

# Internationalization

## Configuration

Internationalization refers to the process of designing a software application so that it can be adapted to various languages and regions without engineering changes. Yii offers several tools that help with internationalisation of a website such as message translation and number- and date-formatting.

There are two languages defined in the Yii application: source language and target language.

Source language is the language original application messages are written in directly in the code such as:

```
echo Yii::t('app', 'I am a message!');
```

The target language is the language that should be used to display the current page i.e. the language that original messages need to be translated to. It is defined in the application configuration like the following:

```
return [  
    'id' => 'applicationID',  
    'basePath' => dirname(__DIR__),  
    // ...  
    'language' => 'sv-SE',  
    // ...  
]
```

The message translation feature in Yii works simply as finding a translation of the message from a source language into a target language. To use the message translation feature you wrap your original message strings with a call to the `Yii::t()` method. The first parameter of this method takes a category which helps to distinguish the source of messages in different parts of the application and the second parameter is the message itself.

Yii tries to load an appropriate translation according to the current application language from one of the message sources. A message source is a set of files or a database that provides translation messages. The following configuration example defines a messages source that takes the messages from PHP files:

```

'components' => [
    // ...
    'i18n' => [
        'translations' => [
            'app*' => [
                'class' => 'yii\i18n\PhpMessageSource',
                'basePath' => '@app/messages',
                'sourceLanguage' => 'sv-SE',
                'fileMap' => [
                    'app' => 'app.php',
                ],
            ],
        ],
    ],
],

```

In the above `app*` is a pattern that specifies which categories are handled by the message source. In this case we're handling everything that begins with `app`. Message files are located in `@app/messages`, the messages directory in your application directory. The `fileMap` array defines which file is to be used for which category. Instead of configuring `fileMap` you can rely on convention which is to use the category name as the file name (e.g. category `app/error` will result in the file name `app/error.php` under the `basePath`).

When translating the message for `Yii::t('app', 'This is a string to translate!')` and an application language `sv-SE`, Yii will first look for a file `@app/messages/sv-SE/app.php` to retrieve the list of available translations. If there is file `sv-SE` it will try `ru` as well before failing.

## Translation

Currently, there is only one PHP file that manages all strings throughout the application. This file is named `App.php` and contains an array that links the original string in English to a translated string in Swedish. It is located within the path `messages/sv-SE/` of the application folder and is structured as followed:

```

return [
    'Welcome'    => 'Hej',
    'Simulator' => 'Simulator',
    'Booking'    => 'Bokning',
];

```