*)$",  # Allowing public access to data exports
#     rf"{URL_PREFIX}/hooks/(.*)$",  # Allowing public access to notification hooks
#     rf"{URL_PREFIX}/healthz/$",  # Allowing public access to health check
#     rf"{URL_PREFIX}/api/(.*)$",  # Allowing access to API
#     rf"{URL_PREFIX}/js/i18n/$",  # JavaScript localization
#     rf"{URL_PREFIX}/contact/$",  # Optional for contact form
#     rf"{URL_PREFIX}/legal/(.*)$",  # Optional for legal app
# )

# Silence some of the Django system checks
SILENCED_SYSTEM_CHECKS = [
    # We have modified django.contrib.auth.middleware.AuthenticationMiddleware
    # as weblate.accounts.middleware.AuthenticationMiddleware
    "admin.E408"
]
```

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```
# Celery worker configuration for testing
# CELERY_TASK_ALWAYS_EAGER = True
# CELERY_BROKER_URL = "memory://"
# CELERY_TASK_EAGER_PROPAGATES = True
# Celery worker configuration for production
CELERY_TASK_ALWAYS_EAGER = False
CELERY_BROKER_URL = "redis://localhost:6379"
CELERY_RESULT_BACKEND = CELERY_BROKER_URL

# Celery settings, it is not recommended to change these
CELERY_WORKER_MAX_MEMORY_PER_CHILD = 200000
CELERY_BEAT_SCHEDULE_FILENAME = os.path.join(DATA_DIR, "celery", "beat-schedule")
CELERY_TASK_ROUTES = {
    "weblate.trans.tasks.auto_translate": {"queue": "translate"},
    "weblate.memory.tasks.*": {"queue": "memory"},
    "weblate.accounts.tasks.notify_*": {"queue": "notify"},
    "weblate.accounts.tasks.send_mails": {"queue": "notify"},
    "weblate.utils.tasks.settings_backup": {"queue": "backup"},
    "weblate.utils.tasks.database_backup": {"queue": "backup"},
    "weblate.wladmin.tasks.backup": {"queue": "backup"},
    "weblate.wladmin.tasks.backup_service": {"queue": "backup"},
}

# Enable plain database backups
DATABASE_BACKUP = "plain"

# Enable auto updating
AUTO_UPDATE = False

# PGP commits signing
WEBLATE_GPG_IDENTITY = None

# Third party services integration
MATOMO_SITE_ID = None
MATOMO_URL = None
GOOGLE_ANALYTICS_ID = None
SENTRY_DSN = None
AKISMET_API_KEY = None
```

2.18 Management commands

Note: Running management commands under a different user than the one running your webserver can result in files getting wrong permissions, please check *Filesystem permissions* for more details.

You will find basic management commands (available as `./manage.py` in the Django sources, or as an extended set in a script called **`weblate`** installable atop Weblate).

2.18.1 Invoking management commands

As mentioned before, invocation depends on how you installed Weblate.

If using virtualenv for Weblate, you can either specify the full path to **`weblate`**, or activate the virtualenv prior to invoking it:

```
# Direct invocation
~/weblate-env/bin/weblate

# Activating virtualenv adds it to search path
. ~/weblate-env/bin/activate
weblate
```

If you are using source code directly (either from a tarball or Git checkout), the management script is `./manage.py` available in the Weblate sources. To run it:

```
python ./manage.py list_versions
```

If you've installed Weblate using the pip or pip3 installer, or by using the `./setup.py` script, the **weblate** is installed to your path (or virtualenv path), from where you can use it to control Weblate:

```
weblate list_versions
```

For the Docker image, the script is installed like above, and you can run it using **docker exec**:

```
docker exec --user weblate <container> weblate list_versions
```

For **docker-compose** the process is similar, you just have to use **docker-compose exec**:

```
docker-compose exec --user weblate weblate weblate list_versions
```

In case you need to pass it a file, you can temporary add a volume:

```
docker-compose exec --user weblate /tmp:/tmp weblate weblate importusers /tmp/users.
↪json
```

See also:

Installing using Docker, *Installing on Debian and Ubuntu*, *Installing on SUSE and openSUSE*, *Installing on RedHat, Fedora and CentOS*

- *Installing from sources*, recommended for development.

2.18.2 add_suggestions

manage.py add_suggestions <project> <component> <language> <file>

New in version 2.5.

Imports a translation from the file to use as a suggestions for the given translation. It skips duplicated translations; only different ones are added.

--author USER@EXAMPLE.COM
: E-mail of author for the suggestions. This user has to exist prior to importing (you can create one in the admin interface if needed).

Example:

```
weblate --author michal@cihar.com add_suggestions weblate master cs /tmp/suggestions-
↪cs.po
```

2.18.3 auto_translate

manage.py auto_translate <project> <component> <language>

New in version 2.5.

Performs automatic translation based on other component translations.

--source PROJECT/COMPONENT
: Specifies the component to use as source available for translation. If not specified all components in the project are used.

--user USERNAME
: Specify username listed as author of the translations. "Anonymous user" is used if not specified.

--overwrite
: Whether to overwrite existing translations.

--inconsistent
: Whether to overwrite existing translations that are inconsistent (see *Inconsistent*).

--add
: Automatically add language if a given translation does not exist.

--mt MT
: Use machine translation instead of other components as machine translations.

--threshold THRESHOLD
: Similarity threshold for machine translation, defaults to 80.

Example:

```
weblate --user nijel --inconsistent --source phpmyadmin/master phpmyadmin 4-5 cs
```

See also:

Automatic translation

2.18.4 celery_queues

manage.py celery_queues

New in version 3.7.

Displays length of Celery task queues.

2.18.5 changesite

manage.py changesite

New in version 2.4.

Change or display the name of your site from the command-line without using the admin interface by adding this.

--set-name NAME
: Gives the site a name.

--get-name
: Prints the current name of your site.

See also:

Set correct site domain

2.18.6 checkgit

`manage.py checkgit <project|project/component>`

Prints current state of the back-end Git repository.

You can either define which project or component to update (for example `weblate/master`), or use `--all` to update all existing components.

2.18.7 commitgit

`manage.py commitgit <project|project/component>`

Commits any possible pending changes to the back-end Git repository.

You can either define which project or component to update (for example `weblate/master`), or use `--all` to update all existing components.

2.18.8 commit_pending

`manage.py commit_pending <project|project/component>`

Commits pending changes older than a given age.

You can either define which project or component to update (for example `weblate/master`), or use `--all` to update all existing components.

`--age HOURS`
: Age in hours for committing. If not specified the value configured in *Component configuration* is used.

Note: This is automatically perfomed in the background by Weblate, so there no real need to invoke this manually, besides forcing an earlier commit than specified by *Component configuration*.

See also:

Running maintenance tasks, *COMMIT_PENDING_HOURS*

2.18.9 cleanuptrans

`manage.py cleanuptrans`

Cleans up orphaned checks and translation suggestions. There is normally no need to run this manually, as the cleanups happen automatically in the background.

See also:

Running maintenance tasks

2.18.10 createadmin

`manage.py createadmin`

Creates an `admin` account with a random password, unless it is specified.

`--password PASSWORD`
: Provides a password on the command-line, to not generate a random one.

`--no-password`
: Do not set password, this can be useful with –update.

--username USERNAME
: Use the given name instead of **admin**.

--email USER@EXAMPLE.COM
: Specify the admin e-mail address.

--name
: Specify the admin name (visible).

--update
: Update the existing user (you can use this to change passwords).

Changed in version 2.9: Added parameters **--username**, **--email**, **--name** and **--update**.

2.18.11 dump_memory

manage.py dump_memory

New in version 2.20.

Export a JSON file containing Weblate Translation Memory content.

See also:

Translation Memory, *Weblate Translation Memory Schema*

2.18.12 dumpuserdata

manage.py dumpuserdata <file.json>

Dumps userdata to a file for later use by *importuserdata*

Hint: This comes in handy when migrating or merging Weblate instances.

2.18.13 import_json

manage.py import_json <json-file>

New in version 2.7.

Batch import of components based on JSON data.

The imported JSON file structure pretty much corresponds to the component object (see *GET /api/components/(string:project)/(string:component)/*). You have to include the **name** and **filemask** fields.

--project PROJECT
: Specifies where the components will be imported from.

--main-component COMPONENT
: Use the given VCS repository from this component for all of them.

--ignore
: Skip (already) imported components.

--update
: Update (already) imported components.

Changed in version 2.9: The parameters **--ignore** and **--update** are there to deal with already imported components.

Example of JSON file:

```
[
    {
        "slug": "po",
        "name": "Gettext PO",
        "file_format": "po",
        "filemask": "po/*.po",
        "new_lang": "none"
    },
    {
        "name": "Android",
        "filemask": "android/values-*/strings.xml",
        "template": "android/values/strings.xml",
        "repo": "weblate://test/test",
        "file_format": "aresource"
    }
]
```

See also:

import_memory

2.18.14 import_memory

manage.py import_memory <file>

New in version 2.20.

Imports a TMX or JSON file into the Weblate translation memory.

`--language-map LANGMAP`
: Allows mapping languages in the TMX to the Weblate translation memory. The language codes are mapped after normalization usually done by Weblate.

  `--language-map en_US:en` will for example import all `en_US` strings as `en` ones.

  This can be useful in case your TMX file locales happen not to match what you use in Weblate.

See also:

Translation Memory, *Weblate Translation Memory Schema*

2.18.15 import_project

manage.py import_project <project> <gitrepo> <branch> <filemask>

Changed in version 3.0: The import_project command is now based on the *Component discovery* addon, leading to some changes in behavior and what parameters are accepted.

Batch imports components into project based on filemask.

<project> names an existing project, into which the components are to be imported.

The *<gitrepo>* defines the Git repository URL to use, and *<branch>* signifies the Git branch. To import additional translation components from an existing Weblate component, use a *weblate://<project>/<component>* URL for the *<gitrepo>*.

The *<filemask>* defines file discovery for the repository. It can be either be made simple using wildcards, or it can use the full power of regular expressions.

The simple matching uses `**` for component name and `*` for language, for example: `**/*.po`

The regular expression has to contain groups named *component* and *language*. For example: `(?P<language>[^/]*)/(?P<component>[^-/]*)\.po`

The import matches existing components based on files and adds the ones that do not exist. It does not change already existing ones.

`--name-template TEMPLATE`
: Customize the name of a component using Django template syntax.

  For example: `Documentation: {{ component }}`

`--base-file-template TEMPLATE`
: Customize the base file for monolingual translations.

  For example: `{{ component }}/res/values/string.xml`

`--new-base-template TEMPLATE`
: Customize the base file for addition of new translations.

  For example: `{{ component }}/ts/en.ts`

`--file-format FORMAT`
: You can also specify the file format to use (see *Supported file formats*), the default is auto-detection.

`--language-regex REGEX`
: You can specify language filtering (see *Component configuration*) with this parameter. It has to be a valid regular expression.

`--main-component`
: You can specify which component will be chosen as the main one—the one actually containing the VCS repository.

`--license NAME`
: Specify the overall, project or component translation license.

`--license-url URL`
: Specify the URL where the translation license is to be found.

`--vcs NAME`
: In case you need to specify which version control system to use, you can do it here. The default version control is Git.

To give you some examples, let's try importing two projects.

First The Debian Handbook translations, where each language has separate a folder with the translations of each chapter:

```
weblate import_project \
    debian-handbook \
    git://anonscm.debian.org/debian-handbook/debian-handbook.git \
    squeeze/master \
    '*/**.po'
```

Then the Tanaguru tool, where the file format needs be specified, along with the base file template, and how all components and translations are located in single folder:

```
weblate import_project \
    --file-format=properties \
    --base-file-template=web-app/tgol-web-app/src/main/resources/i18n/%s-I18N.
↪properties \
    tanaguru \
    https://github.com/Tanaguru/Tanaguru \
    master \
    web-app/tgol-web-app/src/main/resources/i18n/**-I18N_*.properties
```

More complex example of parsing of filenames to get the correct component and language out of a filename like `src/security/Numerous_security_holes_in_0.10.1.de.po`:

```
weblate import_project \
    tails \
    git://git.tails.boum.org/tails master \
    'wiki/src/security/(?P<component>.*)\.(?P<language>[^.]*)\.po$'
```

Filtering only translations in a chosen language:

```
./manage import_project \
    --language-regex '^(cs|sk)$' \
    weblate \
    https://github.com/WeblateOrg/weblate.git \
    'weblate/locale/*/LC_MESSAGES/**.po'
```

See also:

More detailed examples can be found in the *Starting with internationalization* chapter, alternatively you might want to use *import_json*.

2.18.16 importuserdata

manage.py importuserdata <file.json>

Imports user data from a file created by *dumpuserdata*

2.18.17 importusers

manage.py importusers --check <file.json>

Imports users from JSON dump of the Django auth_users database.

--check
With this option it will just check whether a given file can be imported and report possible conflicts arising from usernames or e-mails.

You can dump users from the existing Django installation using:

```
weblate dumpdata auth.User > users.json
```

2.18.18 install_addon

New in version 3.2.

manage.py install_addon --addon ADDON <project|project/component>

Installs an addon to a set of components.

--addon ADDON
Name of the addon to install. For example `weblate.gettext.customize`.

--configuration CONFIG
JSON encoded configuration of an addon.

--update
Update the existing addon configuration.

You can either define which project or component to install the addon in (for example `weblate/master`), or use `--all` to include all existing components.

To install *Customize gettext output* for all components:

```
weblate install_addon --addon weblate.gettext.customize --config '{"width": -1}' --
↪update --all
```

See also:

Addons

2.18.19 list_ignored_checks

manage.py list_ignored_checks

Lists the most frequently ignored checks. This can be useful for tuning your setup, if users have to ignore too many false positive consistency checks.

2.18.20 list_languages

manage.py list_languages <locale>

Lists supported languages in MediaWiki markup - language codes, English names and localized names.

This is used to generate <https://wiki.l10n.cz/Jazyky>.

2.18.21 list_translators

manage.py list_translators <project|project/component>

Lists translators by contributed language for the given project:

```
[French]
Jean Dupont <jean.dupont@example.com>
[English]
John Doe <jd@exemple.com>
```

--language-code
: List names by language code instead of language name.

You can either define which project or component to use (for example `weblate/master`), or use `--all` to list translators from all existing components.

2.18.22 list_versions

manage.py list_versions

Lists all Weblate dependencies and their versions.

2.18.23 loadpo

manage.py loadpo <project|project/component>

Reloads translations from disk (for example in case you have done some updates in the VCS repository).

--force
: Force update, even if the files should be up-to-date.

--lang LANGUAGE
: Limit processing to a single language.

You can either define which project or component to update (for example `weblate/master`), or use `--all` to update all existing components.

Note: You seldom need to invoke this, Weblate will automatically load changed files for every VCS update. This is needed in case you manually changed an underlying Weblate VCS repository or in some special cases following an upgrade.

2.18.24 lock_translation

`manage.py lock_translation <project|project/component>`

Prevents further translation of a component.

Hint: Useful in case you want to do some maintenance on the underlying repository.

You can either define which project or component to update (for example `weblate/master`), or use `--all` to update all existing components.

See also:

unlock_translation

2.18.25 move_language

`manage.py move_language source target`

New in version 3.0.

Allows you to merge language content. This is useful when updating to a new version which contains aliases for previously unknown languages that have been created with the *(generated)* suffix. It moves all content from the *source* language to the *target* one.

Example:

```
weblate move_language cze cs
```

After moving the content, you should check whether there is anything left (this is subject to race conditions when somebody updates the repository meanwhile) and remove the *(generated)* language.

2.18.26 pushgit

`manage.py pushgit <project|project/component>`

Pushes committed changes to the upstream VCS repository.

`--force-commit`
: Force commits any pending changes, prior to pushing.

You can either define which project or component to update (for example `weblate/master`), or use `--all` to update all existing components.

Note: Weblate pushes changes automatically if *Push on commit* in *Component configuration* is turned on, which is the default.

2.18.27 unlock_translation

`manage.py unlock_translation <project|project/component>`

Unlocks a given component, making it available for translation.

Hint: Useful in case you want to do some maintenance on the underlying repository.

You can either define which project or component to update (for example `weblate/master`), or use `--all` to update all existing components.

See also:

lock_translation

2.18.28 setupgroups

`manage.py setupgroups`

Configures default groups and optionally assigns all users to that default group.

`--no-privs-update`
: Turns of automatic updating of existing groups (only adds new ones).

`--no-projects-update`
: Prevents automatic updates of groups for existing projects. This allows adding newly added groups to existing projects, see *Per project access control*.

See also:

Access control

2.18.29 setuplang

`manage.py setuplang`

Updates list of defined languages in Weblate.

`--no-update`
: Turns of automatic updates of existing languages (only adds new ones).

2.18.30 updatechecks

`manage.py updatechecks <project|project/component>`

Updates all checks for all strings.

Hint: Useful for upgrades which do major changes to checks.

You can either define which project or component to update (for example `weblate/master`), or use `--all` to update all existing components.

2.18.31 updategit

`manage.py updategit <project|project/component>`

Fetches remote VCS repositories and updates the internal cache.

You can either define which project or component to update (for example `weblate/master`), or use `--all` to update all existing components.

Note: Usually it is better to configure hooks in the repository to trigger *Notification hooks*, instead of regular polling by *`updategit`*.

2.19 Announcements

Changed in version 4.0: In prior releases this feature was called whiteboard messages.

