



# MULTI-LANGUAGE MANAGEMENT

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# About this presentation / manual

- This presentation ...
  - was created by Dr. Günther Rezniczek and uses a (modified) slideshow template of Ruhr-Universität Bochum
  - is openly shared for use by others – feel free to modify (including removal of branding)
  - was first shown at the Feb 23, 2022, REDCap Africa monthly call
- All screenshots are from REDCap v12.2.4

# Multilingual support in REDCap before v12

- Native

- Language files and different projects for different languages
- Branching logic

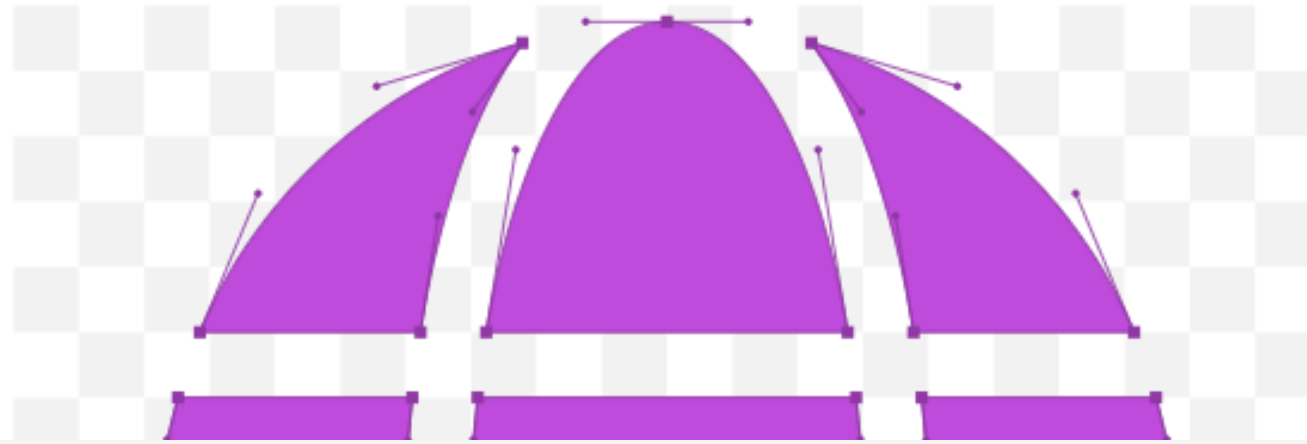
- External Modules

- Multilingual
- Second Language
- Language Switcher
- (Babel)
- (Right-to-Left Module)

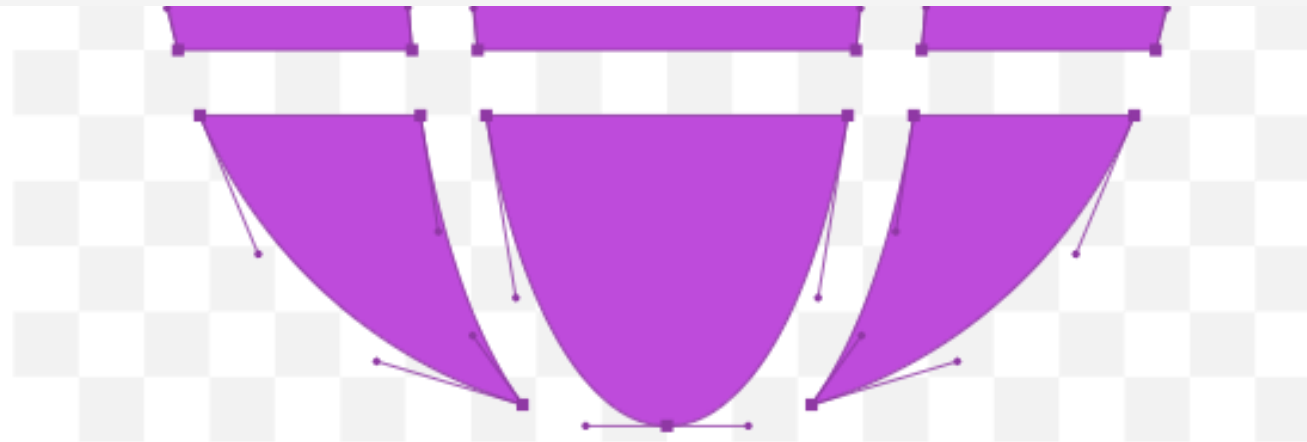
**NOT SATISFACTORY**

→ A better solution was needed!

Enter ...



# Native Multi-Language Support in REDCap



`<i class="fas fa-globe"></i>`

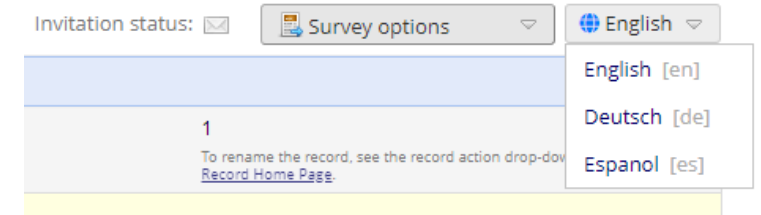
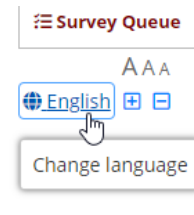
# What is Multi-Language Management (MLM)?

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- New feature in REDCap v12+
- Provides the ability to present REDCap data entry interfaces in multiple languages
  - Data Entry Pages
  - Questions/Choices
  - Survey Settings
  - ASIs and Alerts & Notifications
  - PDFs
- Compatible with piping, field embedding, branching logic

# What is Multi-Language Management (MLM)?

- Users / survey respondents can switch among the available languages at will



- Easy to administer, purely opt-in

# How does it work? – Basic concepts

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There are **two** primary translation components for each language:

## User interface language

i.e., all the strings that are displayed by REDCap in the context of data entry or surveys, the default values of which originate from a Language.ini file (as set in Control Center or Project Settings)

→ (can/should be) provided as  
**SYSTEM LANGUAGES**

## Project-specific language

i.e., all data dictionary items (questions/field labels, choice labels, etc.), survey settings (survey title, survey instructions, etc.), survey queue custom message, ASI and alert message subjects and contents, etc.

(can override user interface items)

# How does it work? – System languages

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What are “**system**” languages?

