

Omnis Localization

If you want to sell your Omnis solution to non-English speaking markets you may want to localize the Omnis runtime engine. Specifically, localization lets you localize the following Omnis items, some of which are visible to the end-user:

- ☐ The names of the days of the week, and 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 performed using the trans.lbr which 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, which is located in the Local folder under the main Omnis 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.

Creating a New Language record

An Omnis library, OMNISLOC.LBR, lets you 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 Local folder under the main Omnis folder. You are prompted for the location of the localization data file (omnisloc.df1).

The Language Setting dialog is displayed.

Language Settings

Language:

General | Text Strings | Days | Months

Separators

Decimal Point:

Thousands:

Parameters:

Import Separators

Decimal Point:

Field:

Notation Quote Char:

Sort Order

00,01,02,03,04,05,06,07,08,09,0A,0B,0C,0D,0E,0F,10,11,12,13,14,15,16,17,18,19,1A,1B,1C,1D,1E,1F,20,21,22,23,24,25,26,27,28,29,2A,2B,2C,2D,2E,2F,30,31,32,33,34,35,36,37,38,39,3A,3B,3C,3D,3E,3F,40,41,42,43,44,45,46,47,48,49,4A,4B,4C,4D,4E,4F,50,51,52,53,54,55,56,57,58,59,5A,5B,5C,5D,5E,5F,60,61,62,63,64,65,66,67,68,69,6A,6B,6C,6D,6E,6F,70,71,72,73,74,75,76,77,78,79,7A,7B,7C,7D,7E,7F,80,81,82,83,84,85,86,87,88,89,8A,8B,8C,8D,8E,8F,90,91,92,93,94,95,96,97,98,99,9A,9B,9C,9D,9E,9F,A0,A1,A2,A3,A4,A5,A6,A7,A8,A9,AA,AB,AC,AD,AE,AF,B0,B1,B2,B3,B4,B5,B6,B7,B8,B9,BA,BB,BC,BD,BE,BF,C0,C1,C2,C3,C4,C5,C6,C7,C8,C9,CA,CB,CC,CD,CE,CF,DA,DB,DC,DD,DE,DF,EA,EB,EC,ED,EE,EF,FA,FB,FC,FD,FE,FF

Find | Next | Previous | Insert (CV) | Insert | Edit | Delete

OK | Cancel

The Insert button lets you create a brand new record, while Insert CV lets you 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 you have finished editing the language record, click on OK to save it.
- 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.

The Localization Data

The following items are stored for each language record. Note that certain items can have a special value that instructs Omnis to read the information from the current operating system settings.

Days of Week

This comprises two 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.

Leave these empty to use the current operating system settings.

Months of Year

This comprises two 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.

Leave these empty to use the current operating system settings.

Separators

These comprise the following:

- ☐ The decimal point used for all numeric fields. Set this to the character '0' (zero) to use the current operating system setting.
- ☐ The thousands separator used for numbers. Set this to the character '0' (zero) to use the current operating system setting.
- ☐ 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.

Setting Am or Pm to the character '0' (zero) instructs Omnis to use the current operating system setting.

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.

Special characters need to be coded according to the ‘Mac OS Roman’ character set in order to give the correct sort order, such as A, Ä, a, ä, B, and so on.

Locale Identifier for Unicode

In the Unicode version of Omnis Studio, you specify the Locale Identifier to specify a language to be used in Omnis (the Sort Order field is labeled Locale when running the Unicode version). There is a check box below the Locale field, “Use Locale For Defaulted Items” which determines the locale used for language items that have been left empty, so that they get a default value from the system:

1. If the Use Locale check box is checked, default values come from the Locale stored in the language record.
2. If it is not checked, default values come from the operating system default Locale.

Language Preferences

The Omnis preferences accessed from the Tools>>Options menu option 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.

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 that lets you 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 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. This process might take a few minutes.

The natcmp() Function

The natcmp() function lets you compare two 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.

Localization under Mac OS X

To resolve a number of problems with localizing Omnis Studio under Mac OS X, we have added a new language folder to the resource folder of the Omnis.app bundle. At present, Omnis supports English and German and there is a folder for each of these languages. To add support for a new language, do the following:

- Create a new folder in the Omnis.app resource folder with the title <Language.lproj> (e.g. French.lproj)
- Copy the InfoPList.strings file from the English.lproj folder to the folder that you just created.

Note that the above is not a replacement for the current Omnis Studio localization process, but an addition which should be carried out to ensure that the System menus and dialogs in Omnis recognize when the language is changed.