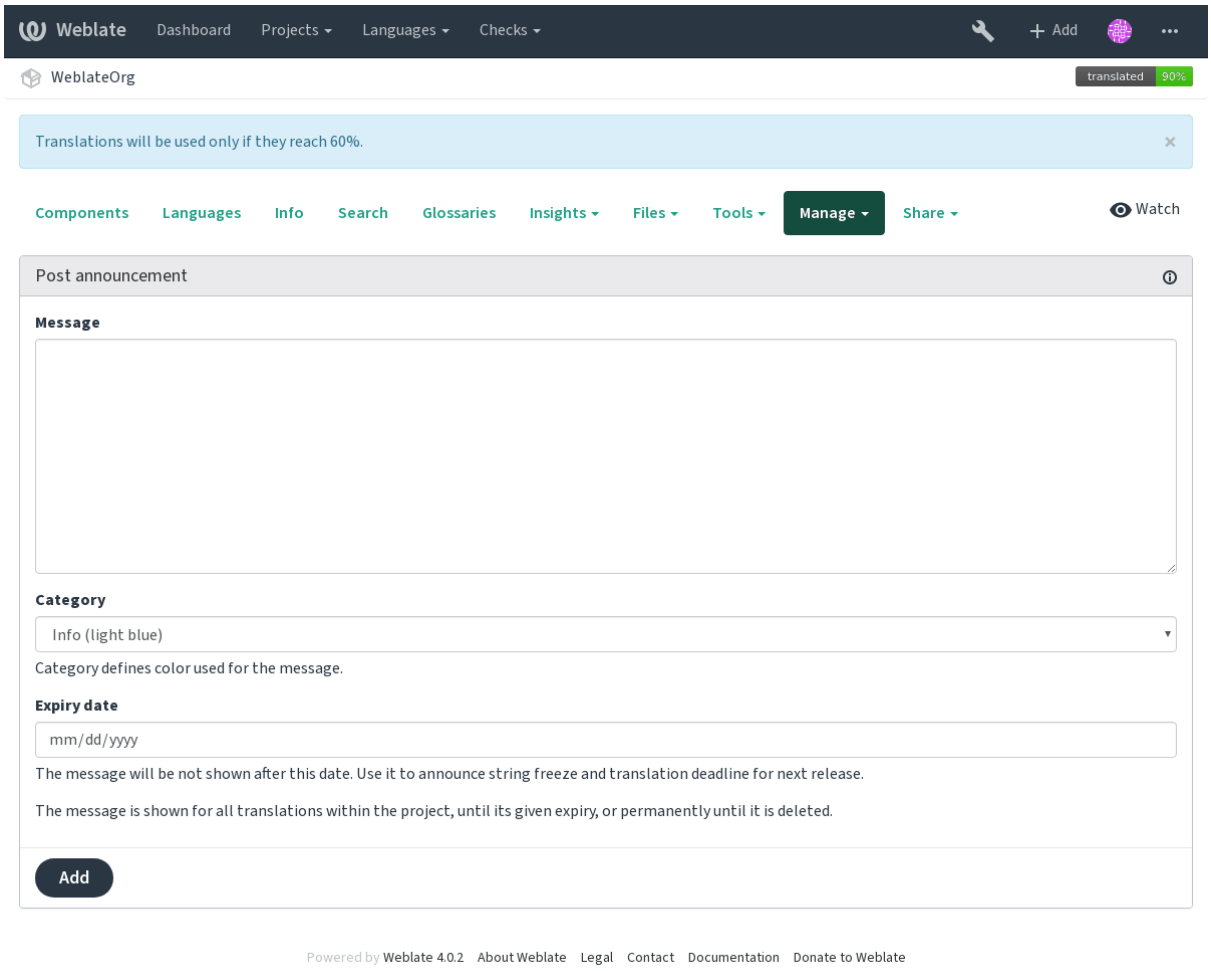
Provide info to your translators by posting announcements, site-wide, per project, component, or language.

Announce the purpose, deadlines, status, or specify targets for translation.

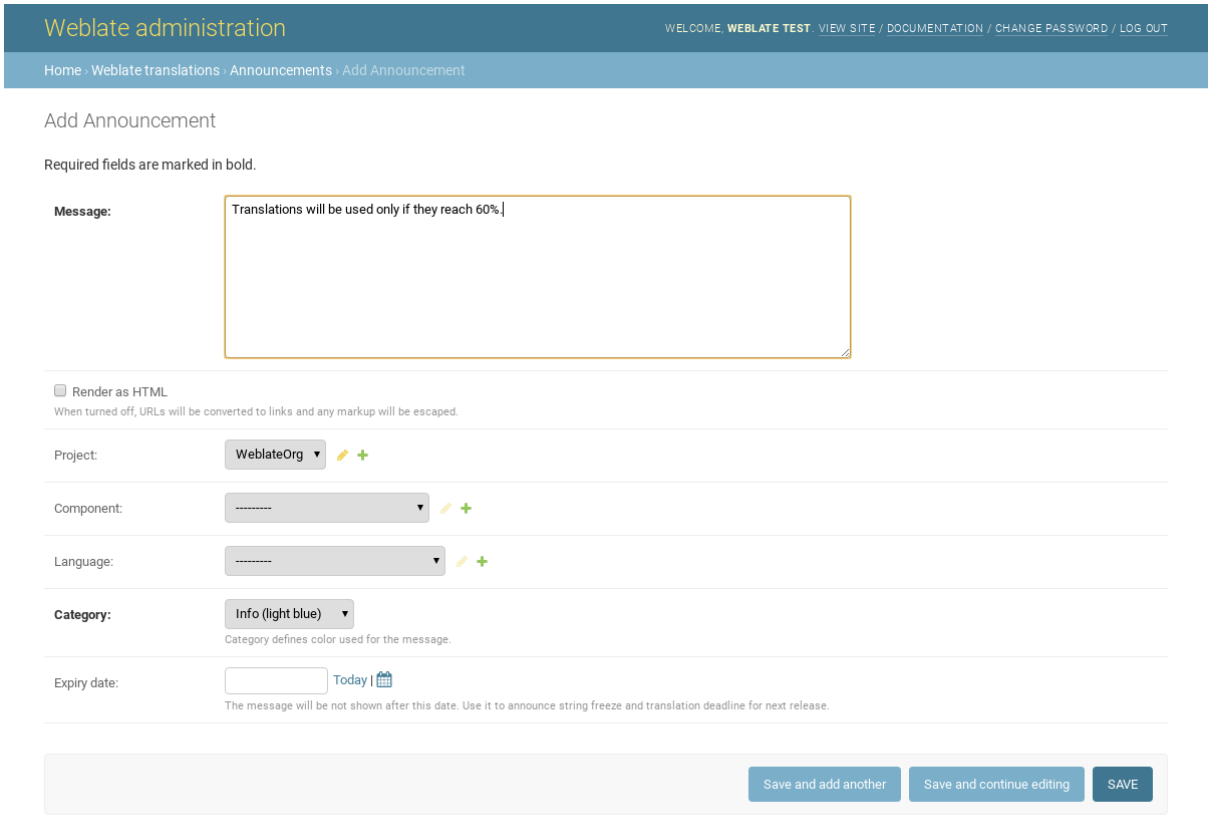
The users will receive notification on the announcements for watched projects (unless they opt out).

This can be useful for various things from announcing the purpose of the website to specifying targets for translations.

The announcements can posted on each level in the *Manage* menu, using *Post announcement*:



It can be also added using the admin interface:



The announcements are then shown based on their specified context:

No context specified

Shown on dashboard (landing page).

Project specified

Shown within the project, including all its components and translations.

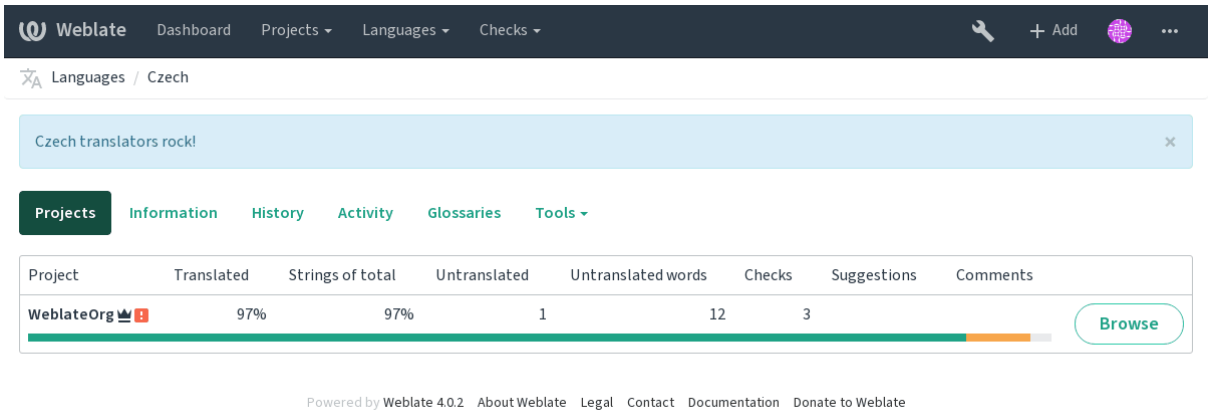
Component specified

Shown for a given component and all its translations.

Language specified

Shown on the language overview and all translations in that language.

This is how it looks on the language overview page:



2.20 Component Lists

Specify multiple lists of components to appear as options on the user dashboard, from which users can pick one as their default view. See *Dashboard* to learn more.

Changed in version 2.20: A status will be presented for each component list presented on the dashboard.

The names and content of component lists can be specified in the admin interface, in *Component lists* section. Each component list must have a name that is displayed to the user, and a slug representing it in the URL.

Changed in version 2.13: Change dashboard settings for anonymous users from the admin interface, altering whatdashboard is presented to unauthenticated users.

2.20.1 Automatic component lists

New in version 2.13.

Add components to the list automatically based on their slug by creating *Automatic component list assignment* rules.

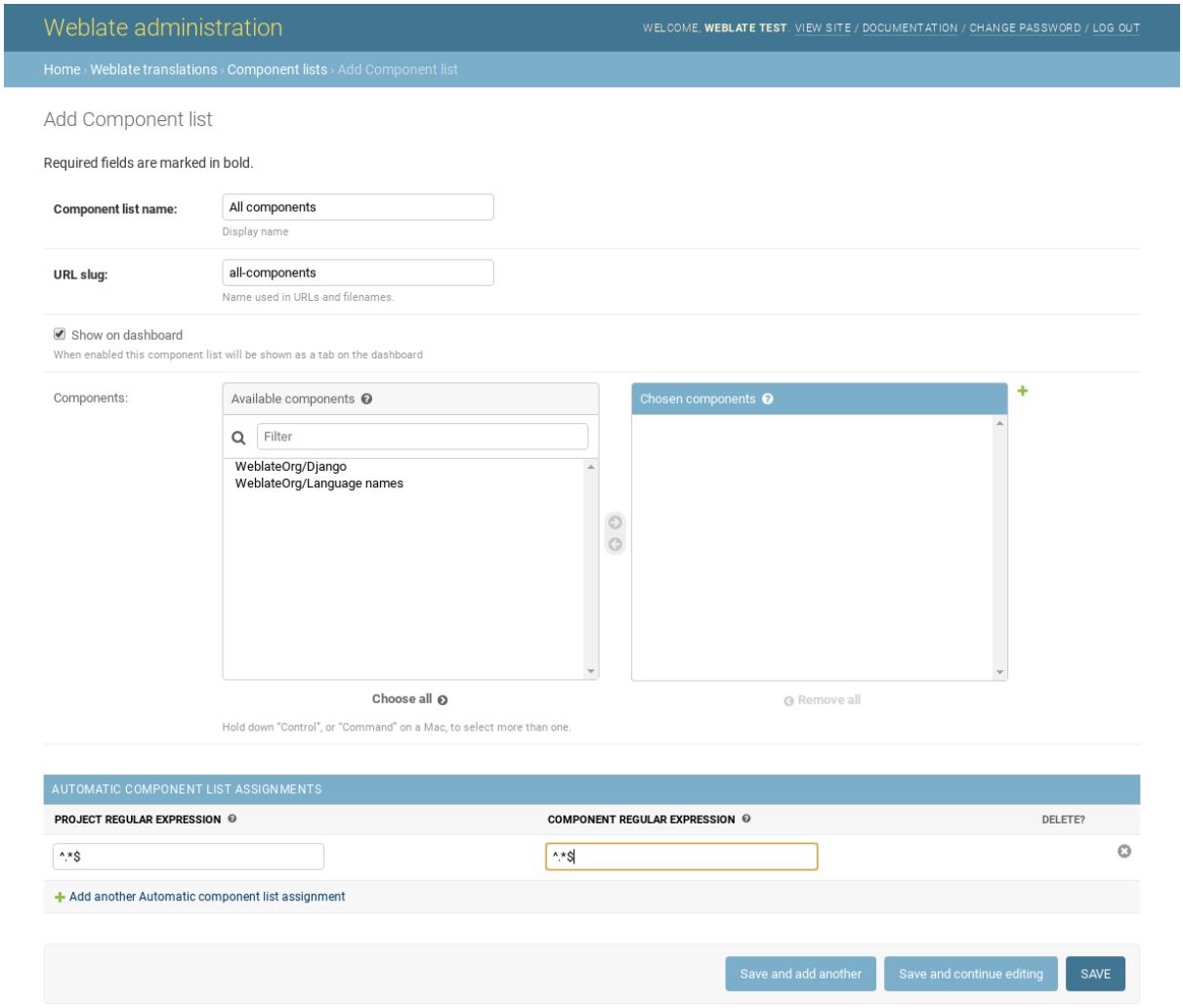
- Useful for maintaining component lists for large installations or in case

---

Hint: Make a component list containing all the components of your Weblate installation.

---

1. Define *Automatic component list assignment* with `^.*$` as regular expression in both the project and the component fields, as shown on this image:



2.21 Optional Weblate modules

Weblate comes with several optional modules which might be useful for your setup.

2.21.1 Git exporter

New in version 2.10.

The Git exporter provides you read only access to the underlying Git repository using HTTP.

Installation

To install, simply add `weblate.gitexport` to installed applications in `settings.py`:

```
INSTALLED_APPS += (
    'weblate.gitexport',
)
```

After installing, you need to migrate your database so that existing repositories are properly exported:

```
weblate migrate
```

Usage

The module automatically hooks into Weblate and sets exported repository URL in the *Component configuration*. The repositories are accessible under `/git/` path of the Weblate, for example `https://example.org/git/weblate/master/`:

```
git clone 'https://example.org/git/weblate/master/'
```

Repositories are available anonymously unless *Per project access control* is enabled. In that case you need to authenticate using your API token (you can obtain it in your *User profile*):

```
git clone 'https://user:KEY@example.org/git/weblate/master/'
```

2.21.2 Billing

New in version 2.4.

Billing module is used on Hosted Weblate and is used to define billing plans, track invoices and usage limits.

Installation

To install, simply add `weblate.billing` to installed applications in `settings.py`:

```
INSTALLED_APPS += (
    'weblate.billing',
)
```

This module includes additional database structures, to have them installed you should run the database migration:

```
weblate migrate
```

Usage

After installation you can control billing in the admin interface. Users with billing enabled will get new *Billing* tab in their *User profile*.

The billing module additionally allows project admins to create new projects and components without being superusers (see *Adding translation projects and components*). This is possible when following conditions are met:

- The billing is in it's configured limits (any overusage results in blocking of project/component creation) and paid (if it's price is non zero)
- The user is admin of existing project with billing or user is owner of billing (the latter is necessary when creating new billing for users to be able to import new projects).

Upon project creation user is able to choose which billing should be charged for the project in case he has access to more of them.

2.21.3 Legal

New in version 2.15.

Legal module is used on Hosted Weblate and is used to provide required legal documents. It comes with blank documents and you are expected to provide following templates with the documents:

legal/documents/tos.html Terms of service document

legal/documents/privacy.html Privacy policy document

legal/documents/summary.html Short overview of terms of service and privacy policy

---

Note: You can find legal documents for the Hosted Weblate service in separate Git repository <https://github.com/WeblateOrg/hosted/tree/master/wlhosted/legal/templates/legal/documents>.

Most likely these will not be directly usable for you, but you might want to use them as a starting point and adjust them to match your use case.

Installation

To install, simply add `weblate.legal` to installed applications in `settings.py`:

```
INSTALLED_APPS += (
    'weblate.legal',
)

# Optionals:

# Social auth pipeline to confirm TOS on registration/login
SOCIAL_AUTH_PIPELINE += (
    'weblate.legal.pipeline.tos_confirm',
)

# Middleware to enforce TOS confirmation of signed in users
MIDDLEWARE += [
    'weblate.legal.middleware.RequireTOSMiddleware',
]
```

This module includes additional database structures, to have them installed you should run the database migration:

```
weblate migrate
```

Now you should edit the legal documents to match your service. You can find them in the `weblate/legal/templates/legal/` folder.

Usage

After installation the legal documents are shown in Weblate UI.

2.21.4 Avatars

Weblate comes with built in support for showing user avatars based on e-mails. This can be disabled using *ENABLE_AVATARS*. The avatars are downloaded and cached server side to reduce information leaks to the sites serving them.

Weblate currently supports single backend:

- Gravatar

See also:

Avatar caching, *AVATAR_URL_PREFIX*, *ENABLE_AVATARS*

2.21.5 Spam protection

Optionally Weblate can be protected against suggestion spamming by unauthenticated users through akismet.com service.

To enable this, you need to install *akismet* Python module and configure Akismet API key.