- Languages that are configured in a REDCap instance’s **Control Center**
- They provide translations for the **stock user interface** strings
- They are **the best way** to initialize a language inside a project

And last but not least:

- They provide a language choice for survey respondents on **general pages** (i.e. pages that cannot be linked with a specific project)
    - Generic survey endpoint (access code page)
    - Error messages
- Thus, the system languages should always be a **superset of all project languages**



# Setting up system languages

1. Go to **Control Center** and bring up the **Multi-Language Management** page
2. Click the **Add a new language** button
3. Click the **Import from file** button

**1** Miscellaneous Modules

- Multi-Language Management**
- Clinical Data Interoperability Services
- Dynamic Data Pull (DDP) - Custom
- Custom Application Links
- Publication Matching

## Multi-Language Management

On this page you can create and configure multiple display languages available on this REDCap installation that are available for projects to use for their User Interface translations. When used in a project, user interface translations defined here will be copied to the project and can be freely customized there. Do not forget to **save your changes** (keyboard shortcut: **CTRL-S**) at any time on this page when you are done editing. NOTE: This page will not auto-translate your text for you, but provides tools so that you may easily translate them yourself.

Languages

Settings

Save Changes

System languages can be defined below, after which they will become available to import into any project for the User Interface translations only. Modifying any languages on this page will not affect existing projects but only project created hereafter. The default language is the language that is shown when no user language preference is found.

**+ Add a new language**

Currently, there are no system languages configured.

## Add New Language

### Language ID

Enter a unique ID for this language

A unique identifier for this language. It is recommended to use the ISO code, such as 'en' or 'en-US' for English, or 'es' for Spanish. **Use only letters and hyphen.**  
[View list of ISO codes](#)

### Language Display Name

Enter a display name

This is the name of the language as shown in the language selectors. This should be entered in its language, such as 'English' or 'Deutsch' (for German).

Sort Override (optional)

Provide alternate name for sorting purposes

If set, this will be used instead of the display name for determining the sort order of languages in language selectors.

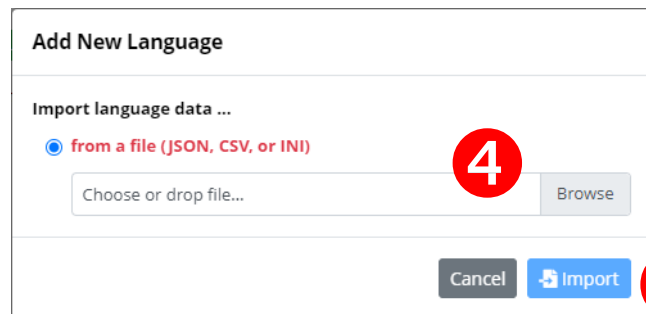
**3** Import from file

Cancel

**+ Add Language**

# Setting up system languages (ctd.)

4. Drop a file containing UI translations onto the **Choose or drop file...** input (or click **Browse**)  
This can be ...
  - A Language.ini file from **REDCap Language Center**  
[https://redcap.vanderbilt.edu/plugins/redcap\\_consortium/language\\_library.php](https://redcap.vanderbilt.edu/plugins/redcap_consortium/language_library.php)
  - A translation file from the **Multi-Language Management (MLM) Translations Repository**  
[https://redcap.vanderbilt.edu/surveys/?\\_\\_report=7LEEXCTLYA7TJDJ3](https://redcap.vanderbilt.edu/surveys/?__report=7LEEXCTLYA7TJDJ3)
5. Click **Import**
6. Back on the **Add New Language** dialog, enter an *ID* and a *Display Name* (if not already set) and optionally a *Sort Override*
7. Finally, click the **Add Language** button



**Add New Language**

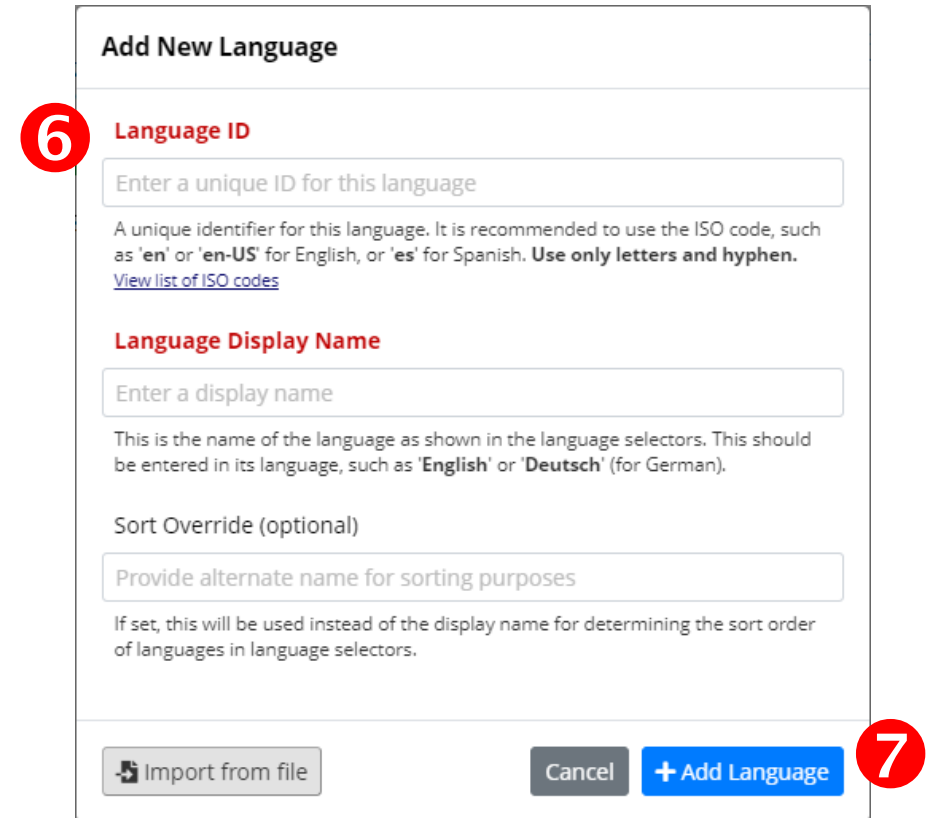
Import language data ...

