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Abstract

Excel-Add-In to support multi-language enabled applications/spreadsheets

Excel Multi-Language Support Add-In

Documentation

# Synopsis

This Excel Add-in (xlam file) offers advanced functionality for excel spreadsheets or applications with are meant to be used in a multi-language environment. It offers simple functions to display text elements as e.g. cell content, (shape) captions and messages in several languages by just selection of a language setting.

This language setting can be based on the selected excel user interface language but is in general independent form such setting. Its also possible to have some text elements bound to the excel system language, while others are dependent of the excel user language.

This excel add-in also offers advanced development support with advanced editing functionality that is integrated with both the excel and the excel VBE environment. Cross-referencing usage of text elements in cells, shapes and VBA (macro) code is also supported as well as widow (unused text elements) and orphan (undefined text elements) control.

It consists of a two-level database (table) of text elements, identified and selected by a key – module (larger application area) and identifier (identifying a specific element). The first level (optional) is a table usually placed in the specific excel workbook and a second table placed in the add-in itself. If a specific text element is requested and is available in the first level this will get returned. If not the second level will get searched and any find returned – else an error/default text. This allows to have a set of generic text messages that can be extended od superseded by application/document specific text elements.

The (sorted) tables are held in memory for fast access to all text elements.

# NLS Table structure

Each text element is identified by a module (string) and identifier (string) value, which the system combines to a key (which is also provided as a pre-calculated value to avoid startup recalculation issues). In addition, the level of the text element (App for application = user workbook or Plt for platform = add-in). Two optional fields are available:

* Type (e.g. cell text, caption, message, error message) describing the intended use of the text element to support translation
* Additional is intended for any user defined purposes, e.g. specifying a face-id for the display of custom menu elements

Following those fields, the NLS table can have 1 – n columns, each one representing a supported language.

The following example shows a two language setup – supporting English an German (Deutsch).

Ein spezifischer Textbaustein wird über =GetNLSText(module,identifier,<P1>,<P2>,<P3>,<P4>) aufgerufen, wobei bis zu vier Textteile, die in der Tabelle als Platzhalter definiert sind (\_\_&1\_\_ bis \_\_&4\_\_) eingefügt werden können. Die Spalte Additional ist für Sonderfunktionen vorbehalten (dzt. Keine Sonderfunktion für den Entwickler definiert).

Module mit tabellenspezifischen Fehlermeldungen sollten mit der Buchstabenkombination TEM (Table Error Message – einstellbar über den Parameter Err Msg Module Regex (für Basisinformation zur Definition einer Regex = regular expression siehe zB

[VBA Regex Regular Expressions Guide )](https://wellsr.com/vba/2018/excel/vba-regex-regular-expressions-guide/) ) im Bereich Identifiers and other Settings auf der Seite Super. Damit kann die Auswahl der Textbausteine für Fehlermeldungen auf relevante Einträge eingeschränkt werden.