See also:

AKISMET_API_KEY

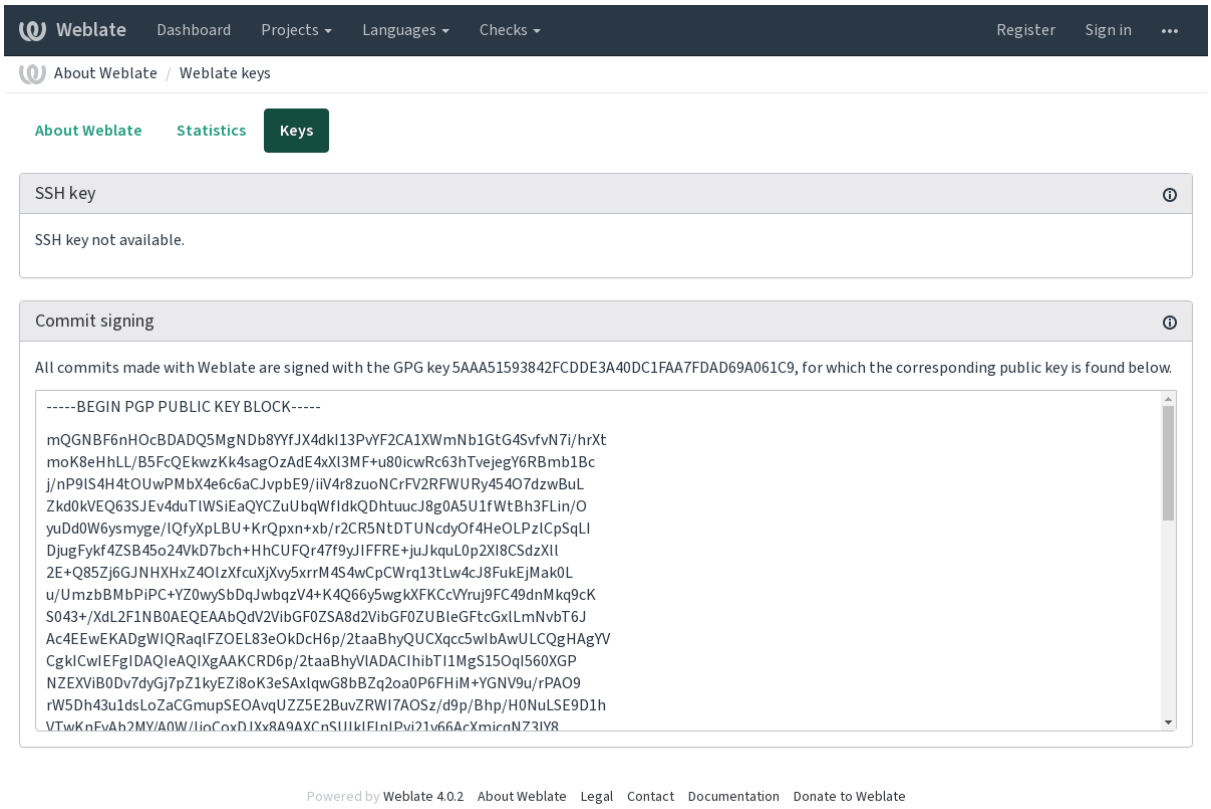
2.21.6 Signing Git commits by GnuPG

New in version 3.1.

Weblate allows you to sign all commits by it's GnuPG key. To configure this, you need to enable *WEBLATE_GPG_IDENTITY*. Weblate will generate GnuPG key when needed and will use it to sign all translation commits.

This feature needs GnuPG 2.1 or newer installed.

You can find the key in the *DATA_DIR* and the public key is shown on the about page:



Alternatively you can also import existing keys into Weblate, just set `HOME=$DATA_DIR/home` when invoking gpg.

See also:

WEBLATE_GPG_IDENTITY

2.21.7 Rate limiting

Changed in version 3.2: The rate limiting now accepts more fine grained configuration.

Several operations in Weblate are rate limited. At most *RATELIMIT_ATTEMPTS* attempts are allowed within *RATELIMIT_WINDOW* seconds. The user is then blocked for *RATELIMIT_LOCKOUT*. There are also per scope variants of those settings, for example `RATELIMIT_CONTACT_ATTEMPTS` or `RATELIMIT_TRANSLATE_ATTEMPTS`, see table below for full list of available scopes.

Following operations are subject to rate limiting:

Name	Scope	Allowed attempts	Ratelimit window	Lockout period
Registration	`REGISTRATION`	5	300	600
Sending message to admins	`MESSAGE`	5	300	600
Password authentication on login	`LOGIN`	5	300	600
Sitewide search	`SEARCH`	6	60	60
Translating	`TRANSLATE`	30	60	600
Adding to glossary	`GLOSSARY`	30	60	600

Additionally if there are more than *AUTH_LOCK_ATTEMPTS* failed authentication attempts on one account, this account password authentication is disabled and it's not possible to login until user asks for password reset.

See also:

Rate limiting

IP address for rate limiting

The rate limiting is based on client IP address. This is obtained from HTTP headers and you will have to change configuration in the event Weblate is running behind reverse proxy to work it properly.

See also:

IP_BEHIND_REVERSE_PROXY, *IP_PROXY_HEADER*, *IP_PROXY_OFFSET*

2.22 Customizing Weblate

Extend and customize using Django and Python. Contribute your changes upstream so that everybody can benefit. This reduces your maintenance costs; code in Weblate is taken care of when changing internal interfaces or refactoring the code.

> **Warning:** Neither internal interfaces or templates are considered a stable API. Please review your own customizations for every upgrade, the interface or their semantics might change without notice.

See also:

Contributing

2.22.1 Creating a Python module

If you are not familiar with Python, you might want to look into Python For Beginners, explaining the basics and pointing to further tutorials.

To write some custom Python code (called a module), a place to store it is needed, either in the system path (usually something like `/usr/lib/python3.7/site-packages/`) or in the Weblate directory, which is also added to the interpreter search path.

Better yet, turn your customization into a proper Python package:

1. Create a folder for your package (we will use *weblate_customization*).
2. within it, create a `setup.py` file to describe the package:

```
from setuptools import setup

setup(
    name = "weblate_customization",
    version = "0.0.1",
    author = "Your name",
    author_email = "yourname@example.com",
    description = "Sample Custom check for Weblate.",
    license = "GPLv3+",
    keywords = "Weblate check example",
    packages=['weblate_customization'],
)
```

3. Create a folder for the Python module (also called `weblate_customization`) for the customization code.
4. Within it, create a `__init__.py` file to make sure Python can import the module.
5. This package can now be installed using `pip install -e`. More info to be found in "Editable" Installs.
6. Once installed, the module can be used in the Weblate configuration (for example `weblate_customization.checks.FooCheck`).

Your module structure should look like this:

```
weblate_customization
   setup.py
   weblate_customization
       __init__.py
       addons.py
       checks.py
```

You can find an example of custimizing Weblate at <https://github.com/WeblateOrg/customize-example>, it covers all the topics described below.

2.22.2 Changing the logo

1. Create a simple Django app containing the static files you want to overwrite (see *Creating a Python module*). 2. Add it to `INSTALLED_APPS`:

```
INSTALLED_APPS = (
   # Add your customization as first
   'weblate_customization',

   # Weblate apps are here…
)
```

Branding appears in the following files:

`icons/weblate.svg` Logo shown in the navigation bar.

`logo-*.png` Web icons depending on screen resolution and web-browser.

`favicon.ico` Web icon used by legacy browsers.

`weblate-*.png` Avatars for bots or anonymous users. Some web-browsers use these as shortcut icons.

`email-logo.png` Used in notifications e-mails.

3. Run `weblate collectstatic --noinput`, to collect static files served to clients.

See also:

Managing static files (e.g. images, JavaScript, CSS), *Serving static files*

2.22.3 Custom quality checks, addons and auto-fixes

To install your code for *Custom automatic fixups*, *Writing own checks* or *Writing addon* and in Weblate:

1. Place the files in your Python module containing the Weblate customization (see *Creating a Python module*).
2. Add its fully-qualified path to the Python class in the dedicated settings (*WEBLATE_ADDONS*, *CHECK_LIST* or *AUTOFIX_LIST*):

```
# Checks
CHECK_LIST += (
    'weblate_customization.checks.FooCheck',
)

# Autofixes
AUTOFIX_LIST += (
  'weblate_customization.autofix.FooFixer',
)

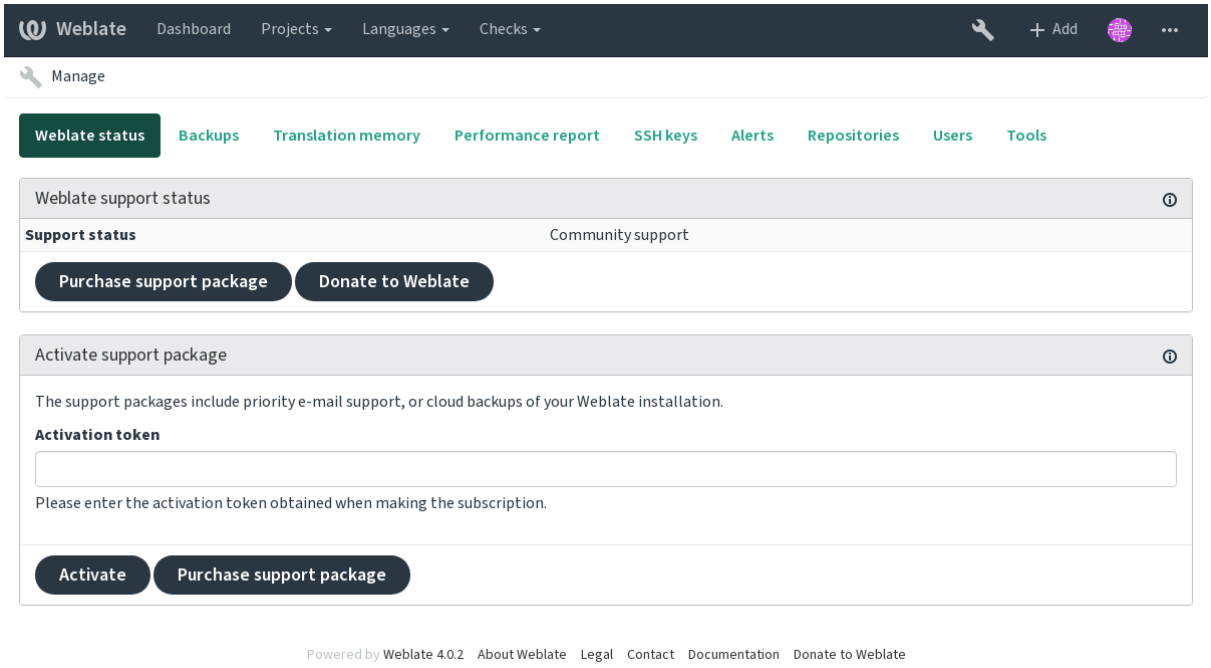
# Addons
WEBLATE_ADDONS += (
  'weblate_customization.addons.ExamplePreAddon',
)
```

See also:

Custom automatic fixups:, ref:*own-checks*, *Writing addon*, *Executing scripts from addon*

2.23 Management interface

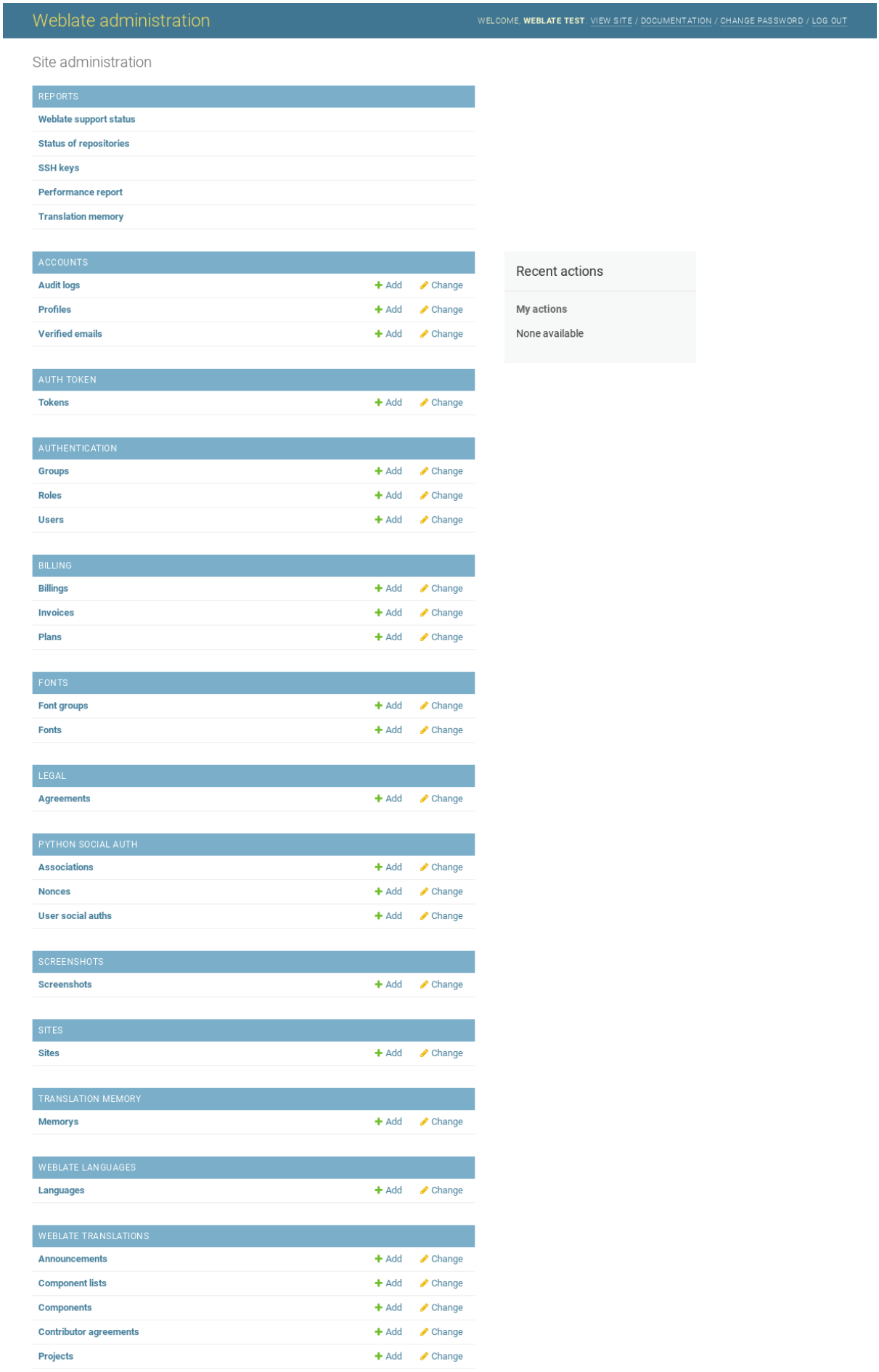
The management interface offer administration settings under the `/management/` URL. It is available for users signed in with admin privileges, accessable by using the wrench icon top right:



2.23.1 The Django admin interface

Warning: Will be removed in the future, as its use is discouraged—most features can be managed directly in Weblate.

Here you can manage objects stored in the database, such as users, translations and other settings:


Weblate administration
WELCOME, WEBLATE TEST. VIEW SITE / DOCUMENTATION / CHANGE PASSWORD / LOG OUT
Site administration
REPORTS
Weblate support status
Status of repositories
SSH keys
Performance report
Translation memory
ACCOUNTS
Audit logs + Add Change
Profiles + Add Change
Verified emails + Add Change
AUTH TOKEN
Tokens + Add Change
AUTHENTICATION
Groups + Add Change
Roles + Add Change
Users + Add Change
BILLING
Billings + Add Change
Invoices + Add Change
Plans + Add Change
FONTS
Font groups + Add Change
Fonts + Add Change
LEGAL
Agreements + Add Change
PYTHON SOCIAL AUTH
Associations + Add Change
Nonces + Add Change
User social auths + Add Change
SCREENSHOTS
Screenshots + Add Change
SITES
Sites + Add Change
TRANSLATION MEMORY
Memorys + Add Change
WEBLATE LANGUAGES
Languages + Add Change
WEBLATE TRANSLATIONS
Announcements + Add Change
Component lists + Add Change
Components + Add Change
Contributor agreements + Add Change
Projects + Add Change
Recent actions
My actions
None available

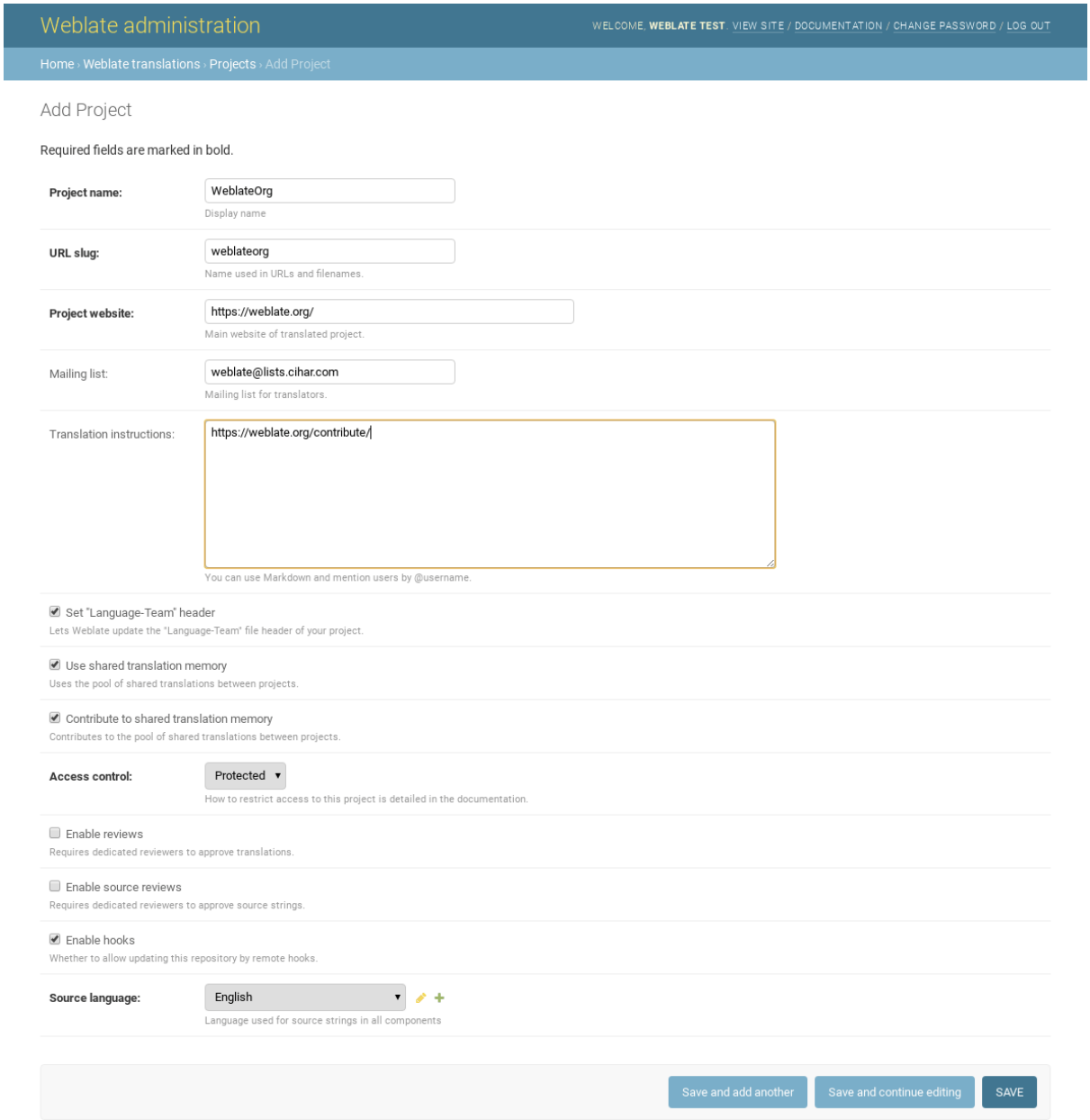
In the *Reports* section, you can check the status of your site, tweak it for *Production setup*, or manage SSH keys used to access *Accessing repositories*.