☒ from a file (JSON, CSV, or INI)

Choose or drop file... **4**

Browse

Cancel **Import** **5**



**Add New Language**

**6** **Language ID**

Enter a unique ID for this language

A unique identifier for this language. It is recommended to use the ISO code, such as 'en' or 'en-US' for English, or 'es' for Spanish. Use only letters and hyphen.  
[View list of ISO codes](#)

**Language Display Name**

Enter a display name

This is the name of the language as shown in the language selectors. This should be entered in its language, such as 'English' or 'Deutsch' (for German).

Sort Override (optional)

Provide alternate name for sorting purposes

If set, this will be used instead of the display name for determining the sort order of languages in language selectors.

**7** **Import from file** **Cancel** **+ Add Language**

# Setting up system languages (ctd.)

8. Set whether this language is **Active\*** and **Visible\***
9. If this is a right-to-left language (such as Arabic or Hebrew), turn on **RTL**
10. Finally, click **Save Changes** to commit all changes to the database

## Multi-Language Management

On this page you can create and configure multiple display languages available on this REDCap installation that are available for projects to use for their User Interface translations. When used in a project, user interface translations defined here will be copied to the project and can be freely customized there. Do not forget to **save your changes** (keyboard shortcut: **CTRL-S**) at any time on this page when you are done editing. NOTE: This page will not auto-translate your text for you, but provides tools so that you may easily translate them yourself.

[Languages](#)
[User Interface](#)
[Settings](#)
[Save Changes](#)

10

System languages can be defined below, after which they will become available to import into any project for the User Interface translations only. Modifying any languages on this page will not affect existing projects but only project created hereafter. The default language is the language that is shown when no user language preference is found.

[+ Add a new language](#)

ID	Display Name	%	Active	Visible	Default	RTL ?	Actions
en	English		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<a href="#">Edit</a> <a href="#">User Interface</a> <a href="#">Add</a> <a href="#">Delete</a>

8

9

- \* **Active** = The language is available for selection on non-project pages seen by survey respondents
- \* **Visible** = The language is listed as an available language on a project's import dialog

# Getting started with MLM in projects

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There are **3** methods for initializing languages within projects:

1. Build from scratch (**not recommended**)
2. Import from a file (.csv, .json, .ini)
3. Import from the SYSTEM LANGUAGES (**preferred**)

Then, data dictionary (and other items) can be translated

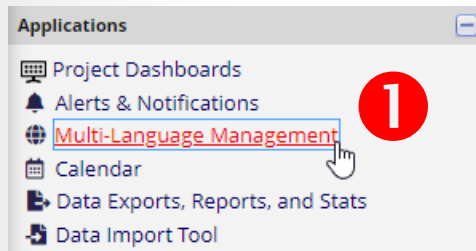
- On the project's MLM setup page
- Offline (by a professional translator)
  1. Export all items that need to be translated
  2. Import the translations

**Note:**

The MLM setup page is locked in **production** projects. Switch to draft mode first.

# Adding languages to projects

1. Bring up the **Multi-Language Management** page by clicking the link in the **Applications** men
2. Click the **Add a new language** button



Note: **Project Design** user rights are required to be able to access the MLM setup page (this may change in future versions)

## Multi-Language Management

On this page you can create and configure multiple display languages for your project (for surveys, data entry forms, alerts, survey invitations, etc.) or alternatively export and import translations using a file. Do not forget to **save your changes** (keyboard shortcut: **CTRL-S**) at any time on this page when you are done editing. NOTE: This page will not auto-translate your text for you, but provides tools so that you may easily translate them yourself. [Learn more.](#)

🌐 Languages ⚙️ Settings — 💾 Save Changes

Manage the available languages in this project using the table and options below by following these steps:

1. Create your default language (i.e., used when creating your fields, instruments, etc.). This will serve as the reference for the other languages.
2. Add other languages that you wish to offer as a translation of the default language.
3. Translate your default text into different languages by clicking the tabs above or the icons to the right of each language below.
4. Test your translations by switching back and forth between languages on your data entry forms and/or surveys. Note that only active languages will be available for selection on those places.
5. Learn how to implement some language-related action tags, such as `@LANGUAGE-SET`, if desired. Learn about them here: [@ Action Tags](#)

+ Add a new language

2

Currently, there are no languages set up in this project.

### (Optional) For surveys, designate a field for storing a participant's language preference

Use this feature to set a source for a participant's language preference (their initial language setting). This must be a radio or dropdown field with choices matching the language **ID** you have defined for each language above, or a text box field with no field validation. The value of this field can be set manually through data entry/data import or with the `@LANGUAGE-CURRENT-FORM/SURVEY` action tags. The value of this setting will dictate the language used for rendering Automated Survey Invitations, Alerts, and PDFs. Text box fields are denoted with [T] while radio and dropdown fields are denoted with [R] and, in case they include all language keys, are highlighted with a green background.

📌 Language preference field: -- Select a field --

NOTE: Similar to a designated email field, when this field exists on multiple events in longitudinal projects, on a repeating instrument, or on a repeating event, the field's value will be synchronized across all instances/events so that changing it in one location will change the value across all events/instances where the field appears.

# Adding languages to projects (ctd.)

3. Click the **Import from file or system** button  
(unless you want to start translating everything from scratch – then skip to step 7)
4. Select a language from the **available system languages** (or import from a file)
5. Click the **Import** button

**Add New Language**

**Language ID**

Enter a unique ID for this language

A unique identifier for this language. It is recommended to use the ISO code, such as 'en' or 'en-US' for English, or 'es' for Spanish. **Use only letters and hyphen.**  
[View list of ISO codes](#)

**Language Display Name**




Enter a display name

This is the name of the language as shown in the language selectors. This should be entered in its language, such as 'English' or 'Deutsch' (for German).

**Sort Override (optional)**

Provide alternate name for sorting purposes


If set, this will be used instead of the display name for determining the sort order of languages in language selectors.

 Import from file or system **3**  

**Add New Language**

**Import language data ...**

☐ **from a file (JSON, CSV, or INI)**

Choose or drop file... 



*Include the following:*

- ☒ Translations of user interface items
- ☒ Translations of project-specific items\*  
\*These include: fields, survey settings, ASIs, alerts, form and event names, missing data code labels, ...

