OMNIS Localization

Developers and distributors in non-English speaking countries may need to localize OMNIS. Localization provides a mechanism to configure the following OMNIS internal items:

- The names of the days of the week.

- The names of the months of the year.

- Separator characters.

- The text for Yes/No, OK/Cancel, True/False, Am/Pm and On/Off.

- The national sort ordering.

Localization as described here applies to OMNIS as a whole; localization of specific libraries is discussed in a separate document.

Storage of Localization Data

All libraries share the same set of data, stored in an OMNIS data file, the **localization database**, called OMNISLOC.DF1, located in the OMNIS local folder.

OMNISLOC contains a data slot for configuration data; each record in that slot contains a complete set of data corresponding to a language.

It also contains a data slot with a single record, which identifies the current language i.e. the current set of configuration data.

The Localization Data

The following items are stored for each language.

Days of Week

This comprises 2 strings for each of the 7 days of the week, allowing for a full name such as Wednesday, and an abbreviated name, such as Wed.

Months of Year

This comprises 2 strings for each of the 12 months of the year, allowing for a full name such as August, and an abbreviated name such as Aug.

Separators

These comprise the following:

The decimal point used for all numeric fields

The thousands separator used for numbers

The function parameter separator

The decimal point used when importing data.

The field separator used when importing.

The sequence used for quoting names in the notation.

Standard Text Strings

These comprise the strings for Yes and No, OK and Cancel, True and False, Am and Pm, and On and Off.

National Sort Ordering

This comprises the text string which defines the sort ordering for national fields. To eliminate any cross-platform ambiguity introduced by the different character sets involved, this is stored as a 512 byte ASCII representation of the 256 byte sort ordering. Each byte in the sort ordering represents the position of the character equal to that byte in the sort order.

The natcmp() Function

This allows the developer to compare 2 values using the national sort ordering.

    natcmp (value1, value2)

OMNIS converts both values to strings before doing the comparison.

OMNIS uses the same rules for comparing the strings as it does for normal strings, except that it performs the comparison using the national sort ordering.

natcmp returns 0 if the strings are equal, 1 if value1 > value2, and -1 if value 1 < value2.
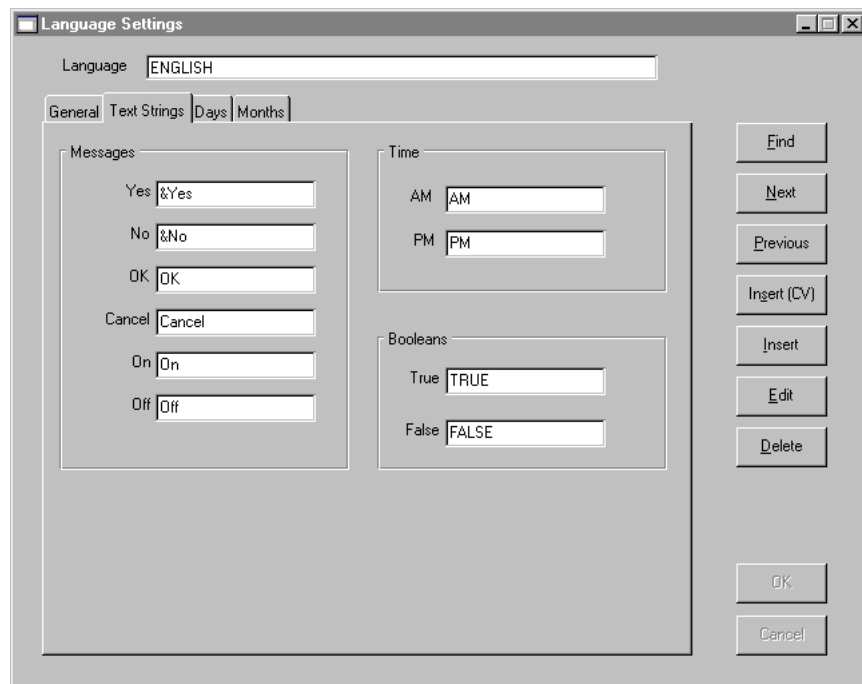
User Interface

The OMNIS preferences accessed from the IDE Tools>>Options menu line allow you to assign a new language from the dropdown list in the **newlanguage** property. The current language is shown in the **language** property. The language must already be defined in the localization data file.

The new language does not apply until the user quits and restarts OMNIS. Note that if the localization database is shared by several users, then the new language setting affects each of them, as soon as they restart.

An OMNIS library, OMNISLOC.LBR is provided that allows the developer to create and edit language information. To use it:

- Take a backup of the current version of OMNISLOC.DF1. You may prefer to work on the backup copy rather than the live copy, in which case you should make a working copy as well as a backup copy.

- Open the OMNISLOC.LBR library, found in the OMNIS local folder. You are prompted for the location of the localization data file and a localization menu is installed on the IDE menu bar, to the right of the Tools menu.

- Select Current Language to display the language in use

- Select Language Records to create a new set of language information, or to edit an existing one. This displays a dialog containing a set of tabbed panes and the standard OMNIS Insert, Edit, Find, Next and Previous buttons.

You use the Next and Previous buttons to move through the records in the data file, the Find button to locate a particular language record, and Edit to modify data already present in the data file.

Two Insert buttons are available. Insert allows you to create a brand new record, while Insert CV allows you to make a copy of an existing language record and edit that. This is particularly useful for cases where there are only minimal differences between two language records. To use Insert CV:

- Display the language record you want to copy

- Click on Insert CV

A new record is created. Remember to edit the language name as well as the specific internal data.

- When all the data is input, click on OK to store it and close the library.

- If you were working on a copy of the data file, move it back to the local folder.

- Close the OMNISLOC library.

Any fields that are left blank will default to a single space. Some of the fields on the General tab are limited in terms of which characters can be used; for example trying to define a letter as a decimal separator will not be allowed, and will generate an error message.

Notation

There is no requirement to manipulate localization data at runtime, so the localization notation is minimal.

❑ **$root.$prefs.$language**

This is a read-only attribute which returns the name of the language OMNIS is currently using.

❑ **$root.$prefs.$newlanguage**

This is an assignable attribute which allows the developer to read and assign the name of the new language i.e. the language OMNIS will use when it restarts.

❑ **$hascurrlangnationalsortorder**

Every data file stores its national sort order. When you create a new data file, OMNIS stores the national sort order for the current language in the data file.

$hascurrlangnationalsortorder is an attribute of a data file e.g.

$root.$datas.DataFile.$hascurrlangnationalsortorder

Its value is true if the sort order matches that for the current language, and false otherwise.

It is assignable. You cannot set it to false, but setting it to true you warn the developer that this is a potentially lengthy operation with a no/yes message; if they want to continue, it drops all of the indexes from the data file, changes the sort order to that for the current language, and rebuilds all of the indexes.