Manage database objects in any of the sections below. The most interesting one is probably *Weblate translations*, where you can manage translatable projects, see *Project configuration* and *Component configuration*.

Weblate languages holds language definitions, expained further in *Language definitions*.

Adding a project

Adding a project serves as container for all components. Usually you create one project for one piece of software, or book (See *Project configuration* for info on individual parameters):

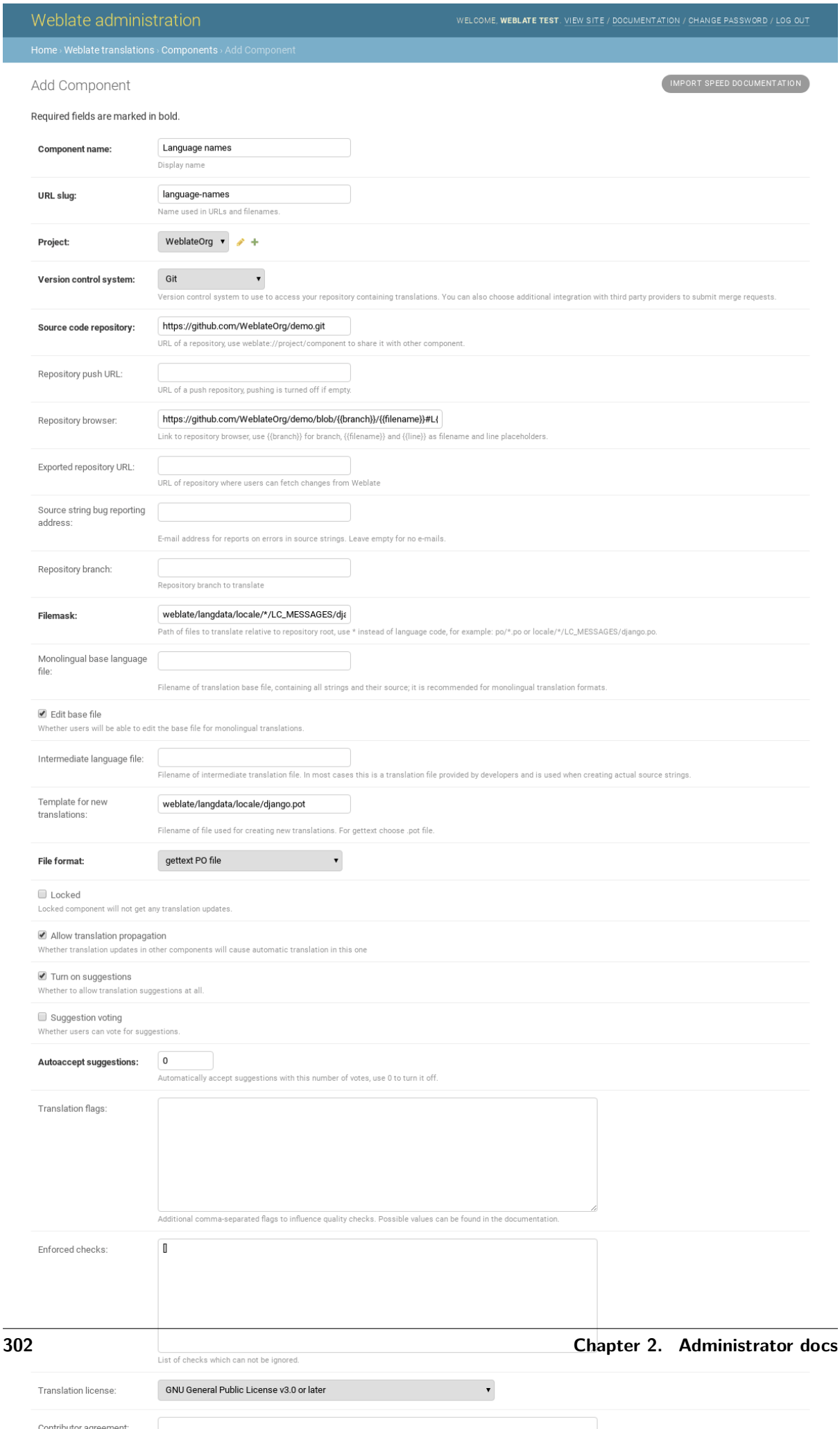


See also:

Project configuration

Bilingual components

Once you have added a project, translation components can be added to it. (See *Component configuration* for info regarding individual parameters):

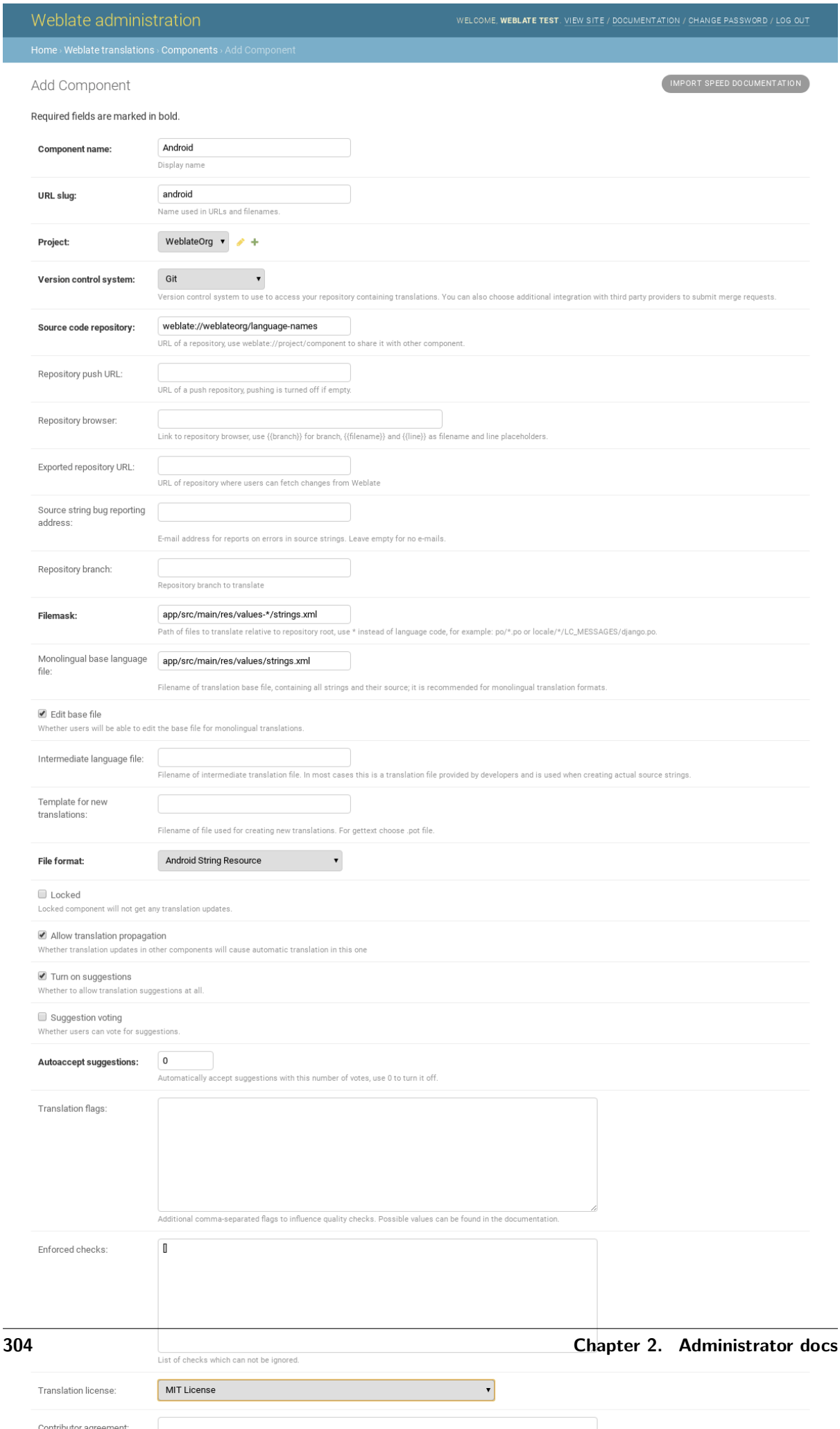

Weblate administration
WELCOME, WEBLATE TEST. VIEW SITE / DOCUMENTATION / CHANGE PASSWORD / LOG OUT
Home › Weblate translations › Components › Add Component
Add Component
IMPORT SPEED DOCUMENTATION
Required fields are marked in bold.
Component name:
Language names
Display name
URL slug:
language-names
Name used in URLs and filenames.
Project:
WeblateOrg
Version control system:
Git
Version control system to use to access your repository containing translations. You can also choose additional integration with third party providers to submit merge requests.
Source code repository:
https://github.com/WeblateOrg/demo.git
URL of a repository, use weblate://project/component to share it with other component.
Repository push URL:
URL of a push repository, pushing is turned off if empty.
Repository browser:
https://github.com/WeblateOrg/demo/blob/{{branch}}/{{filename}}#L{
Link to repository browser, use {{branch}} for branch, {{filename}} and {{line}} as filename and line placeholders.
Exported repository URL:
URL of repository where users can fetch changes from Weblate
Source string bug reporting address:
E-mail address for reports on errors in source strings. Leave empty for no e-mails.
Repository branch:
Repository branch to translate
Filemask:
weblate/langdata/locale/*/LC_MESSAGES/dj
Path of files to translate relative to repository root, use * instead of language code, for example: po/*.po or locale/*/LC_MESSAGES/django.po.
Monolingual base language file:
Filename of translation base file, containing all strings and their source; it is recommended for monolingual translation formats.
Edit base file
Whether users will be able to edit the base file for monolingual translations.
Intermediate language file:
Filename of intermediate translation file. In most cases this is a translation file provided by developers and is used when creating actual source strings.
Template for new translations:
weblate/langdata/locale/django.pot
Filename of file used for creating new translations. For gettext choose .pot file.
File format:
gettext PO file
Locked
Locked component will not get any translation updates.
Allow translation propagation
Whether translation updates in other components will cause automatic translation in this one
Turn on suggestions
Whether to allow translation suggestions at all.
Suggestion voting
Whether users can vote for suggestions.
Autoaccept suggestions:
0
Automatically accept suggestions with this number of votes, use 0 to turn it off.
Translation flags:
Additional comma-separated flags to influence quality checks. Possible values can be found in the documentation.
Enforced checks:
[]
List of checks which can not be ignored.
Translation license:
GNU General Public License v3.0 or later
Contributor agreement:

See also:

Component configuration, *Bilingual and monolingual formats*

Monolingual components

For easier translation of these, provide a template file containg the mapping of message IDs to its respective source language (usually English). (See *Component configuration* for info regarding individual parameters):


Weblate administration
WELCOME, WEBLATE TEST. VIEW SITE / DOCUMENTATION / CHANGE PASSWORD / LOG OUT
Home › Weblate translations › Components › Add Component
Add Component
IMPORT SPEED DOCUMENTATION
Required fields are marked in bold.
Component name:
Android
Display name
URL slug:
android
Name used in URLs and filenames.
Project:
WeblateOrg
Version control system:
Git
Version control system to use to access your repository containing translations. You can also choose additional integration with third party providers to submit merge requests.
Source code repository:
weblate://weblateorg/language-names
URL of a repository, use weblate://project/component to share it with other component.
Repository push URL:
URL of a push repository, pushing is turned off if empty.
Repository browser:
Link to repository browser, use {{branch}} for branch, {{filename}} and {{line}} as filename and line placeholders.
Exported repository URL:
URL of repository where users can fetch changes from Weblate
Source string bug reporting address:
E-mail address for reports on errors in source strings. Leave empty for no e-mails.
Repository branch:
Repository branch to translate
Filemask:
app/src/main/res/values-*/strings.xml
Path of files to translate relative to repository root, use * instead of language code, for example: po/*.po or locale/*/LC_MESSAGES/django.po.
Monolingual base language file:
app/src/main/res/values/strings.xml
Filename of translation base file, containing all strings and their source; it is recommended for monolingual translation formats.
Edit base file
Whether users will be able to edit the base file for monolingual translations.
Intermediate language file:
Filename of intermediate translation file. In most cases this is a translation file provided by developers and is used when creating actual source strings.
Template for new translations:
Filename of file used for creating new translations. For gettext choose .pot file.
File format:
Android String Resource
Locked
Locked component will not get any translation updates.
Allow translation propagation
Whether translation updates in other components will cause automatic translation in this one
Turn on suggestions
Whether to allow translation suggestions at all.
Suggestion voting
Whether users can vote for suggestions.
Autoaccept suggestions:
0
Automatically accept suggestions with this number of votes, use 0 to turn it off.
Translation flags:
Additional comma-separated flags to influence quality checks. Possible values can be found in the documentation.
Enforced checks:
List of checks which can not be ignored.
Translation license:
MIT License
Contributor agreement:

See also:

Component configuration, *Bilingual and monolingual formats*

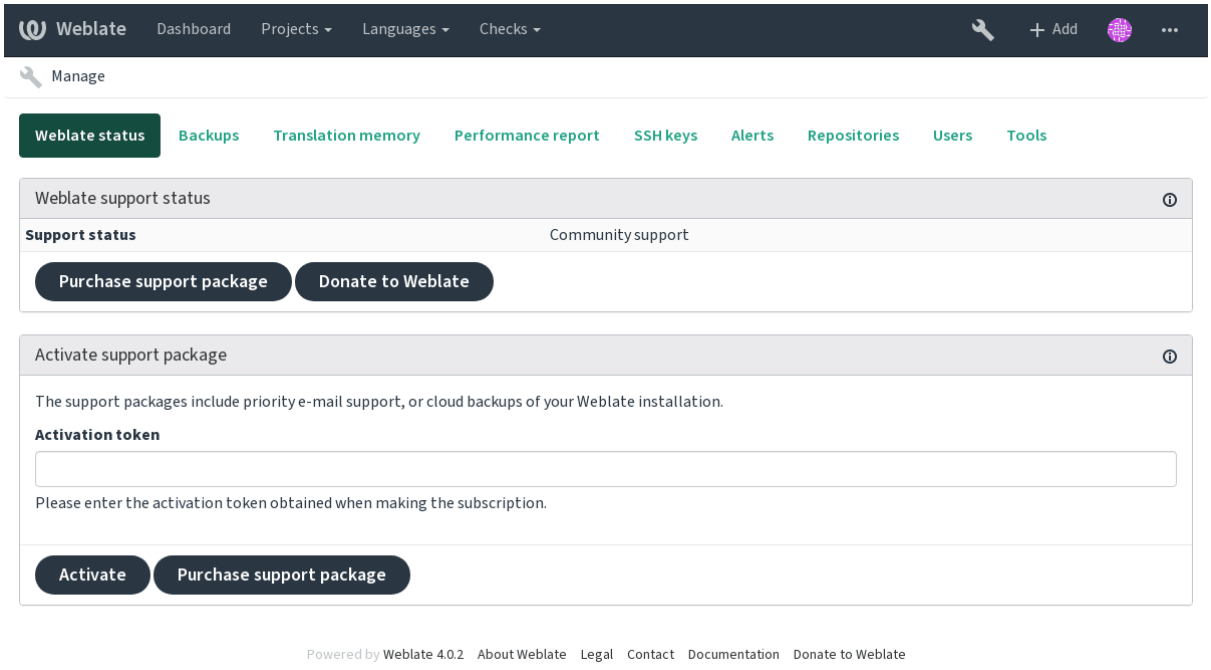
2.24 Getting support for Weblate

Weblate is copylefted libre software with community support. Subscribers receive priority support at no extra charge. Prepaid help packages are available for everyone. You can find more info about current support offerings at <https://weblate.org/support/>.