– or –

☒ **from available system languages**

**4**

  **5**

# Adding languages to projects (ctd.)

6. Back on the **Add New Language** dialog, enter an *ID* and a *Display Name* (if not already set) and optionally a *Sort Override*
7. Click the **Add Language** button

**Add New Language**

**Language ID**  
  
A unique identifier for this language. It is recommended to use the ISO code, such as 'en' or 'en-US' for English, or 'es' for Spanish. **Use only letters and hyphen.**  
[View list of ISO codes](#)

**Language Display Name**  
  
This is the name of the language as shown in the language selectors. This should be entered in its language, such as 'English' or 'Deutsch' (for German).

**Sort Override (optional)**  
  
If set, this will be used instead of the display name for determining the sort order of languages in language selectors.

# Adding languages to projects (ctd.)

8. Turn on/off languages by setting their **Active** state
9. Set whether a language represents the **Default** or should serve as **Fallback**, and whether it's a right-to-left (**RTL**) language
10. Finally, click the **Save Changes** button to commit your changes

## Multi-Language Management

On this page you can create and configure multiple display languages for your project (for surveys, data entry forms, alerts, survey invitations, etc.) or alternatively export and import translations using a file. Do not forget to **save your changes** (keyboard shortcut: **CTRL-S**) at any time on this page when you are done editing. NOTE: This page will not auto-translate your text for you, but provides tools so that you may easily translate them yourself. [Learn more.](#)

[Languages](#)
[Forms/Surveys](#)
[Alerts](#)
[Misc](#)
[User Interface](#)
[Settings](#)
[Save Changes](#)

Manage the available languages in this project using the table and options below by following these steps:

1. Create your default language (i.e., used when creating your fields, instruments, etc.). This will serve as the reference for the other languages.
2. Add other languages that you wish to offer as a translation of the default language.
3. Translate your default text into different languages by clicking the tabs above or the icons to the right of each language below.
4. Test your translations by switching back and forth between languages on your data entry forms and/or surveys. Note that only active languages will be available for selection on those places.
5. Learn how to implement some language-related action tags, such as `@LANGUAGE-SET`, if desired. Learn about them here: [@ Action Tags](#)

[+ Add a new language](#)

ID	Display Name	Active	Default	Fallback	RTL ?	Actions
en	English	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<a href="#">Edit</a> <a href="#">Add</a> <a href="#">Alerts</a> <a href="#">Misc</a> <a href="#">User Interface</a> <a href="#">Translations</a> <a href="#">Delete</a>
de	Deutsch	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<a href="#">Edit</a> <a href="#">Add</a> <a href="#">Alerts</a> <a href="#">Misc</a> <a href="#">User Interface</a> <a href="#">Translations</a> <a href="#">Delete</a>



# Understanding Default and Fallback

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## Default (also named **Reference**)

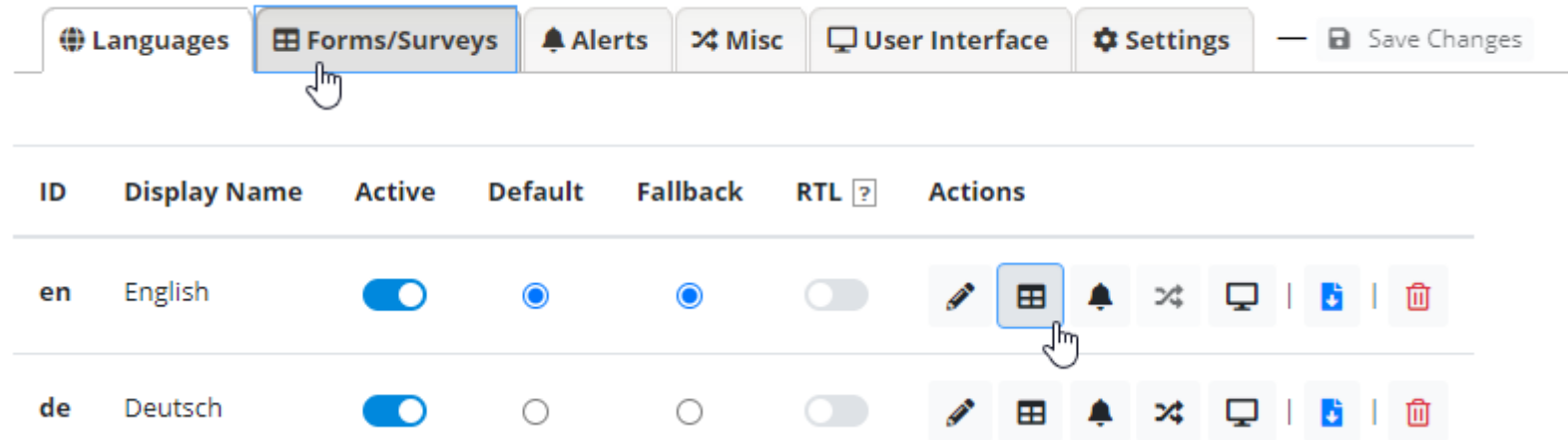
- This is the language used during project design, i.e. for all data dictionary items such as field labels, choice labels, etc., as well as for survey settings, ASI or Alerts messages, Missing Data Code labels, etc.
- This usually corresponds (but not necessarily) with the language set as the project language (on the Project Settings page) by an admin.
- There must always be a default language, but this does not mean that it needs to be shown (i.e. it's **Active** state can be off).






















## Fallback

- This is the language that should be used in case a translation is not available in the language that currently should be displayed on a (data entry or survey) page.
- In case there is no fallback translation available, the item will be shown in the default language.

# Translating project items

1. Click on tab or the corresponding icon in the languages table



 Languages	 Forms/Surveys	 Alerts	 Misc	 User Interface	 Settings	—  Save Changes
ID	Display Name	Active	Default	Fallback	RTL ?	Actions
en	English	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	          
de	Deutsch	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	          

- **Forms / Surveys** (fields, survey settings, ASIs, survey queue customizations)
- **Alerts**
- **Misc** (Missing Data Codes, PDF customizations, Protected Email customizations)
- **User Interface** – usually set from a system language, but allows project-specific overrides

# Forms/Surveys (default language)

1. On each language's tab, control whether this languages is available for selection, separately for data entry forms and surveys.
2. The default language tab (indicated by an asterisk) is special.
3. There is nothing to translate, but fields can be excluded from translation (i.e., they won't show up on the other languages' tabs)

Note, a common pitfall is to forget to enable languages!

(Full control comes at a price!)

