

Lap Timer Localization Guide

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This documentation is a collection of information and conversations on localizing the LapTimer family of apps to *new languages* (named „localization“).

Intro

Starting with version 14.4, I've fully internationalized LapTimer. All text can be customized and adopted to languages other than English. The first localization available is German, my native language. In case you want to support translating LapTimer to a third language, please let me know.

Localizations available (but not necessarily complete) are:

- English
- German
- Spanish
- Italian
- Chinese (traditional)
- Chinese (simplified)
- Japanese

What is required to localize LapTimer to a further language (let us name it *new language*)? There are several text files that need to be translated.

Two consist of simple mappings from English phrases to phrases in *new language*. One of the files is for all the text fragments included in LapTimer's code, the other is for translation of LapTimer's Settings. You start with the files including English / German mapping. You do not need to speak German at all to translate, but you need to fully understand English including the technical terms used within LapTimer.

```
Localization.strings  
Root.strings
```

The next file is the definition of all the alerts and messages shown by LapTimer. It is available in any of the existing to translate it to *new language*.

```
AlertResourcesLocalized.xrd
```

Finally, there is a text describing LapTimer on AppStore and a slightly different one on PlayStore :

```
AppStoreDescription.txt
```

Important: you need to use an UTF8 capable plain text editor to customize the above files. Do NOT use Word or something like this. My recommendation is to use Notepad++ on Windows and TextWrangler on MacOSX. Both can be downloaded from the net for free.

As soon as all this has been done and sent to me (phase 1), I will generate an app version including the new language and provide it to you for testing. There will be areas where text needs to be shortened because it is too long. Once this is done (phase 2), localization is finished and will be available in the next public release.

My estimate for translating LapTimer is 2 days for a new language including QA.

As I keep developing LapTimer, I will contact you from time to time to add new language elements. In case you do not want me to request this deltas (because you don't have the time available etc), please drop me a note so I can look for an alternative.

Translators will be named as contributors within LapTimer. Please let me know how you want to be mentioned.

Standard Terms

There is a number of terms used throughout LapTimer that need to be translated consistently. This is **very important** to not confuse users. Please keep an eye on this and always double check:

“Track” denotes a racing circuit. It is defined once (by a “Track Set”) and is driven and timed several times resulting in so called “Laps”. A “lap” denotes one round driven, it is associated with a “time lapped”, and “data recordings” including GPS, acceleration, OBD and other data.

Data recordings are made up from a series of “fixes”. As a sample, when using a 1 Hz GPS sensor, a lap of one minute will result in a data recording made up from 60 fixes including a position on track each. So “fix” is used (and translated) like a “position” although it includes a lot more data than just a position in LapTimer.

The next one is more complicated.

“POI” is the general term used both for points of interest (passive located information on a map) and triggers (active located information on a map). Sometimes the terms “Information POI” and “Trigger” are used to be clear but there exist exceptions.

A group of POIs is named “POI Set”. In case this POI set contains triggers too, it is typically named “Track Set”. In case we are sure a track set is in focus, the term “Track Set” is used. In cases either a Track Set or a POI Set is talked about, the term “POI Set” is used as the one that is more general.

Text Length

Space is always limited on mobile devices. Even in English – where it is comparably easy to use short words – space is too limited sometimes and abbreviations need to be used. Watch out when you translate to other languages. Try to use very short wording. In case you see no chance to stay on or below the space used by the English original, use abbreviations. This topic typically becomes visible once a localized version of LapTimer is generated for testing.

Customizing AlertRessourcesLocalized.xrd

The file defines the alerts shown throughout LapTimer. Using an unusual file ending, it is actually a simple text file (following XML syntax). Please use any plain text editor to edit it. Do not use any rich text editor. In case your favorite plain text editor cannot open .xrd files, add the .txt ending.

An AlertREssourceLocalized.xrd file exists for every language LapTimer is localized for. The original file is the English version, that is the file I typically pass on to translators.

As an XML file, a special format needs to be kept. Changes go to marked areas only. Not all English text included is translated. The following sample marks all areas to be translated to 'new language' in red. Leave everything else as it is.

```
<ALERT_RESOURCE RESOURCE_ID="1100" COMMENT="ConfirmationDeleteVehicle">
  <ALERT_TYPE> CONFIRMATION_ALERT </ALERT_TYPE>
  <HELP_ID> 0 </HELP_ID>
  <DEFAULT_BUTTON> 1 </DEFAULT_BUTTON>
  <TITLE> "Confirmation" </TITLE>
  <MESSAGE>
    "When deleting vehicle '^1', all references are moved to 'Un-
    specified' vehicle. Continue?"
  </MESSAGE>
  <BUTTONS>
    <TEXT> "Yes" </TEXT>
    <TEXT> "No" </TEXT>
  </BUTTONS>
</ALERT_RESOURCE>
```

Some caveats: the escape sequences ^1, ^2, ^3 are replaced by some text (the vehicle name in the example above) at runtime. This sequences can be moved within the red text but need to be remain to let LapTimer work correctly. Double quotes cannot be used within the string sequence and should be avoided. In case you cannot use the single quote, please escape the double quote to appear in the text like this: \"

Customizing Localizable.strings and Root.strings

Again, this is a plain text file. Different to the .xrd file, it contains simple mappings from English wording to wording in *new language*. As this file does not exist for English, I typically distribute the English -> German mapping file. It needs to be translated to English -> *new language*.

The structure is pretty simple, here is an example:

```
"Laps: %hu / GPS Fixes: %lu" = "Runden: %hu / GPS Positionen: %lu";
```

Again, only the text marked in red can be changed. Everything else needs to remain as it is. The English text is used to find the correct mapping, even adding a space will destroy the mapping and generate issues. The .strings file has placeholders too. In this file, they are escaped by a percent sign. Examples are %lu or %hu etc. These escapes must not be changed. Here, even the order is given (i.e. first %hu und then %lu) und must remain as it is. Another escape sequence is \n denoting a line feed. This can be changed as appropriate.

Customizing AppStore / PlayStore Description

Please simply translate the text to *new language*. There is no text formatting necessary. The description is plain text. Please note that translating this is the last priority, it is not part of the app itself and I do not make localized store descriptions available for every language.