2.24.1 Integrating support

New in version 3.8.

Purchased support packages can optionally be integrated into your Weblate subscription management interface, from where you will find a link to it. Basic instance details about your installation are also reported back to Weblate this way.



2.24.2 Data submitted to the Weblate

- URL where your Weblate isntance is configured
- Your site title
- The Weblate version you are running
- Tallies of some objects in your Weblate database (projects, components, languages, source strings and users)
- The public SSH key of your instance

No other data is submitted.

2.24.3 Integration services

- See if your support package is still valid
- *Using Weblate provisioned backup storage*

Hint: Purchased support packages are already activated upon purchase, and can be used without integrating them.

CHAPTER 3

Contributor docs

3.1 About Weblate

3.1.1 Project goals

Web-based continuous localization tool with tight *Version control integration* supporting a wide range of *Supported file formats*, making it easy for translators to contribute.

3.1.2 Project name

“Weblate” is a portmanteau of the words “web” and “translate”.

3.1.3 Project website

The landing page is <https://weblate.org/> and a cloud hosted service at <https://hosted.weblate.org/>. This documentation can be found on <https://docs.weblate.org/>.

3.1.4 Project logos

The project logos and other graphics is available in <https://github.com/WeblateOrg/graphics/> repository.

3.1.5 Leadership

This project is maintained by Michal Čihař <michal@cihar.com>.

3.1.6 Authors

Weblate was started by Michal Čihař <michal@cihar.com>. Since its inception in 2012, thousands of people have contributed.

3.2 Contributing

There are dozens of ways to contribute in Weblate. Any help is welcomed, be it coding, graphics design, documentation or sponsorship.

3.2.1 Code and development

Weblate is developed on GitHub. You are welcome to fork the code and open pull requests. Patches in any other form are welcome too.

See also:

Check out *Internals* to see how Weblate looks from inside.

3.2.2 Coding standard

The code should follow PEP-8 coding guidelines and should be formatted using **`black`** code formatter.

To check the code quality, you can use **`flake8`**, the recommended plugins are listed in `.pre-commit-config.yaml` and it's configuration is placed in `setup.cfg`.

The easiest approach to enforce all this is to install pre-commit. Weblate repository contains configuration for it to verify the commited files are sane. After installing it (it is already included in the `requirements-lint.txt`) eneble it by running `pre-commit install` in Weblate checkout. This way all your changes will be automatically checked.

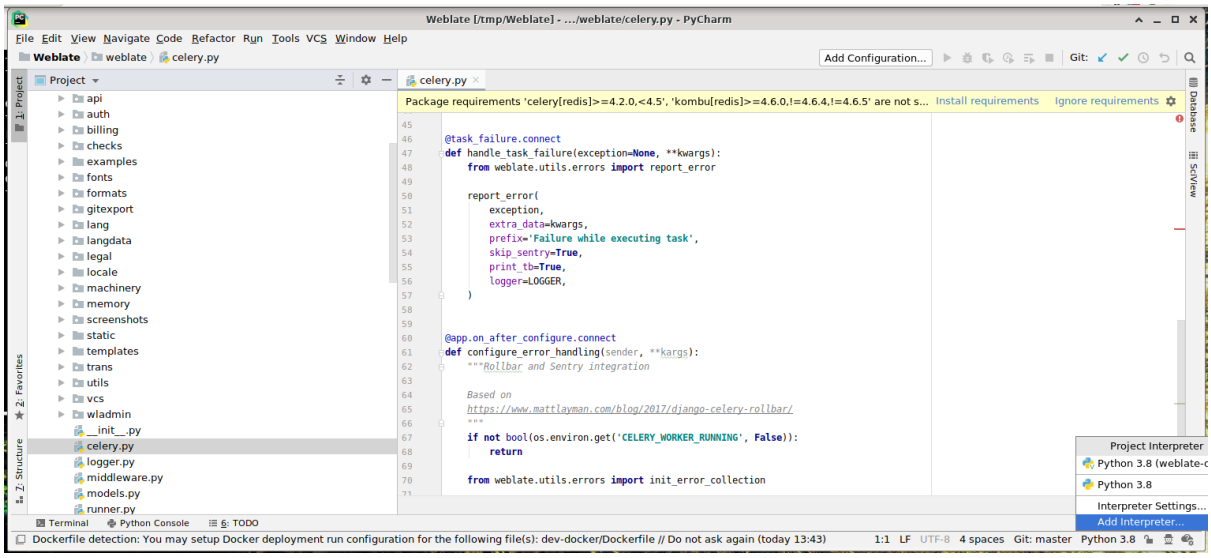
You can also trigger check manually, to check all files run:

```
pre-commit run --all
```

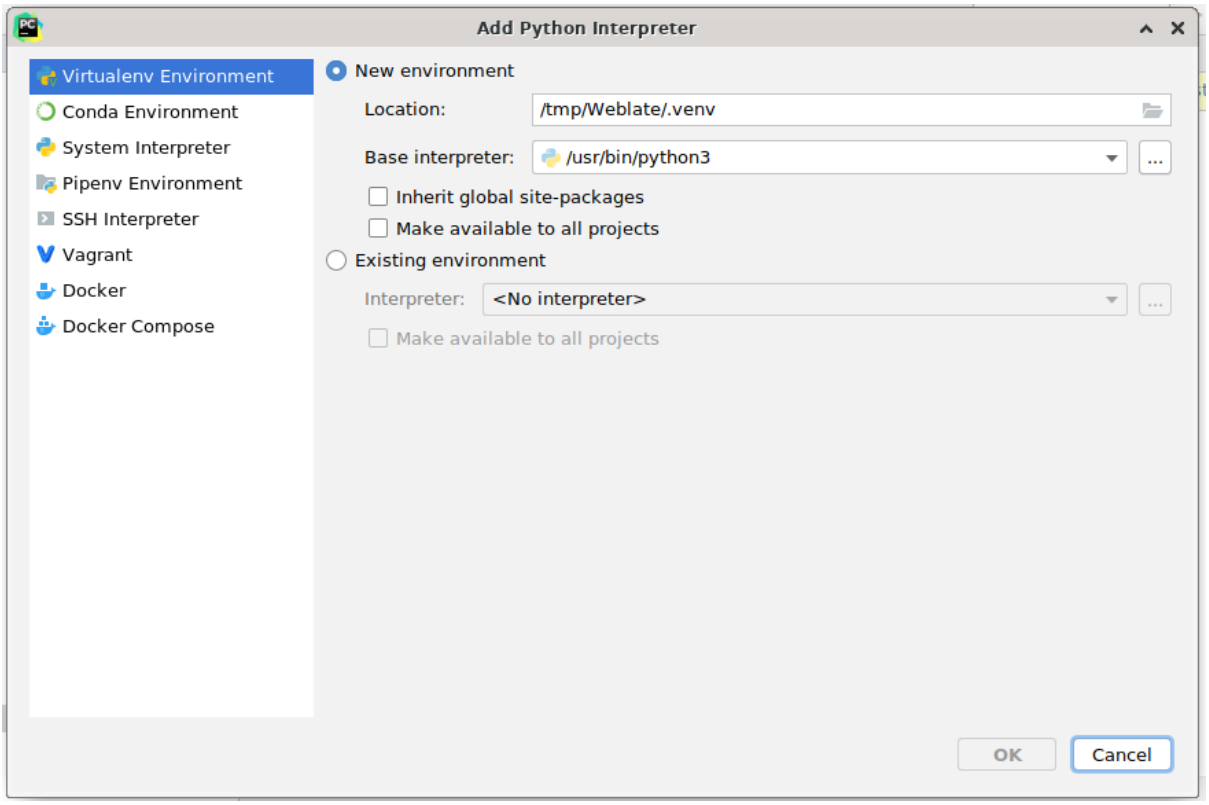
3.2.3 Coding Weblate with PyCharm

PyCharm is a known IDE for Python, here's some guidelines to help you setup Weblate project in it.

Considering you have just cloned the Github repository, just open the folder in which you cloned it in PyCharm. Once the IDE is open, the first step is to specify the interpreter you want:

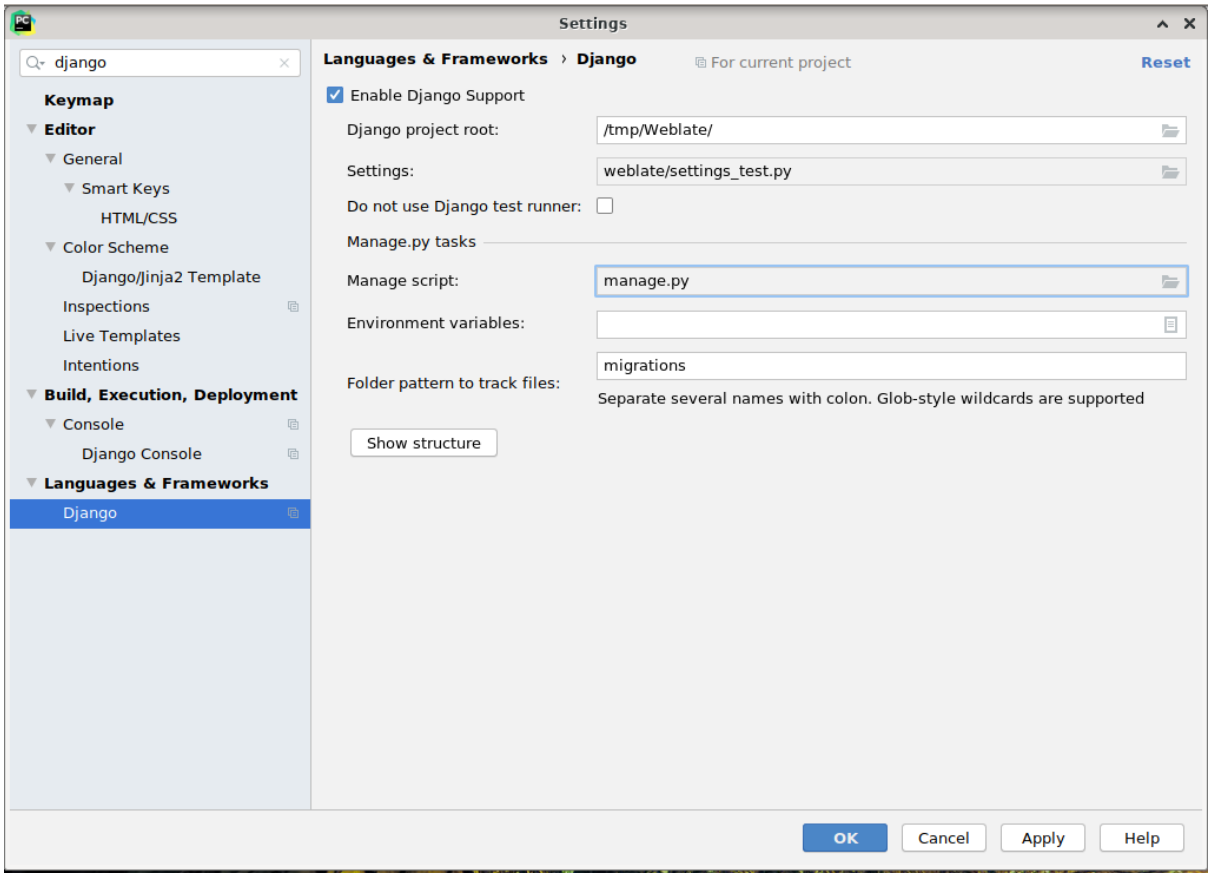


You can either chose to let PyCharm create the virtualenv for you, or select an already existing one:



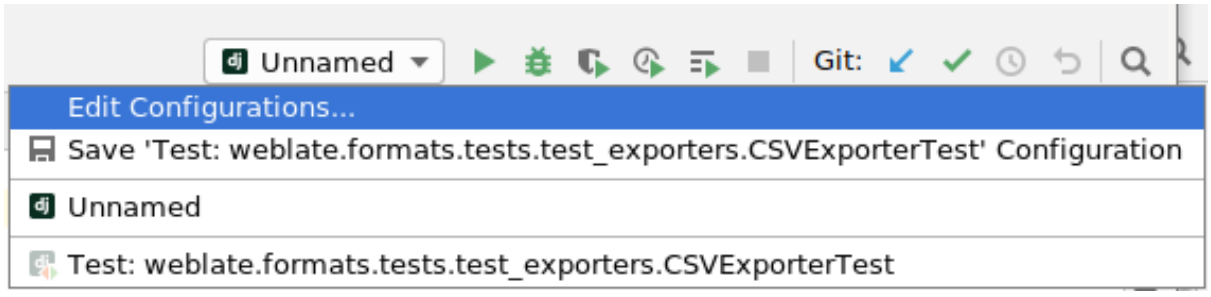
Don't forget to install the dependencies once the interpreter is set: you can do it, either through the console (the console from the IDE will directly use your virtualenv by default), or through the interface when you get a warning about missing dependencies.

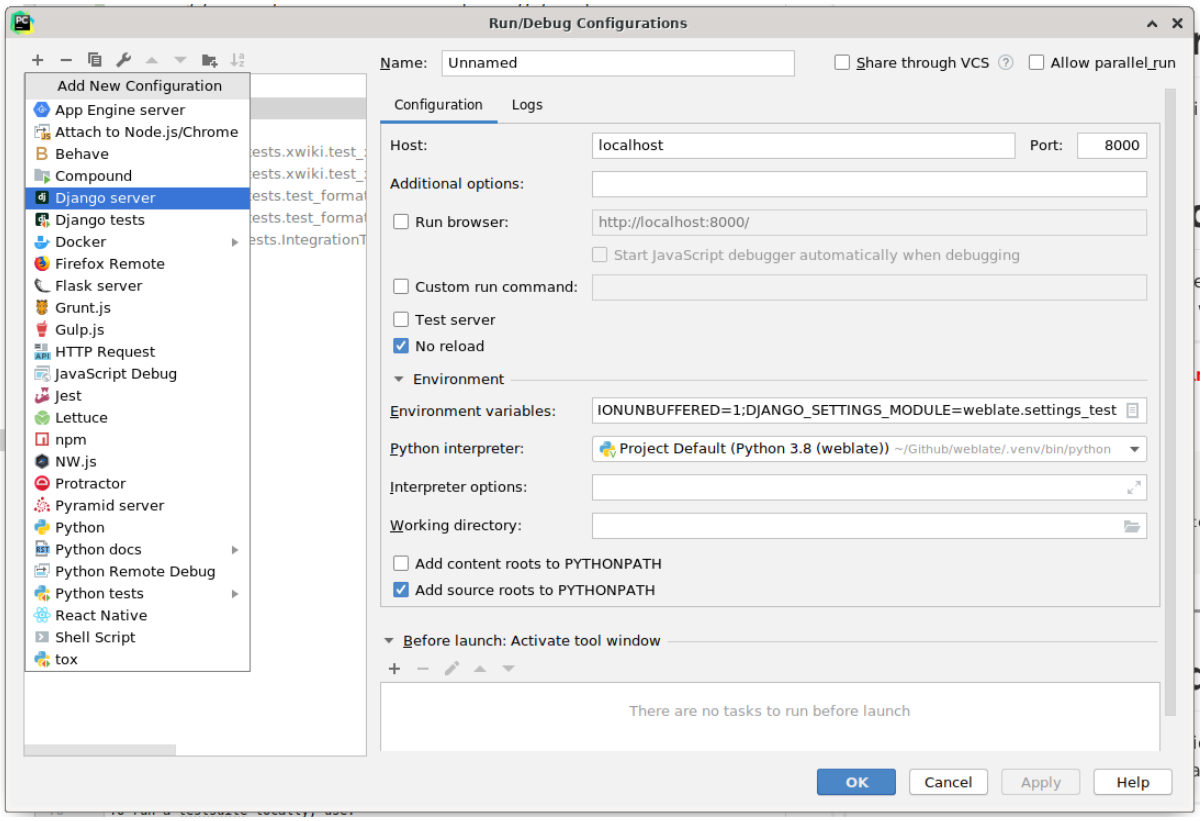
The second step is to set the right information to use natively Django inside PyCharm: the idea is to be able to immediately trigger the unit tests in the IDE. For that you need to specify the root path of Django and the path of one setting:



Be careful, the *Django project root* is the root of the repository, not the weblate sub-directory. About the settings, I personally use the *settings_test* from the repository, but you could create your own setting and set it there.

Last step is to be able to run the server and to put breakpoints on the code to be able to debug it. This is done by creating a new *Django Server* configuration:





Be careful to properly checked "No reload": you won't get anymore the server live reload if you modify some files, but the debugger will be stopped on the breakpoint you set.

3.2.4 Security by Design Principles

Any code for Weblate should be written with Security by Design Principles in mind.

3.2.5 Testsuite and CI

Testsuites exist for most of the current code, increase coverage by adding testcases for any new functionality, and verify that it works.

Continuous integration

Current test results can be found on GitHub Actions and coverage is reported on Codecov.

There are several jobs to verify different aspects:

- Unit tests
- Documentation build and external links
- Migration testing from all supported releases
- Code linting
- Setup verification (ensures that generated dist files do not miss anything and can be tested)

The configuration for the CI is in `.github/workflows` directory. It heavily uses helper scripts stored in `ci` directory. The scripts can be also executed manually, but they require several environment variables, mostly defining Django settings file to use and database connection. The example definition of that is in `scripts/test-database`:

```
# Simple way to configure test database from environment

# Database backend to use postgresql / mysql / mariadb
export CI_DATABASE=postgresql

# Database server configuration
export CI_DB_USER=weblate
export CI_DB_PASSWORD=weblate
export CI_DB_HOST=127.0.0.1

# Django settings module to use
export DJANGO_SETTINGS_MODULE=weblate.settings_test
```

The simple execution can look like:

```
. scripts/test-database
./ci/run-migrate
./ci/run-test
./ci/run-docs
./ci/run-setup
```

Local testing

To run a testsuite locally, use:

```
DJANGO_SETTINGS_MODULE=weblate.settings_test ./manage.py test
```

Hint: You will need a database (PostgreSQL) server to be used for tests. By default Django creates separate database to run tests with `test_` prefix, so in case your settings is configured to use `weblate`, the tests will use `test_weblate` database. See *Database setup for Weblate* for setup instructions.