The screenshot shows the REDCap 'Forms/Surveys' interface. At the top, there is a navigation bar with tabs: Languages, Forms/Surveys, Alerts, Misc, User Interface, and Settings. A 'Save Changes' button is on the right. Below the navigation bar, a red text prompt says 'Click a button below to select a language to translate:'. There are two buttons: '\* English' (highlighted with a red circle '2') and 'Deutsch'. Below these buttons is a yellow warning box stating: 'This is the default language. Thus, items cannot be edited here, but they can be modified in the Online Designer (or via Data Dictionary upload) and the Survey Settings page. However, fields and individual survey settings can be set to be excluded from translation here. If you wish to begin/continue translating the default language text, click a language button above.' Below the warning box, a paragraph explains the page's purpose: 'Use this page to manage which instruments will be translated, separately in data entry and survey modes. Furthermore, use it to navigate to the various sub-pages, such as field exclusions (default language only), or translations of field items (labels, etc.), survey settings (title, instructions, etc.) and ASI emails.' Below this text is a table with columns: Instrument, Data Entry, Survey, Fields, Survey Settings, and ASIs. The 'Fields' column has a red circle '3' next to it. The table lists three instruments: 'Basic Demography Form', 'Second Form', and 'PDF'. The 'Data Entry' and 'Survey' columns have toggle switches. The 'Fields' column has 'Exclude' links. The 'Survey Settings' column has 'Translate' links. The 'ASIs' column has 'Translate' links or dashes. A red circle '1' is placed over the 'Basic Demography Form' row.

Instrument	Data Entry	Survey	Fields	Survey Settings	ASIs
Basic Demography Form	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">Exclude</a>	<a href="#">Translate</a>	<a href="#">Translate</a>
Second Form	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">Exclude</a>	<a href="#">Translate</a>	—
PDF	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">Exclude</a>	—	—

# Forms/Surveys (other languages)

1. On each language's tab, control whether this languages is available for selection, separately for data entry forms and surveys.
2. Depending on whether an instrument is enabled as a survey and has ASIs, **Translate** buttons are available.
3. In case the Survey Queue is enable with custom texts, translation buttons are available

Note, a common pitfall is to forget to enable languages!

(Full control comes at a price!)

Click a button below to select a language to translate:

\* English Deutsch

Use this page to manage which instruments will be translated, separately in data entry and survey modes. Furthermore, use it to navigate to the various sub-pages, such as field exclusions (default language only), or translations of field items (labels, etc.), survey settings (title, instructions, etc.) and ASI emails.

3 Custom Survey Queue Text

Custom Survey Login Error Message

Instrument	Data Entry	Survey	Fields	Survey Settings	ASIs
Basic Demography Form	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Translate	<input checked="" type="checkbox"/> Translate	<input checked="" type="checkbox"/> Translate
Second Form	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Translate	<input checked="" type="checkbox"/> Translate	—
PDF	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Translate	—	—

# Forms/Surveys – Fields

1. Use the **Go to field** dropdown to quickly navigate to a specific field
2. Enter translations. When appropriate, a **Rich Text Editor** button is available
3. Indicators reflect the translation status of items/subitems (green = complete)

## Hints:

- The copy icons next to the default text can be used to quickly copy/paste them to translation tools
- In case an item changes after having been translated, this will be indicated:

2 ☐ first\_name

■ Section header translation:

■ Default text: Contact Details

■ Field label translation:

Default text: Given name

Languages Forms/Surveys Alerts Misc User Interface Settings Save Changes

Click a button below to select a language to translate:

\* English Deutsch

## Fields

Instrument: Basic Demography Form - Survey Settings | ASIs

CTRL-G - Go to field: 1 ☐ Hide translated items

HINT: You may check the checkbox next to each field to mark it as "done" if its text does not require translation.

---

2 ☐ first\_name

■ Section header translation:  Rich Text Editor

■ Default text: Contact Information

■ Field label translation:  Rich Text Editor

Default text: Given name

■ Translation of the @Action Tag value(s):

Action Tag	Translation
@PLACEHOLDER	<input type="text" value=" Geben Sie Ihren Vornamen ein"/>
	Default text:  Enter the first name

# Forms/Surveys – Survey settings

1. Translate each item
2. Use the **Rich Text Editor** for any settings supporting HTML

Note, there is nothing to translate for the default language (marked with an asterisk). When clicked, this will take you to the field exclusion page)

Languages Forms/Surveys Alerts Misc User Interface Settings Save Changes

Click a button below to select a language to translate:

\* English Deutsch

## Survey Settings

Instrument: Basic Demography Form - Fields | ASIs

### Survey Title and Prompts

**1** Translation of the survey title:

Basisdaten

Default text: Basic Demography Form

Translation of the survey instructions:

<p><strong>Bitte beantworten Sie den Fragebogen.</strong></p> <p>Vielen Dank!</p>

Default text: <p><strong>Please complete the survey below.</strong></p> <p>Thank you!</p>

Translation of the survey completion text:

Enter translation

Default text: <p><strong>Thank you for taking the survey.</strong></p> <p>Have a nice day!</p>

Rich Text Editor

**2** Rich Text Editor

# Forms/Surveys – ASIs

1. Translate each item
2. Use the **Rich Text Editor** for any settings supporting HTML

Note, ASIs for each event must →  
be translated separately

Make sure that piping is replicated  
faithfully in the translations!

[Languages](#)
[Forms/Surveys](#)
[Alerts](#)
[Misc](#)
[User Interface](#)
[Settings](#)
[Save Changes](#)

Click a button below to select a language to translate:

[\\* English](#)
[Deutsch](#)

**ASIs** Instrument: **Basic Demography Form** – [Fields](#) | [Survey Settings](#)

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**Event 1** (event\_1\_arm\_1)

Language-specific sender display name: ASI Anzeigenname 1

Default text: [🔗](#) ASI Display Name

Translation of the email subject: Enter translation

Default text: [🔗](#) ASI Subject

Translation of the message body: Enter translation

Default text: [🔗](#) <p>Please take this survey.</p><p>You may open the survey in your web browser by clicking the link below:<br>[survey-link]</p><p>If the link above does not work, try copying the link below into your web browser:<br>[survey-url]</p><p>This link is unique to you and should not be forwarded to others.</p>