The `weblate/settings_test.py` is used in CI environment as well (see *Continuous integration*) and can be tuned using environment variables:

```
# Simple way to configure test database from environment

# Database backend to use postgresql / mysql / mariadb
export CI_DATABASE=postgresql

# Database server configuration
export CI_DB_USER=weblate
export CI_DB_PASSWORD=weblate
export CI_DB_HOST=127.0.0.1

# Django settings module to use
export DJANGO_SETTINGS_MODULE=weblate.settings_test
```

Prior to runinng tests you should collect static files as some tests rely on them being present:

```
DJANGO_SETTINGS_MODULE=weblate.settings_test ./manage.py collectstatic
```

You can also specify individual tests to run:

```
DJANGO_SETTINGS_MODULE=weblate.settings_test ./manage.py test weblate.gitexport
```

Hint: The tests can also be executed inside developer docker container, see *Running Weblate locally in Docker*.

See also:

See Testing in Django for more info on running and writing tests for Django.

3.2.6 Reporting issues

Our issue tracker is hosted at GitHub:

Feel welcome to report any issues with, or suggest improvement of Weblate there. If what you have found is a security issue in Weblate, please consult the "Security issues" section below.

3.2.7 Security issues

In order to give the community time to respond and upgrade your are strongly urged to report all security issues privately. HackerOne is used to handle security issues, and can be reported directly at HackerOne.

Alternatively, report to security@weblate.org, which ends up on HackerOne as well.

If you don't want to use HackerOne, for whatever reason, you can send the report by e-mail to michal@cihar.com. You can choose to encrypt it using this PGP key *3CB 1DF1 EF12 CF2A C0EE 5A32 9C27 B313 42B7 511D*.

Note: Weblate depends on third party components for many things. In case you find a vulnerability affecting one of those components in general, please report it directly to the respective project.

Some of these are:

- Django
- Django REST framework
- Python Social Auth

3.2.8 Starting with our codebase

If looking for some bugs to familiarize yourself with the Weblate codebase, look for ones labelled good first issue.

3.2.9 Directory structure

Quick overview of directory structure of Weblate main repository:

`doc` Source code for this documentation, built using Sphinx.

`dev-docker` Docker code to run development server, see *Running Weblate locally in Docker*.

`weblate` Source code of Weblate as a Django application, see *Internals*.

`weblate/static` Client files (CSS, Javascript and images).

3.2.10 Running Weblate locally

The most comfortable approach to get started with Weblate development is to follow *Installing from sources*. It will get you a virtual env with editable Weblate sources.

To start a development server run:

```
weblate runserver
```

Depending on your configuration you might also want to start Celery workers:

```
./weblate/examples/celery start
```

Running Weblate locally in Docker

If you have Docker and docker-compose installed, you can spin up the development environment simply by running:

```
./rundev.sh
```

It will create development Docker image and start it. Weblate is running on <http://127.0.0.1:8080/> and you can sign in with `admin` user and `admin` password. The new installation is empty, so you might want to continue with *Adding translation projects and components*.

The `Dockerfile` and `docker-compose.yml` for this are located in `dev-docker` directory.

The script also accepts some parameters, to execute tests run it with `test` parameter and then specify any `test` parameters, for example:

```
./rundev.sh test --failfast weblate.trans
```

Be careful that your Docker containers are up and running before running the tests. You can check that by running the `docker ps` command.

To stop the background containers run:

```
./rundev.sh stop
```

Running the script without args will recreate Docker container and restart it.

Note: This is not suitable setup for production, it includes several hacks which are insecure, but make development easier.

3.2.11 Translating

Weblate is being translated using Weblate itself, feel free to take part in the effort of making Weblate available in as many human languages as possible.

3.2.12 Funding Weblate development

You can fund further Weblate development on the donate page. Funds collected there are used to fund gratis hosting for libre software projects, and further development of Weblate. Please check the the *donate page* for details, such as funding goals and rewards you can get by being a funder.

Backers who have funded Weblate

List of Weblate supporters:

- Yashiro Ccs
- Cheng-Chia Tseng
- Timon Reinhard
- Cassidy James
- Loic Dachary
- Marozed

Do you want to be in the list? Please see options on the Donate to Weblate.

3.2.13 Releasing Weblate

Things to check prior to release:

1. Check newly translated languages by `./scripts/list-translated-languages`.
2. Set final version by `./scripts/prepare-release`.
3. Make sure screenshots are up to date `make -C docs update-screenshots`

Perform the release:

4. Create a release `./scripts/create-release --tag` (see bellow for requirements)

Post release manual steps:

5. Update Docker image.
6. Close GitHub milestone.
7. Once the Docker image is tested, add a tag and push it.
8. Include new version in `./ci/run-migrate` to cover it in migration testing.
9. Increase version in the repository by `./scripts/set-version`.

To create tags using the `./scripts/create-release` script you will need following:

- GnuPG with private key used to sign the release
- Push access to Weblate git repositories (it pushes tags)
- Configured `hub` tool and access to create releases on the Weblate repo
- SSH access to Weblate download server (the Website downloads are copied there)
- Token for the Read the Docs service in `~/.config/readthedocs.token`

3.3 Debugging Weblate

Bugs can behave as application crashes or as a misbehavior. You are welcome to collect info on any such issue and submit it to our issue tracker.

3.3.1 Weblate logs

Weblate can produce detailed logs of what is going in in the background. In default configuration it uses syslog and that makes the log appear either in `/var/log/messages` or `/var/log/syslog` (depending on your syslog daemon configuration).

The Docker containers log (as usual in the Docker world) to their output, so you can look at the logs using *docker-compose logs*.

See also:

Sample configuration contains `LOGGING` configuration.

3.3.2 Analyzing application crashes

In case the application crashes, it is useful to collect as much info about the crash as possible. The easiest way to achieve this is by using third-party services which can collect such info automatically. You can find info on how to set this up in *Collecting error reports*.

3.3.3 Silent failures

Lots of tasks are offloaded to Celery for background processing. Failures are not shown in the user interface, but appear in the Celery logs. Configuring *Collecting error reports* helps you to notice such failures easier.

3.3.4 Performance issues

In case Weblate preforms badly in some situation, please collect relevant logs showing the issue, and anything that might help figuring out where the code might be improved.

In case some requests take too long without any indication, you might want to install *dogslow <https://pypi.org/project/dogslow/>* along with *Collecting error reports* and get pinpointed detailed tracebacks in the error collection tool.

3.4 Internals

Note: This chapter will give you basic overview of Weblate internals.

Weblate derives most of its code structure from, and is based on Django. Familiarize yourself with Django at a glance to get a basic understanding of its file structure.

3.4.1 Modules

Weblate consists of several Django applications (some optional, see *Optional Weblate modules*):

`accounts`

User account, profiles and notifications.

`addons`

Addons to tweak Weblate behavior, see *Addons*.

`api`

API based on Django REST framework.

`auth`

Authentication and permissions.

`billing`

The optional *Billing* module.

`formats`

File format abstraction layer based on translate-toolkit.

`gitexport`

The optional *Git exporter* module.

`lang`

Module defining language and plural models.

`langdata`

Language data definitions.

`legal`

The optional *Legal* module.

`machinery`

Integration of machine translation services.

`memory`

Built in translation memory, see *Translation Memory*.

`permissions`

Obsolete.

`screenshots`

Screenshots management and OCR module.

`trans`

Main module handling translations.

`utils`

Various helper utilities.

`vcs`

Version control system abstraction.

`wladmin`

Django admin interface customization.

3.5 Data schemas

Weblate uses JSON Schema to define layout of external JSON files.

3.5.1 Weblate Translation Memory Schema

type	*array*
items	

Continued on next page

Table 1 – continued from previous page

•	*The Translation Memory Item*		
	type	*object*	
	properties		
	• **category**	*The String Category*	
		1 is global, 2 is shared, 10000000+ are project specific, 20000000+ are user specific	
		type	*integer*
		examples	1
		minimum	0
		default	1
	• **origin**	*The String Origin*	
		Filename or component name	
		type	*string*
		examples	test
		pattern	^(.*)$
		default	
	• **source**	*The Source String*	
		type	*string*
		examples	Hello
		pattern	^(.+)$
		default	
	• **source_language**	*The Source Language*	
		ISO 639-1 / ISO 639-2 / IETF BCP 47	
		type	*string*
		examples	en
		pattern	^([^]+)$
		default	
	• **target**	*The Target String*	
		type	*string*
		examples	Ahoj
		pattern	^(.+)$
		default	
	• **target_language**	*The Target Language*	
		ISO 639-1 / ISO 639-2 / IETF BCP 47	
		type	*string*
		examples	cs
		pattern	^([^]+)$
		default	
	additionalProperties	False	
definitions			

See also:

Translation Memory, `dump_memory`, `import_memory`

3.6 License

Copyright (C) 2012 - 2020 Michal Čihař <michal@cihar.com>

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <https://www.gnu.org/licenses/>.

3.7 Legal documents

Note: Herein you will find various legal information you might need to operate Weblate in certain legal jurisdictions. It is provided as a means of guidance, without any warranty of accuracy or correctness. It is ultimately your responsibility to ensure that your use of Weblate complies with all applicable laws and regulations.

3.7.1 ITAR and other export controls

Weblate can be run within your own datacenter or virtual private cloud. As such, it can be used to store ITAR or other export-controlled information, however, end users are responsible for ensuring such compliance.

The Hosted Weblate service has not been audited for compliance with ITAR or other export controls, and does not currently offer the ability to restrict translations access by country.

3.7.2 US encryption controls

Weblate does not contain any cryptographic code, but might be subject export controls as it uses third party components utilizing cryptography for authentication, data-integrity and -confidentiality.

Most likely Weblate would be classified as ECCN 5D002 or 5D992 and, as publicly available libre software, it should not be subject to EAR (see Encryption items NOT Subject to the EAR.

Software components used by Weblate (listing only components related to cryptographic function):

Python See https://wiki.python.org/moin/PythonSoftwareFoundationLicenseFaq#Is_Python_subject_to_export_laws.3F

GnuPG Optionally used by Weblate

Git Optionally used by Weblate

curl Used by Git

OpenSSL Used by Python and cURL

The strength of encryption keys depend on the configuration of Weblate and the third party components it interacts with, but in any decent setup it will include all export restricted cryptographic functions:

- In excess of 56 bits for a symmetric algorithm
- Factorisation of integers in excess of 512 bits for an asymmetric algorithm
- Computation of discrete logarithms in a multiplicative group of a finite field of size greater than 512 bits for an asymmetric algorithm
- Discrete logarithms in a group different than above in excess of 112 bits for an asymmetric algorithm

Weblate doesn't have any cryptographic activation feature, but it can be configured in a way where no cryptography code would be involved. The cryptographic features include:

- Accessing remote servers using secure protocols (HTTPS)
- Generating signatures for code commits (PGP)

See also:

Export Controls (EAR) on Open Source Software

CHAPTER 4

Change History

4.1 Weblate 4.0.4

Released on May 07th 2020.

- Fixed testsuite execution on some Python 3.8 environments.
- Typo fixes in the documentation.
- Fixed creating components using API in some cases.
- Fixed JavaScript errors breaking mobile navigation.
- Fixed crash on displaying some checks.
- Fixed screenshots listing.
- Fixed monthly digest notifications.
- Fixed intermediate translation behavior with units non existing in translation.

4.2 Weblate 4.0.3

Released on May 02nd 2020.

- Fixed possible crash in reports.
- User mentions in comments are now case insensitive.
- Fixed PostgreSQL migration for non superusers.
- Fixed changing the repository URL while creating component.
- Fixed crash when upstream repository is gone.

4.3 Weblate 4.0.2

Released on April 27th 2020.

- Improved performance of translation stats.

- Improved performance of changing labels.
- Improved bulk edit performance.
- Improved translation memory performance.
- Fixed possible crash on component deletion.
- Fixed displaying of translation changes in some corner cases.
- Improved warning about too long celery queue.
- Fixed possible false positives in the consistency check.
- Fixed deadlock when changing linked component repository.
- Included edit distance in changes listing and CSV and reports.
- Avoid false positives of punctuation spacing check for Canadian French.
- Fixed XLIFF export with placeholders.
- Fixed false positive with zero width check.
- Improved reporting of configuration errors.
- Fixed bilingual source upload.
- Automatically detect supported languages for DeepL machine translation.
- Fixed progress bar display in some corner cases.
- Fixed some checks triggering on non translated strings.

4.4 Weblate 4.0.1

Released on April 16th 2020.

- Fixed package installation from PyPI.

4.5 Weblate 4.0

Released on April 16th 2020.

- Weblate now requires Python 3.6 or newer.
- Added management overview of component alerts.
- Added component alert for broken repository browser URLs.
- Improved sign in and registration pages.
- Project access control and workflow configuration integrated to project settings.
- Added check and highlighter for i18next interpolation and nesting.
- Added check and highlighter for percent placeholders.
- Display failing checks for suggestions.
- Record source string changes in history.
- Upgraded Microsoft Translator to version 3 API.
- Reimplemented translation memory backend.
- Added support for several `is:` lookups in *Searching*.
- Allow to make *Unchanged translation* avoid internal blacklist.

- Improved comments extraction from monolingual po files.
- Renamed whiteboard messages to announcements.
- Fixed occasional problems with registration mails.
- Improved LINGUAS update addon to handle more syntax variants.
- Fixed editing monolingual XLIFF source file.
- Added support for exact matching in *Searching*.
- Extended API to cover screenshots, users, groups, componentlists and extended creating projects.
- Add support for source upload on bilingual translations.
- Added support for intermediate language from developers.
- Added support for source strings review.
- Extended download options for platform wide translation memory.

4.6 Weblate 3.11.3

Released on March 11th 2020.

- Fixed searching for fields with certain priority.
- Fixed predefined query for recently added strings.
- Fixed searching returning duplicate matches.
- Fixed notifications rendering in Gmail.
- Fixed reverting changes from the history.
- Added links to events in digest notifications.
- Fixed email for account removal confirmation.
- Added support for Slack authentication in Docker container.
- Avoid sending notifications for not subscribed languages.
- Include Celery queues in performance overview.
- Fixed documentation links for addons.
- Reduced false negatives for unchanged translation check.
- Raised bleach dependency to address CVE-2020-6802.
- Fixed listing project level changes in history.
- Fixed stats invalidation in some corner cases.
- Fixed searching for certain string states.
- Improved format string checks behavior on missing percent.
- Fixed authentication using some third party providers.

4.7 Weblate 3.11.2

Released on February 22nd 2020.

- Fixed rendering of suggestions.
- Fixed some strings wrongly reported as having no words.

4.8 Weblate 3.11.1

Released on February 20th 2020.

- Documented Celery setup changes.
- Improved filename validation on component creation.
- Fixed minimal versions of some dependecies.
- Fixed adding groups with certain Django versions.
- Fixed manual pushing to upstream repository.
- Improved glossary matching.

4.9 Weblate 3.11

Released on February 17th 2020.

- Allow using VCS push URL during component creation via API.
- Rendered width check now shows image with the render.
- Fixed links in notifications e-mails.
- Improved look of plaintext e-mails.
- Display ignored checks and allow to make them active again.
- Display nearby keys on monolingual translations.
- Added support for groupping string shapings.
- Recommend upgrade to new Weblate versions in the system checks.
- Provide more detailed analysis for duplicate language alert.
- Include more detailed license info on the project pages.
- Automatically unshallow local copies if needed.
- Fixed download of strings needing action.
- New alert to warn about using the same filemask twice.
- Improve XML placeables extraction.
- The *SINGLE_PROJECT* can now enforce redirection to chosen project.
- Added option to resolve comments.
- Added bulk editing of flags.
- Added support for *String labels*.
- Added bulk edit addon.
- Added option for *Enforcing checks*.
- Increased default validity of confirmation links.
- Improved Matomo integration.
- Fixed *Has been translated* to correctly handle source string change.
- Extended automatic updates configuration by *AUTO_UPDATE*.
- LINGUAS addons now do full sync of translations in Weblate.

4.10 Weblate 3.10.3

Released on January 18th 2020.

- Support for translate-toolkit 2.5.0.

4.11 Weblate 3.10.2

Released on January 18th 2020.

- Add lock indication to projects.
- Fixed CSS bug causing flickering in some web browsers.
- Fixed searching on systems with non-English locales.
- Improved repository matching for GitHub and Bitbucket hooks.
- Fixed data migration on some Python 2.7 installations.
- Allow configuration of Git shallow cloning.
- Improved background notification processing.
- Fixed broken form submission when navigating back in web browser.
- New addon to configure YAML formatting.
- Fixed same plurals check to not fire on single plural form languages.
- Fixed regex search on some fields.

4.12 Weblate 3.10.1

Released on January 9th 2020.

- Extended API with translation creation.
- Fixed several corner cases in data migrations.
- Compatibility with Django 3.0.
- Improved data cleanup performance.
- Added support for customizable security.txt.
- Improved breadcrumbs in changelog.
- Improved translations listing on dashboard.
- Improved HTTP responses for webhooks.
- Added support for GitLab merge requests in Docker container.

4.13 Weblate 3.10

Released on December 20th 2019.

- Improved application user interface.
- Added doublespace check.
- Fixed creating new languages.
- Avoid sending auditlog notifications to deleted e-mails.