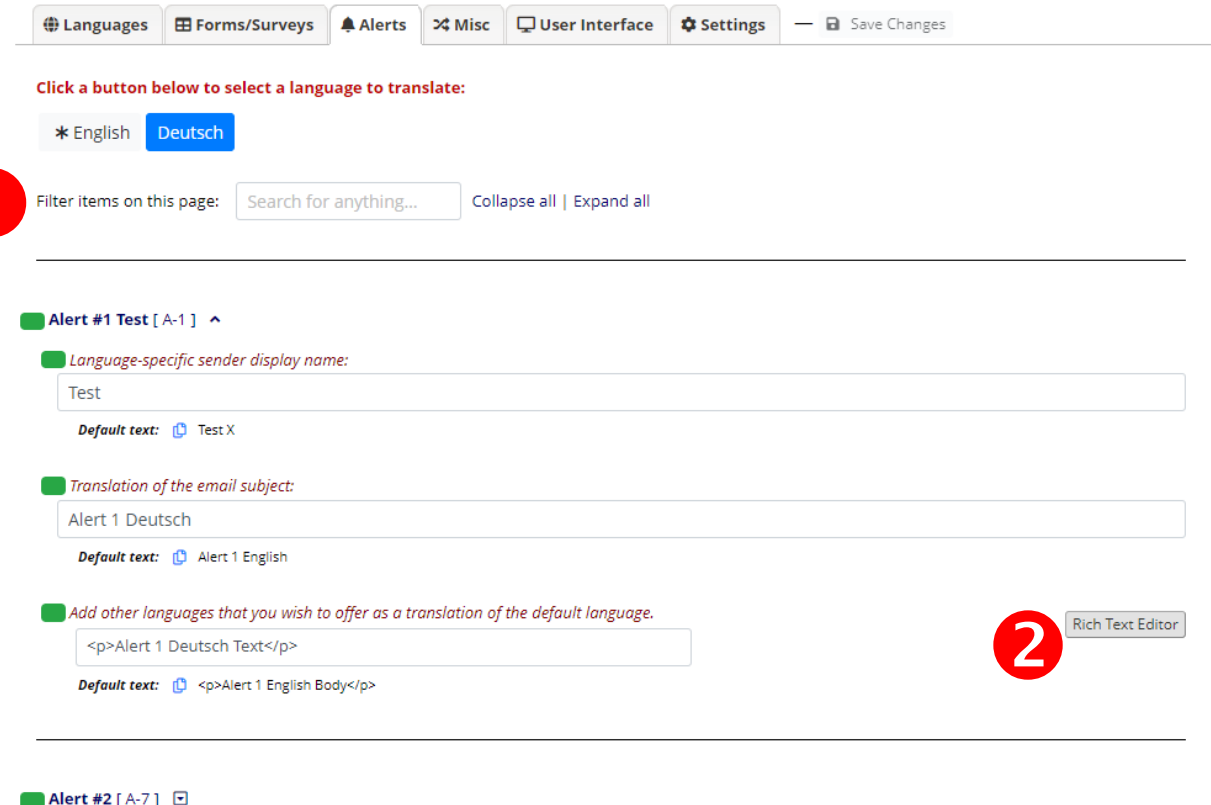
[Rich Text Editor](#)
2

# Alerts

1. Use the search box to quickly find the item you would like to translate / edit.
2. Use the **Rich Text Editor** for any settings supporting HTML

For Alerts, there are important → settings to be made on the default language's page!

Make sure that piping is replicated → faithfully in the translations!



Languages Forms/Surveys Alerts Misc User Interface Settings Save Changes

Click a button below to select a language to translate:

\* English Deutsch

1 Filter items on this page: Search for anything... Collapse all | Expand all

Alert #1 Test [ A-1 ] ^

Language-specific sender display name:

Test

Default text: Test X

Translation of the email subject:

Alert 1 Deutsch

Default text: Alert 1 English

Add other languages that you wish to offer as a translation of the default language.

<p>Alert 1 Deutsch Text</p>

Default text: <p>Alert 1 English Body</p>

2 Rich Text Editor

Alert #2 [ A-7 ] □



# Alerts – Default language special options

1. Individual alerts can be excluded from translation
2. Since alerts may trigger under circumstances when no language can be determined automatically, set a **Language Source** for each event.
  - **Language preference field** or **User's or survey respondent's active language**
  - What to choose will depend on how the alert is triggered

Select the default →  
language to get  
to this page!

Languages
Forms/Surveys
Alerts
Misc
User Interface
Settings
Save Changes

Click a button below to select a language to translate:

\* English
Deutsch

**This is the default/reference language.** Thus, items cannot be edited here, but they can be modified on the *Alerts & Notifications* page. However, individual alerts can be set to be excluded from translation here. **If you wish to begin/continue translating the default language text, click a language button above.**

Use this page to manage which alerts should be translated. Alerts that are turned off will not show up for (nor be translated into) other languages. Note that since alerts can be set up for various purposes and triggered in different contexts, it is not possible to automatically determine the language that should be used to render an alert. Therefore, for each alert, the source for the language information needs to be set. This can either be the '**Language preference field**' (as set on the 'Languages' tab; this is the default), or the '**User's or survey respondent's active language**' (as set in their profile/browser cookie).

ID	Alert	Excluded	Language Source
A-1	#1 Test	<input type="checkbox"/>	Language preference field
A-7	#2	<input type="checkbox"/>	User's or survey respondent's active language

# Miscellaneous items

- Missing Data Codes
- PDF customizations
- Protected Email customizations

For the default language, there →  
is nothing to translate.

Tabs will only show when there →  
are customizations set outside  
of MLM. This means, it is not  
possible to add new text using  
MLM, only replace text (with  
translations).

Languages
Forms/Surveys
Alerts
Misc
User Interface
Settings
Save Changes

Click a button below to select a language to translate:

\* English
Deutsch

Note that some tabs on this page, such as Missing Data Codes or Protected Email Mode, will only be shown when the corresponding features are enabled in this project. If nothing is displayed below, then there is nothing to translate here.

Missing Data Codes
PDF
Protected Email

Missing Data Code Translations

Code	Translation
NI	Keine Information
	Default text: No information
INV	Ungültig
	Default text: Invalid
UNK	Unbekannt
	Default text: Unknown

# What determines the currently active\* language?

\* i.e., the language a page, email, PDF is rendered in

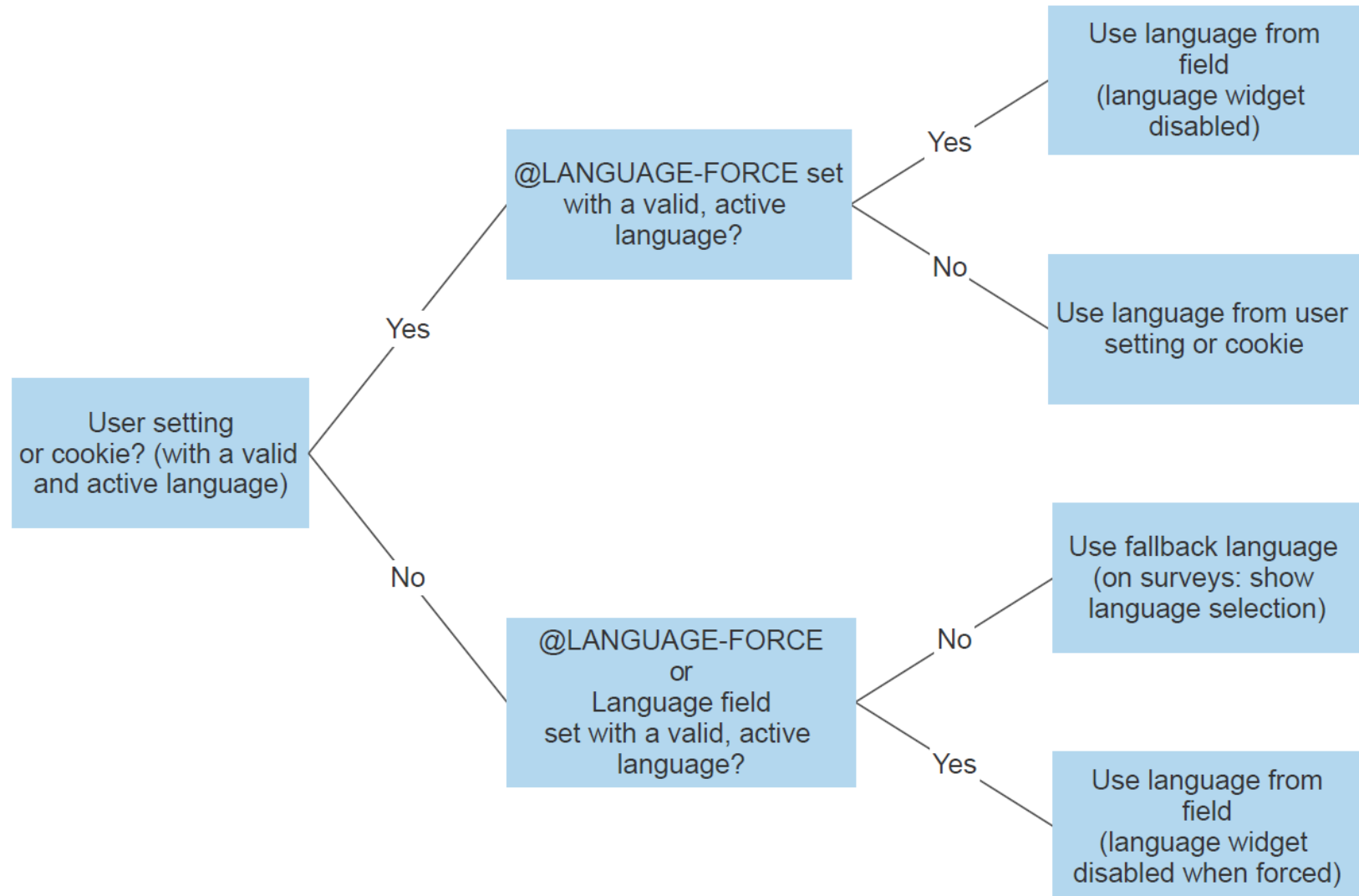
Generally:

- A user's (survey respondent's) choice:
  - Set via the language selection widget (or a radio field when used with the **@LANGUAGE-SET** action tag)
  - On repeat visits through a cookie value (surveys, non-authenticated users) or user setting (data entry pages, authenticated users)

When this is not available, e.g., in a process triggered by ASI logic:

- By a field in the project:
  - Set through the **Language preference field** option on the MLM setup page
  - Its value must correspond to the ID of an *active* language
  - Can be set manually (e.g., on an intake form) or captured into a field with **@LANGUAGE-CURRENT-FORM/SURVEY** action tag
  - Can force a language with the **@LANGUAGE-FORCE** action tags








# Language determination algorithm



# Exporting languages (for re-use/offline translation)

1. Click on the **Export** button in the language's row in the languages table
2. Choose the items that should be included in the export
3. Choose whether to include translation prompts and/or default values, as well as the file format (JSON or CSV)
4. Click the **Download Language** button

For offline translation, include **prompts** and **default values**!  
For transfers or backups, these are not needed.

ID	Display Name	Active	Default	Fallback	RTL ?	Actions
de	Deutsch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	      

**Export Language — [ de: Deutsch ]**

Please choose what to include in the export file, and set export options.

*Include the following:*

- ☒ Translations of user interface items
- ☒ Translations of instruments names
- ☒ Translations of field items
- ☒ Translations of survey settings and Survey Queue items
- ☒ Translations of automated survey invitations
- ☒ Translations of alerts
- ☒ Translations of event names
- ☒ Translations of missing data code labels
- ☒ Translations of PDF customizations
- ☒ Translations of Protected Email settings

*Export Options:*








- ☐ Include translation prompts
- ☐ Include default values
- ☒ JSON
- ☐ CSV — ☒ Comma (,) ☐ Semicolon (;) ☐ Tab

NOTE: The export will reflect the currently **SAVED** state only. Thus, any unsaved changes will **NOT** be contained in the export file.

Cancel
Download Language (4)

# Importing (updated) translations

1. Click on the **Edit language** button in the corresponding row in the languages table
2. Click on the **Import from file or system** button
3. Drag the translation file into the **Choose or drop file...** box (or click **Browse**)
4. Make sure to select **use imported values**
5. Click the **Import** button
6. Click the **Apply Changes** button
7. Save your changes

ID	Display Name	Active	Default	Fallback	RTL ?	Actions
de	Deutsch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	      

1

Edit Language — [ de ]

**Language ID**  


A unique identifier for this language. It is recommended to use the ISO code, such as 'en' or 'en-US' for English, or 'es' for Spanish. **Use only letters and hyphen.**  
[View list of ISO codes](#)

**Language Display Name**  


This is the name of the language as shown in the language selectors. This should be entered in its language, such as 'English' or 'Deutsch' (for German).