- Added support for read only strings.
- Added support for Markdown in comments.
- Allow placing translation instruction text in project info.
- Add copy to clipboard for secondary languages.
- Improved support for Mercurial.
- Improved Git repository fetching performance.
- Add search lookup for age of string.
- Show source language for all translations.
- Show context for nearby strings.
- Added support for notifications on repository operations.
- Improved translation listings.
- Extended search capabilities.
- Added support for automatic translation strings marked for editing.
- Avoid sending duplicate notifications for linked component alerts.
- Improve default merge request message.
- Better indicate string state in Zen mode.
- Added support for more languages in Yandex Translate.
- Improved look of notification e-mails.
- Provide choice for translation license.

4.14 Weblate 3.9.1

Released on October 28th 2019.

- Remove some unneeded files from backups.
- Fixed potential crash in reports.
- Fixed cross database migration failure.
- Added support for force pushing Git repositories.
- Reduced risk of registration token invalidation.
- Fixed account removal hitting rate limiter.
- Added search based on priority.
- Fixed possible crash on adding strings to JSON file.
- Safe HTML check and fixup now honor source string markup.
- Avoid sending notifications to invited and deleted users.
- Fix SSL connection to redis in Celery in Docker container.

4.15 Weblate 3.9

Released on October 15th 2019.

- Include Weblate metadata in downloaded files.

- Improved UI for failing checks.
- Indicate missing strings in format checks.
- Separate check for French punctuation spacing.
- Add support for fixing some of quality checks errors.
- Add separate permission to create new projects.
- Extend stats for char counts.
- Improve support for Java style language codes.
- Added new generic check for placeholders.
- Added support for WebExtension JSON placeholders.
- Added support for flat XML format.
- Exteded API with project, component and translation removal and creation.
- Added support for Gitea and Gitee webhooks.
- Added new custom regex based check.
- Allow to configure contributing to shared translation memory.
- Added ZIP download for more translation files.
- Make XLIFF standard compliant parsing of maxwidth and font.
- Added new check and fixer for safe HTML markup for translating web applications.
- Add component alert on unsupported configuration.
- Added automatic translation addon to bootstrap translations.
- Extend automatic translation to add suggestions.
- Display addon parameters on overview.
- Sentry is now supported through modern Sentry SDK instead of Raven.
- Changed example settings to be better fit for production environment.
- Added automated backups using BorgBackup.
- Split cleanup addon for RESX to avoid unwanted file updates.
- Added advanced search capabilities.
- Allow users to download their own reports.
- Added localization guide to help configuring components.
- Added suport for GitLab merge requests.
- Improved display of repository status.
- Perform automated translation in the background.

4.16 Weblate 3.8

Released on August 15th 2019.

- Added support for simplified creating of similar components.
- Added support for parsing translation flags from the XML based file formats.
- Log exceptions into Celery log.
- Improve performance of repository scoped addons.

- Improved look of notification e-mails.
- Fixed password reset behavior.
- Improved performance on most of translation pages.
- Fixed listing of languages not known to Weblate.
- Add support for cloning addons to discovered components.
- Add support for replacing file content with uploaded.
- Add support for translating non VCS based content.
- Added OpenGraph widget image to use on social networks.
- Added support for animated screenshots.
- Improved handling of monolingual XLIFF files.
- Avoid sending multiple notifications for single event.
- Add support for filtering changes.
- Extended predefined periods for reporting.
- Added webhook support for Azure Repos.
- New opt-in notifications on pending suggestions or untranslated strings.
- Add one click unsubscribe link to notification e-mails.
- Fixed false positives with Has been translated check.
- New management interface for admins.
- String priority can now be specified using flags.
- Added language management views.
- Add checks for Qt library and Ruby format strings.
- Added configuration to better fit single project installations.
- Notify about new string on source string change on monolingual translations.
- Added separate view for translation memory with search capability.

4.17 Weblate 3.7.1

Released on June 28th 2019.

- Documentation updates.
- Fixed some requirements constraints.
- Updated language database.
- Localization updates.
- Various user interface tweaks.
- Improved handling of unsupported but discovered translation files.
- More verbosely report missing file format requirements.

4.18 Weblate 3.7

Released on June 21st 2019.

- Added separate Celery queue for notifications.
- Use consistent look with application for API browsing.
- Include approved stats in the reports.
- Report progress when updating translation component.
- Allow to abort running background component update.
- Extend template language for filename manipulations.
- Use templates for editor link and repository browser URL.
- Indicate max length and current characters count when editing translation.
- Improved handling of abbreviations in unchanged translation check.
- Refreshed landing page for new contributors.
- Add support for configuring msgmerge addon.
- Delay opening SMTP connection when sending notifications.
- Improved error logging.
- Allow custom location in MO generating addon.
- Added addons to cleanup old suggestions or comments.
- Added option to enable horizontal mode in the Zen editor.
- Improved import perfomance with many linked components.
- Fixed examples installation in some cases.
- Improved rendering of alerts in changes.
- Added new horizontal stats widget.
- Improved format strings check on plurals.
- Added font management tool.
- New check for rendered text dimensions.
- Added support for subtitle formats.
- Include overall completion stats for languages.
- Added reporting at project and global scope.
- Improved user interface when showing translation status.
- New Weblate logo and color scheme.
- New look of bitmap badges.

4.19 Weblate 3.6.1

Released on April 26th 2019.

- Improved handling of monolingual XLIFF files.
- Fixed digest notifications in some corner cases.
- Fixed addon script error alert.

- Fixed generating MO file for monolingual PO files.
- Fixed display of uninstalled checks.
- Indicate administered projects on project listing.
- Allow update to recover from missing VCS repository.

4.20 Weblate 3.6

Released on April 20th 2019.

- Add support for downloading user data.
- Addons are now automatically triggered upon installation.
- Improved instructions for resolving merge conflicts.
- Cleanup addon is now compatible with app store metadata translations.
- Configurable language code syntax when adding new translations.
- Warn about using Python 2 with planned termination of support in April 2020.
- Extract special characters from the source string for visual keyboard.
- Extended contributor stats to reflect both source and target counts.
- Admins and consistency addons can now add translations even if disabled for users.
- Fixed description of toggle disabling `Language-Team` header manipulation.
- Notify users mentioned in comments.
- Removed file format autodetection from component setup.
- Fixed generating MO file for monolingual PO files.
- Added digest notifications.
- Added support for muting component notifications.
- Added notifications for new alerts, whiteboard messages or components.
- Notifications for administered projects can now be configured.
- Improved handling of three letter language codes.

4.21 Weblate 3.5.1

Released on March 10th 2019.

- Fixed Celery systemd unit example.
- Fixed notifications from HTTP repositories with login.
- Fixed race condition in editing source string for monolingual translations.
- Include output of failed addon execution in the logs.
- Improved validation of choices for adding new language.
- Allow to edit file format in component settings.
- Update installation instructions to prefer Python 3.
- Performance and consistency improvements for loading translations.
- Make Microsoft Terminology service compatible with current Zeep releases.

- Localization updates.

4.22 Weblate 3.5

Released on March 3rd 2019.

- Improved performance of built-in translation memory.
- Added interface to manage global translation memory.
- Improved alerting on bad component state.
- Added user interface to manage whiteboard messages.
- Addon commit message now can be configured.
- Reduce number of commits when updating upstream repository.
- Fixed possible metadata loss when moving component between projects.
- Improved navigation in the Zen mode.
- Added several new quality checks (Markdown related and URL).
- Added support for app store metadata files.
- Added support for toggling GitHub or Gerrit integration.
- Added check for Kashida letters.
- Added option to squash commits based on authors.
- Improved support for XLSX file format.
- Compatibility with Tesseract 4.0.
- Billing addon now removes projects for unpaid billings after 45 days.

4.23 Weblate 3.4

Released on January 22nd 2019.

- Added support for XLIFF placeholders.
- Celery can now utilize multiple task queues.
- Added support for renaming and moving projects and components.
- Include characters counts in reports.
- Added guided adding of translation components with automatic detection of translation files.
- Customizable merge commit messages for Git.
- Added visual indication of component alerts in navigation.
- Improved performance of loading translation files.
- New addon to squash commits prior to push.
- Improved displaying of translation changes.
- Changed default merge style to rebase and made that configurable.
- Better handle private use subtags in language code.
- Improved performance of fulltext index updates.
- Extended file upload API to support more parameters.

4.24 Weblate 3.3

Released on November 30th 2018.

- Added support for component and project removal.
- Improved performance for some monolingual translations.
- Added translation component alerts to highlight problems with a translation.
- Expose XLIFF string resname as context when available.
- Added support for XLIFF states.
- Added check for non writable files in DATA_DIR.
- Improved CSV export for changes.

4.25 Weblate 3.2.2

Released on October 20th 2018.

- Remove no longer needed Babel dependency.
- Updated language definitions.
- Improve documentation for addons, LDAP and Celery.
- Fixed enabling new dos-eol and auto-java-messageformat flags.
- Fixed running setup.py test from PyPI package.
- Improved plurals handling.
- Fixed translation upload API failure in some corner cases.
- Fixed updating Git configuration in case it was changed manually.

4.26 Weblate 3.2.1

Released on October 10th 2018.

- Document dependency on backports.csv on Python 2.7.
- Fix running tests under root.
- Improved error handling in gitexport module.
- Fixed progress reporting for newly added languages.
- Correctly report Celery worker errors to Sentry.
- Fixed creating new translations with Qt Linguist.
- Fixed occasional fulltext index update failures.
- Improved validation when creating new components.
- Added support for cleanup of old suggestions.

4.27 Weblate 3.2

Released on October 6th 2018.

- Add install_addon management command for automated addon installation.
- Allow more fine grained ratelimit settings.
- Added support for export and import of Excel files.
- Improve component cleanup in case of multiple component discovery addons.
- Rewritten Microsoft Terminology machine translation backend.
- Weblate now uses Celery to offload some processing.
- Improved search capabilities and added regular expression search.
- Added support for Youdao Zhiyun API machine translation.
- Added support for Baidu API machine translation.
- Integrated maintenance and cleanup tasks using Celery.
- Improved performance of loading translations by almost 25%.
- Removed support for merging headers on upload.
- Removed support for custom commit messages.
- Configurable editing mode (zen/full).
- Added support for error reporting to Sentry.
- Added support for automated daily update of repositories.
- Added support for creating projects and components by users.
- Built in translation memory now automatically stores translations done.
- Users and projects can import their existing translation memories.
- Better management of related strings for screenshots.
- Added support for checking Java MessageFormat.

See 3.2 milestone on GitHub for detailed list of addressed issues.

4.28 Weblate 3.1.1

Released on July 27th 2018.

- Fix testsuite failure on some setups.

4.29 Weblate 3.1

Released on July 27th 2018.

- Upgrades from older version than 3.0.1 are not supported.
- Allow to override default commit messages from settings.
- Improve webhooks compatibility with self hosted environments.
- Added support for Amazon Translate.
- Compatibility with Django 2.1.
- Django system checks are now used to diagnose problems with installation.

- Removed support for soon shutdown libravatar service.
- New addon to mark unchanged translations as needing edit.
- Add support for jumping to specific location while translating.
- Downloaded translations can now be customized.
- Improved calculation of string similarity in translation memory matches.
- Added support by signing Git commits by GnuPG.

4.30 Weblate 3.0.1

Released on June 10th 2018.

- Fixed possible migration issue from 2.20.
- Localization updates.
- Removed obsolete hook examples.
- Improved caching documentation.
- Fixed displaying of admin documentation.
- Improved handling of long language names.

4.31 Weblate 3.0

Released on June 1st 2018.

- Rewritten access control.
- Several code cleanups that lead to moved and renamed modules.
- New addon for automatic component discovery.
- The import_project management command has now slightly different parameters.
- Added basic support for Windows RC files.
- New addon to store contributor names in PO file headers.
- The per component hook scripts are removed, use addons instead.
- Add support for collecting contributor agreements.
- Access control changes are now tracked in history.
- New addon to ensure all components in a project have same translations.
- Support for more variables in commit message templates.
- Add support for providing additional textual context.

4.32 Weblate 2.x series

4.32.1 Weblate 2.20

Released on April 4th 2018.

- Improved speed of cloning subversion repositories.
- Changed repository locking to use third party library.

- Added support for downloading only strings needing action.
- Added support for searching in several languages at once.
- New addon to configure gettext output wrapping.
- New addon to configure JSON formatting.
- Added support for authentication in API using RFC 6750 compatible Bearer authentication.
- Added support for automatic translation using machine translation services.
- Added support for HTML markup in whiteboard messages.
- Added support for mass changing state of strings.
- Translate-toolkit at least 2.3.0 is now required, older versions are no longer supported.
- Added built in translation memory.
- Added componentlists overview to dashboard and per component list overview pages.
- Added support for DeepL machine translation service.
- Machine translation results are now cached inside Weblate.
- Added support for reordering commited changes.

4.32.2 Weblate 2.19.1

Released on February 20th 2018.

- Fixed migration issue on upgrade from 2.18.
- Improved file upload API validation.

4.32.3 Weblate 2.19

Released on February 15th 2018.

- Fixed imports across some file formats.
- Display human friendly browser information in audit log.
- Added TMX exporter for files.
- Various performance improvements for loading translation files.
- Added option to disable access management in Weblate in favor of Django one.
- Improved glossary lookup speed for large strings.
- Compatibility with django_auth_ldap 1.3.0.
- Configuration errors are now stored and reported persistently.
- Honor ignore flags in whitespace autofixer.
- Improved compatibility with some Subversion setups.
- Improved built in machine translation service.
- Added support for SAP Translation Hub service.
- Added support for Microsoft Terminology service.
- Removed support for advertisement in notification e-mails.
- Improved translation progress reporting at language level.
- Improved support for different plural formulas.

- Added support for Subversion repositories not using stdlayout.
- Added addons to customize translation workflows.

4.32.4 Weblate 2.18

Released on December 15th 2017.

- Extended contributor stats.
- Improved configuration of special characters virtual keyboard.
- Added support for DTD file format.
- Changed keyboard shortcuts to less likely collide with browser/system ones.
- Improved support for approved flag in XLIFF files.
- Added support for not wrapping long strings in gettext PO files.
- Added button to copy permalink for current translation.
- Dropped support for Django 1.10 and added support for Django 2.0.
- Removed locking of translations while translating.
- Added support for adding new strings to monolingual translations.
- Added support for translation workflows with dedicated reviewers.

4.32.5 Weblate 2.17.1

Released on October 13th 2017.

- Fixed running testsuite in some specific situations.
- Locales updates.

4.32.6 Weblate 2.17

Released on October 13th 2017.

- Weblate by default does shallow Git clones now.
- Improved performance when updating large translation files.
- Added support for blocking certain e-mails from registration.
- Users can now delete their own comments.
- Added preview step to search and replace feature.
- Client side persistence of settings in search and upload forms.
- Extended search capabilities.
- More fine grained per project ACL configuration.
- Default value of BASE_DIR has been changed.
- Added two step account removal to prevent accidental removal.
- Project access control settings is now editable.
- Added optional spam protection for suggestions using Akismet.

4.32.7 Weblate 2.16

Released on August 11th 2017.

- Various performance improvements.
- Added support for nested JSON format.
- Added support for WebExtension JSON format.
- Fixed git exporter authentication.
- Improved CSV import in certain situations.
- Improved look of Other translations widget.
- The max-length checks is now enforcing length of text in form.
- Make the commit_pending age configurable per component.
- Various user interface cleanups.
- Fixed component/project/sitewide search for translations.

4.32.8 Weblate 2.15

Released on June 30th 2017.

- Show more related translations in other translations.
- Add option to see translations of current string to other languages.
- Use 4 plural forms for Lithuanian by default.
- Fixed upload for monolingual files of different format.
- Improved error messages on failed authentication.
- Keep page state when removing word from glossary.
- Added direct link to edit secondary language translation.
- Added Perl format quality check.
- Added support for rejecting reused passwords.
- Extended toolbar for editing RTL languages.

4.32.9 Weblate 2.14.1

Released on May 24th 2017.

- Fixed possible error when paginating search results.
- Fixed migrations from older versions in some corner cases.
- Fixed possible CSRF on project watch and unwatch.
- The password reset no longer authenticates user.
- Fixed possible CAPTCHA bypass on forgotten password.

4.32.10 Weblate 2.14

Released on May 17th 2017.

- Add glossary entries using AJAX.
- The logout now uses POST to avoid CSRF.

- The API key token reset now uses POST to avoid CSRF.
- Weblate sets Content-Security-Policy by default.
- The local editor URL is validated to avoid self-XSS.
- The password is now validated against common flaws by default.
- Notify users about important activity with their account such as password change.
- The CSV exports now escape potential formulas.
- Various minor improvements in security.
- The authentication attempts are now rate limited.
- Suggestion content is stored in the history.
- Store important account activity in audit log.
- Ask for password confirmation when removing account or adding new associations.
- Show time when suggestion has been made.
- There is new quality check for trailing semicolon.
- Ensure that search links can be shared.
- Included source string information and screenshots in the API.
- Allow to overwrite translations through API upload.

4.32.11 Weblate 2.13.1

Released on Apr 12th 2017.

- Fixed listing of managed projects in profile.
- Fixed migration issue where some permissions were missing.
- Fixed listing of current file format in translation download.
- Return HTTP 404 when trying to access project where user lacks privileges.

4.32.12 Weblate 2.13

Released on Apr 12th 2017.

- Fixed quality checks on translation templates.
- Added quality check to trigger on losing translation.
- Add option to view pending suggestions from user.
- Add option to automatically build component lists.
- Default dashboard for unauthenticated users can be configured.
- Add option to browse 25 random strings for review.
- History now indicates string change.
- Better error reporting when adding new translation.
- Added per language search within project.
- Group ACLs can now be limited to certain permissions.
- The per project ALCs are now implemented using Group ACL.
- Added more fine grained privileges control.

- Various minor UI improvements.

4.32.13 Weblate 2.12

Released on Mar 3rd 2017.

- Improved admin interface for groups.
- Added support for Yandex Translate API.
- Improved speed of sitewide search.
- Added project and component wide search.
- Added project and component wide search and replace.
- Improved rendering of inconsistent translations.
- Added support for opening source files in local editor.
- Added support for configuring visual keyboard with special characters.
- Improved screenshot management with OCR support for matching source strings.
- Default commit message now includes translation information and URL.
- Added support for Joomla translation format.
- Improved reliability of import across file formats.

4.32.14 Weblate 2.11

Released on Jan 31st 2017.

- Include language detailed information on language page.
- Mercurial backend improvements.
- Added option to specify translation component priority.
- More consistent usage of Group ACL even with less used permissions.
- Added WL_BRANCH variable to hook scripts.
- Improved developer documentation.
- Better compatibility with various Git versions in Git exporter addon.
- Included per project and component stats.
- Added language code mapping for better support of Microsoft Translate API.
- Moved fulltext cleanup to background job to make translation removal faster.
- Fixed displaying of plural source for languages with single plural form.
- Improved error handling in import_project.
- Various performance improvements.

4.32.15 Weblate 2.10.1

Released on Jan 20th 2017.

- Do not leak account existence on password reset form (CVE-2017-5537).

4.32.16 Weblate 2.10

Released on Dec 15th 2016.

- Added quality check to check whether plurals are translated differently.
- Fixed GitHub hooks for repositories with authentication.
- Added optional Git exporter module.
- Support for Microsoft Cognitive Services Translator API.
- Simplified project and component user interface.
- Added automatic fix to remove control characters.
- Added per language overview to project.
- Added support for CSV export.
- Added CSV download for stats.
- Added matrix view for quick overview of all translations
- Added basic API for changes and strings.
- Added support for Apertium APy server for machine translations.

4.32.17 Weblate 2.9

Released on Nov 4th 2016.

- Extended parameters for createadmin management command.
- Extended import_json to be able to handle with existing components.
- Added support for YAML files.
- Project owners can now configure translation component and project details.
- Use “Watched” instead of “Subscribed” projects.
- Projects can be watched directly from project page.
- Added multi language status widget.
- Highlight secondary language if not showing source.
- Record suggestion deletion in history.
- Improved UX of languages selection in profile.
- Fixed showing whiteboard messages for component.
- Keep preferences tab selected after saving.
- Show source string comment more prominently.
- Automatically install Gettext PO merge driver for Git repositories.
- Added search and replace feature.
- Added support for uploading visual context (screenshots) for translations.

4.32.18 Weblate 2.8

Released on Aug 31st 2016.

- Documentation improvements.
- Translations.

- Updated bundled javascript libraries.
- Added list_translators management command.
- Django 1.8 is no longer supported.
- Fixed compatibility with Django 1.10.
- Added Subversion support.
- Separated XML validity check from XML mismatched tags.
- Fixed API to honor HIDE_REPO_CREDENTIALS settings.
- Show source change in Zen mode.
- Alt+PageUp/PageDown/Home/End now works in Zen mode as well.
- Add tooltip showing exact time of changes.
- Add option to select filters and search from translation page.
- Added UI for translation removal.
- Improved behavior when inserting placeables.
- Fixed auto locking issues in Zen mode.

4.32.19 Weblate 2.7

Released on Jul 10th 2016.

- Removed Google web translate machine translation.
- Improved commit message when adding translation.
- Fixed Google Translate API for Hebrew language.
- Compatibility with Mercurial 3.8.
- Added import_json management command.
- Correct ordering of listed translations.
- Show full suggestion text, not only a diff.
- Extend API (detailed repository status, statistics, …).
- Testsuite no longer requires network access to test repositories.

4.32.20 Weblate 2.6

Released on Apr 28th 2016.

- Fixed validation of components with language filter.
- Improved support for XLIFF files.
- Fixed machine translation for non English sources.
- Added REST API.
- Django 1.10 compatibility.
- Added categories to whiteboard messages.

4.32.21 Weblate 2.5

Released on Mar 10th 2016.

- Fixed automatic translation for project owners.
- Improved performance of commit and push operations.
- New management command to add suggestions from command line.
- Added support for merging comments on file upload.
- Added support for some GNU extensions to C printf format.
- Documentation improvements.
- Added support for generating translator credits.
- Added support for generating contributor stats.
- Site wide search can search only in one language.
- Improve quality checks for Armenian.
- Support for starting translation components without existing translations.
- Support for adding new translations in Qt TS.
- Improved support for translating PHP files.
- Performance improvements for quality checks.
- Fixed sitewide search for failing checks.
- Added option to specify source language.
- Improved support for XLIFF files.
- Extended list of options for import_project.
- Improved targeting for whiteboard messages.
- Support for automatic translation across projects.
- Optimized fulltext search index.
- Added management command for auto translation.
- Added placeables highlighting.
- Added keyboard shortcuts for placeables, checks and machine translations.
- Improved translation locking.
- Added quality check for AngularJS interpolation.
- Added extensive group based ACLs.
- Clarified terminology on strings needing review (formerly fuzzy).
- Clarified terminology on strings needing action and not translated strings.
- Support for Python 3.
- Dropped support for Django 1.7.
- Dropped dependency on msginit for creating new gettext PO files.
- Added configurable dashboard views.
- Improved notifications on parse errors.
- Added option to import components with duplicate name to import_project.
- Improved support for translating PHP files
- Added XLIFF export for dictionary.

- Added XLIFF and gettext PO export for all translations.
- Documentation improvements.
- Added support for configurable automatic group assignments.
- Improved adding of new translations.

4.32.22 Weblate 2.4

Released on Sep 20th 2015.

- Improved support for PHP files.
- Ability to add ACL to anonymous user.
- Improved configurability of import_project command.
- Added CSV dump of history.
- Avoid copy/paste errors with whitespace characters.
- Added support for Bitbucket webhooks.
- Tigher control on fuzzy strings on translation upload.
- Several URLs have changed, you might have to update your bookmarks.
- Hook scripts are executed with VCS root as current directory.
- Hook scripts are executed with environment variables describing current component.
- Add management command to optimize fulltext index.
- Added support for error reporting to Rollbar.
- Projects now can have multiple owners.
- Project owners can manage themselves.
- Added support for `javascript-format` used in gettext PO.
- Support for adding new translations in XLIFF.
- Improved file format autodetection.
- Extended keyboard shortcuts.
- Improved dictionary matching for several languages.
- Improved layout of most of pages.
- Support for adding words to dictionary while translating.
- Added support for filtering languages to be managed by Weblate.
- Added support for translating and importing CSV files.
- Rewritten handling of static files.
- Direct login/registration links to third-party service if that's the only one.
- Commit pending changes on account removal.
- Add management command to change site name.
- Add option to configure default committer.
- Add hook after adding new translation.
- Add option to specify multiple files to add to commit.

4.32.23 Weblate 2.3

Released on May 22nd 2015.

- Dropped support for Django 1.6 and South migrations.
- Support for adding new translations when using Java Property files
- Allow to accept suggestion without editing.
- Improved support for Google OAuth 2.0
- Added support for Microsoft .resx files.
- Tuned default robots.txt to disallow big crawling of translations.
- Simplified workflow for accepting suggestions.
- Added project owners who always receive important notifications.
- Allow to disable editing of monolingual template.
- More detailed repository status view.
- Direct link for editing template when changing translation.
- Allow to add more permissions to project owners.
- Allow to show secondary language in Zen mode.
- Support for hiding source string in favor of secondary language.

4.32.24 Weblate 2.2

Released on Feb 19th 2015.

- Performance improvements.
- Fulltext search on location and comments fields.
- New SVG/javascript based activity charts.
- Support for Django 1.8.
- Support for deleting comments.
- Added own SVG badge.
- Added support for Google Analytics.
- Improved handling of translation filenames.
- Added support for monolingual JSON translations.
- Record component locking in a history.
- Support for editing source (template) language for monolingual translations.
- Added basic support for Gerrit.

4.32.25 Weblate 2.1

Released on Dec 5th 2014.

- Added support for Mercurial repositories.
- Replaced Glyphicon font by Awesome.
- Added icons for social authentication services.
- Better consistency of button colors and icons.

- Documentation improvements.
- Various bugfixes.
- Automatic hiding of columns in translation listing for small screens.
- Changed configuration of filesystem paths.
- Improved SSH keys handling and storage.
- Improved repository locking.
- Customizable quality checks per source string.
- Allow to hide completed translations from dashboard.

4.32.26 Weblate 2.0

Released on Nov 6th 2014.

- New responsive UI using Bootstrap.
- Rewritten VCS backend.
- Documentation improvements.
- Added whiteboard for site wide messages.
- Configurable strings priority.
- Added support for JSON file format.
- Fixed generating mo files in certain cases.
- Added support for GitLab notifications.
- Added support for disabling translation suggestions.
- Django 1.7 support.
- ACL projects now have user management.
- Extended search possibilities.
- Give more hints to translators about plurals.
- Fixed Git repository locking.
- Compatibility with older Git versions.
- Improved ACL support.
- Added buttons for per language quotes and other special characters.
- Support for exporting stats as JSONP.

4.33 Weblate 1.x series

4.33.1 Weblate 1.9

Released on May 6th 2014.

- Django 1.6 compatibility.
- No longer maintained compatibility with Django 1.4.
- Management commands for locking/unlocking translations.
- Improved support for Qt TS files.

- Users can now delete their account.
- Avatars can be disabled.
- Merged first and last name attributes.
- Avatars are now fetched and cached server side.
- Added support for shields.io badge.

4.33.2 Weblate 1.8

Released on November 7th 2013.

- Please check manual for upgrade instructions.
- Nicer listing of project summary.
- Better visible options for sharing.
- More control over anonymous users privileges.
- Supports login using third party services, check manual for more details.
- Users can login by e-mail instead of username.
- Documentation improvements.
- Improved source strings review.
- Searching across all strings.
- Better tracking of source strings.
- Captcha protection for registration.

4.33.3 Weblate 1.7

Released on October 7th 2013.

- Please check manual for upgrade instructions.
- Support for checking Python brace format string.
- Per component customization of quality checks.
- Detailed per translation stats.
- Changed way of linking suggestions, checks and comments to strings.
- Users can now add text to commit message.
- Support for subscribing on new language requests.
- Support for adding new translations.
- Widgets and charts are now rendered using Pillow instead of Pango + Cairo.
- Add status badge widget.
- Dropped invalid text direction check.
- Changes in dictionary are now logged in history.
- Performance improvements for translating view.

4.33.4 Weblate 1.6

Released on July 25th 2013.

- Nicer error handling on registration.
- Browsing of changes.
- Fixed sorting of machine translation suggestions.
- Improved support for MyMemory machine translation.
- Added support for Amagama machine translation.
- Various optimizations on frequently used pages.
- Highlights searched phrase in search results.
- Support for automatic fixups while saving the message.
- Tracking of translation history and option to revert it.
- Added support for Google Translate API.
- Added support for managing SSH host keys.
- Various form validation improvements.
- Various quality checks improvements.
- Performance improvements for import.
- Added support for voting on suggestions.
- Cleanup of admin interface.

4.33.5 Weblate 1.5

Released on April 16th 2013.

- Please check manual for upgrade instructions.
- Added public user pages.
- Better naming of plural forms.
- Added support for TBX export of glossary.
- Added support for Bitbucket notifications.
- Activity charts are now available for each translation, language or user.
- Extended options of import_project admin command.
- Compatible with Django 1.5.
- Avatars are now shown using libravatar.
- Added possibility to pretty print JSON export.
- Various performance improvements.
- Indicate failing checks or fuzzy strings in progress bars for projects or languages as well.
- Added support for custom pre-commit hooks and committing additional files.
- Rewritten search for better performance and user experience.
- New interface for machine translations.
- Added support for monolingual po files.
- Extend amount of cached metadata to improve speed of various searches.

- Now shows word counts as well.

4.33.6 Weblate 1.4

Released on January 23rd 2013.

- Fixed deleting of checks/comments on string deletion.
- Added option to disable automatic propagation of translations.
- Added option to subscribe for merge failures.
- Correctly import on projects which needs custom ttkit loader.
- Added sitemaps to allow easier access by crawlers.
- Provide direct links to string in notification e-mails or feeds.
- Various improvements to admin interface.
- Provide hints for production setup in admin interface.
- Added per language widgets and engage page.
- Improved translation locking handling.
- Show code snippets for widgets in more variants.
- Indicate failing checks or fuzzy strings in progress bars.
- More options for formatting commit message.
- Fixed error handling with machine translation services.
- Improved automatic translation locking behaviour.
- Support for showing changes from previous source string.
- Added support for substring search.
- Various quality checks improvements.
- Support for per project ACL.
- Basic string tests coverage.

4.33.7 Weblate 1.3

Released on November 16th 2012.

- Compatibility with PostgreSQL database backend.
- Removes languages removed in upstream git repository.
- Improved quality checks processing.
- Added new checks (BB code, XML markup and newlines).
- Support for optional rebasing instead of merge.
- Possibility to relocate Weblate (for example to run it under /weblate path).
- Support for manually choosing file type in case autodetection fails.
- Better support for Android resources.
- Support for generating SSH key from web interface.
- More visible data exports.
- New buttons to enter some special characters.

- Support for exporting dictionary.
- Support for locking down whole Weblate installation.
- Checks for source strings and support for source strings review.
- Support for user comments for both translations and source strings.
- Better changes log tracking.
- Changes can now be monitored using RSS.
- Improved support for RTL languages.

4.33.8 Weblate 1.2

Released on August 14th 2012.

- Weblate now uses South for database migration, please check upgrade instructions if you are upgrading.
- Fixed minor issues with linked git repos.
- New introduction page for engaging people with translating using Weblate.
- Added widgets which can be used for promoting translation projects.
- Added option to reset repository to origin (for privileged users).
- Project or component can now be locked for translations.
- Possibility to disable some translations.
- Configurable options for adding new translations.
- Configuration of git commits per project.
- Simple antispam protection.
- Better layout of main page.
- Support for automatically pushing changes on every commit.
- Support for e-mail notifications of translators.
- List only used languages in preferences.
- Improved handling of not known languages when importing project.
- Support for locking translation by translator.
- Optionally maintain `Language-Team` header in po file.
- Include some statistics in about page.
- Supports (and requires) django-registration 0.8.
- Caching of counted strings with failing checks.
- Checking of requirements during setup.
- Documentation improvements.

4.33.9 Weblate 1.1

Released on July 4th 2012.

- Improved several translations.
- Better validation while creating component.
- Added support for shared git repositories across components.

- Do not necessary commit on every attempt to pull remote repo.
- Added support for offloading indexing.

4.33.10 Weblate 1.0

Released on May 10th 2012.

- Improved validation while adding/saving component.
- Experimental support for Android component files (needs patched ttkit).
- Updates from hooks are run in background.
- Improved installation instructions.
- Improved navigation in dictionary.

4.34 Weblate 0.x series

4.34.1 Weblate 0.9

Released on April 18th 2012.

- Fixed import of unknown languages.
- Improved listing of nearby messages.
- Improved several checks.
- Documentation updates.
- Added definition for several more languages.
- Various code cleanups.
- Documentation improvements.
- Changed file layout.
- Update helper scripts to Django 1.4.
- Improved navigation while translating.
- Better handling of po file renames.
- Better validation while creating component.
- Integrated full setup into syncdb.
- Added list of recent changes to all translation pages.
- Check for not translated strings ignores format string only messages.

4.34.2 Weblate 0.8

Released on April 3rd 2012.

- Replaced own full text search with Whoosh.
- Various fixes and improvements to checks.
- New command updatechecks.
- Lot of translation updates.
- Added dictionary for storing most frequently used terms.

- Added /admin/report/ for overview of repositories status.
- Machine translation services no longer block page loading.
- Management interface now contains also useful actions to update data.
- Records log of changes made by users.
- Ability to postpone commit to Git to generate less commits from single user.
- Possibility to browse failing checks.
- Automatic translation using already translated strings.
- New about page showing used versions.
- Django 1.4 compatibility.
- Ability to push changes to remote repo from web interface.
- Added review of translations done by others.

4.34.3 Weblate 0.7

Released on February 16th 2012.

- Direct support for GitHub notifications.
- Added support for cleaning up orphaned checks and translations.
- Displays nearby strings while translating.
- Displays similar strings while translating.
- Improved searching for string.

4.34.4 Weblate 0.6

Released on February 14th 2012.

- Added various checks for translated messages.
- Tunable access control.
- Improved handling of translations with new lines.
- Added client side sorting of tables.
- Please check upgrading instructions in case you are upgrading.

4.34.5 Weblate 0.5

Released on February 12th 2012.

- **Support for machine translation using following online services:**
  - Apertium
  - Microsoft Translator
  - MyMemory
- Several new translations.
- Improved merging of upstream changes.
- Better handle concurrent git pull and translation.
- Propagating works for fuzzy changes as well.

- Propagating works also for file upload.
- Fixed file downloads while using FastCGI (and possibly others).

4.34.6 Weblate 0.4

Released on February 8th 2012.

- Added usage guide to documentation.
- Fixed API hooks not to require CSRF protection.

4.34.7 Weblate 0.3

Released on February 8th 2012.

- Better display of source for plural translations.
- New documentation in Sphinx format.
- Displays secondary languages while translating.
- Improved error page to give list of existing projects.
- New per language stats.

4.34.8 Weblate 0.2

Released on February 7th 2012.

- Improved validation of several forms.
- Warn users on profile upgrade.
- Remember URL for login.
- Naming of text areas while entering plural forms.
- Automatic expanding of translation area.

4.34.9 Weblate 0.1

Released on February 6th 2012.

- Initial release.

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