**Sort Override (optional)**  


If set, this will be used instead of the display name for determining the sort order of languages in language selectors.

2

Edit Language — [ de ]

**Import language data ...**  
☒ **from a file (JSON, CSV, or INI)**

Choose or drop file...

**Include the following:**  
☒ Translations of user interface items  
☒ Translations of project-specific items\*  
\*These include: fields, survey settings, ASIs, alerts, form and event names, missing data code labels, ...

-- or --

☐ **from available system languages**

**Import options:**  
When merging,  
☐ keep local values  
☒ **use imported values**  
☐ Import empty values (clears local values)

3

4

6

5

# Change tracking


**⚠ ATTENTION:** The original values of some translated items have changed, and thus some translations might be out of date. [Review 1 changed items.](#)

MLM has a change tracking mechanism built in. This will detect changes in items that occurred after such an item had been translated. When the MLM setup page is accessed, such items will be displayed in the **Review Changed Items** popup.

1. **Accept** an individual item as still valid or Edit an item to update its translation, or
2. **Accept all translations as still valid**, or
3. **Export** all items of a language for offline revision (and re-import later)

**⚠ Review Changed Items**

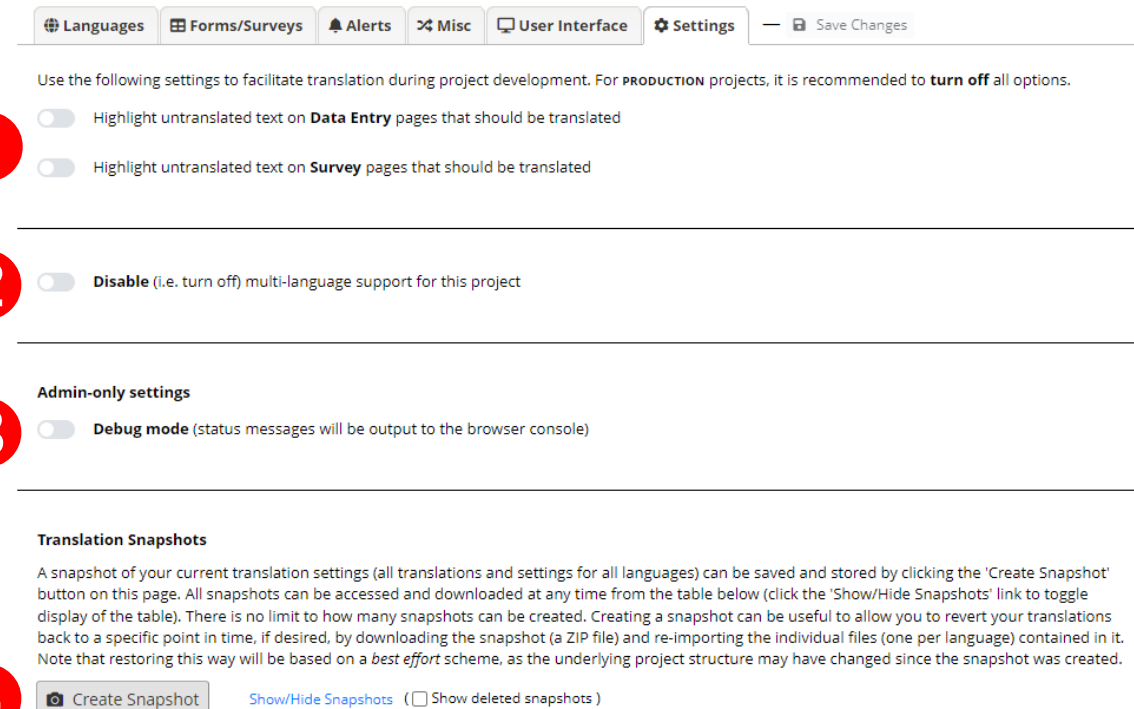
The values of some project or user interface items have changed since translations for these were last saved. Thus, the translations might be outdated and should be reviewed.

Item	Default text	Translation	Action
<i>Deutsch</i>			 Export <b>3</b>
The 'Change language' tooltip text:	Change language	Sprache ändern	Accept   Edit <b>1</b>
Accept all translations as still valid <b>2</b>			Okay

# Other MLM settings / Translation snapshots

There are a number of options available under the **Settings** tab, such as the option to ...

1. **Highlight untranslated text** (this is useful during development as a visually check for items missing translations in the set language on data entry form and surveys)
2. **Disable** multi-language support in the project (this can be useful for troubleshooting a suspected bug)
3. Enable **Debug mode** (for admins only; a lot of data is output to the browser console)
4. **Create Snapshot** (this will archive a ZIP with export files for all languages)



The screenshot shows the REDCap Settings tab with various configuration options. The tabs at the top are Languages, Forms/Surveys, Alerts, Misc, User Interface, Settings, and Save Changes. The Settings tab is active, displaying instructions: "Use the following settings to facilitate translation during project development. For PRODUCTION projects, it is recommended to turn off all options."

Options 1 and 2 are under the main settings section:

- 1. ☐ Highlight untranslated text on **Data Entry** pages that should be translated
- 2. ☐ Highlight untranslated text on **Survey** pages that should be translated

Option 3 is under the "Admin-only settings" section:

- 3. ☐ **Debug mode** (status messages will be output to the browser console)

Option 4 is under the "Translation Snapshots" section:

A snapshot of your current translation settings (all translations and settings for all languages) can be saved and stored by clicking the 'Create Snapshot' button on this page. All snapshots can be accessed and downloaded at any time from the table below (click the 'Show/Hide Snapshots' link to toggle display of the table). There is no limit to how many snapshots can be created. Creating a snapshot can be useful to allow you to revert your translations back to a specific point in time, if desired, by downloading the snapshot (a ZIP file) and re-importing the individual files (one per language) contained in it. Note that restoring this way will be based on a *best effort* scheme, as the underlying project structure may have changed since the snapshot was created.

4.  [Show/Hide Snapshots](#) (☐ Show deleted snapshots)