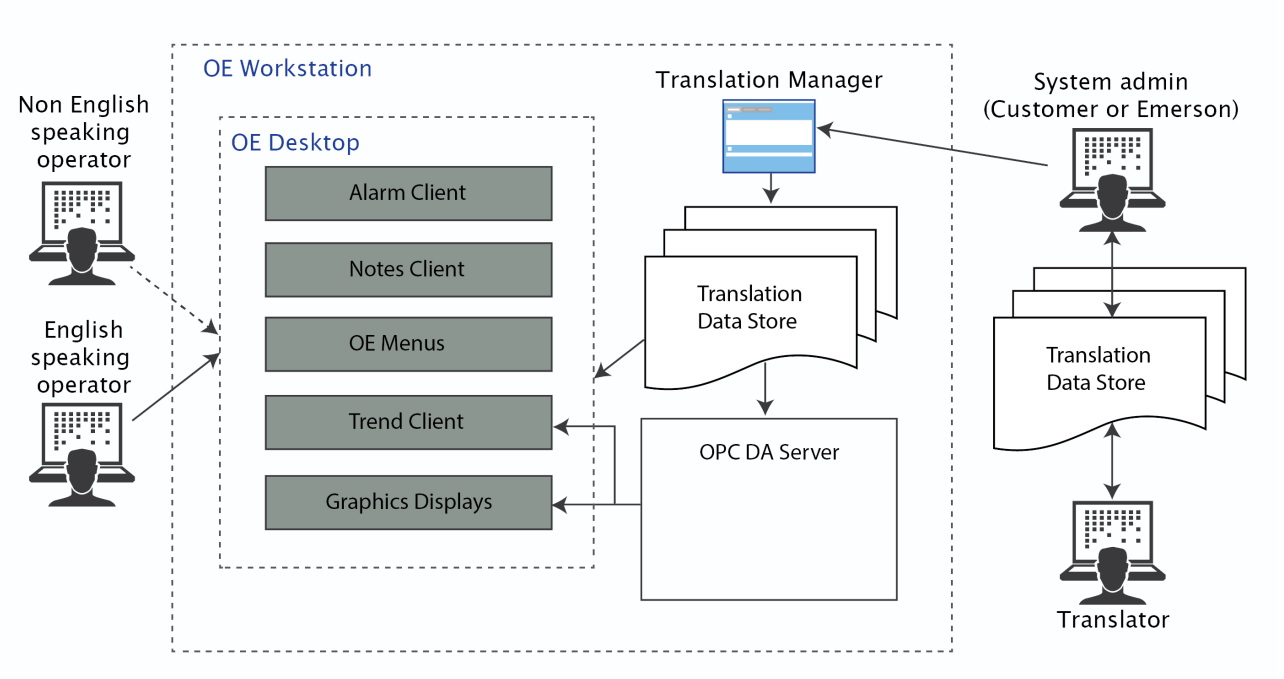
Workstation Localization Guide



Revision Tracking Sheet

November 2020

This manual may be revised periodically to incorporate new or updated information. The revision date of each page appears at the bottom of the page opposite the page number. A change in revision date to any page also changes the date of the manual that appears on the front cover. Listed below is the revision date of each page (if applicable):

Page	Revision
All pages	November 2020
All pages	August 2017
All pages	July 2016
Initial issue	May 2016

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1 Workstation Localization - Overview

OpenEnterprise™ (OE) Workstation Localization enables operators to use their OE workstations in their native language. Localization is configured by a system administrator using the Translation Manager utility, a Language Pack which contains Product Translations for OE, and custom entered Project Translations.

Note: Each OE installation configuration supports specific 32-bit/64-bit operating systems running English as the base language. Workstation Localization requires a Windows Language Pack to be installed (in the same language as the OE Language Pack).

This manual, *OpenEnterprise Workstation Localization Guide*, details the processes required to configure localization for your OE workstation users. Although part of the OE documentation library, this manual represents only a portion of the information available through the OE online help system, which provides point-of-use information you can access while using the OE system. This manual contains the following chapters:

Chapter	Description
Chapter 1 Overview	Provides an overview of the general structure of the manual, provides an overview of Workstation Localization as it applies to OpenEnterprise, briefly discusses the user interface and software tools designed to streamline the configuration process, and describes the key processes involved.
Chapter 2 Translation Manager	Describes the main localization configuration tool Translation Manager and how to manage Product Translations and Project Translations.
Chapter 3 OE Desktop Localization	Describes the Workstation client components additional configuration options.
Chapter 4 Localization Settings	Describes where to find information about the localization settings and some useful troubleshooting tips.
Appendix A	Provides a general glossary of OE terms.
Appendix B	Localizing Graphics Displays
Appendix C	Placeholders Reference

This manual is just one of several manuals describing how to use OpenEnterprise. However, you should always refer to the extensive online help provided with the OpenEnterprise software. It is the most current and is the primary source of information on effectively managing OE.

Please refer to the Installation Guide for instructions on Installing Workstation Localization.

1.1 Introduction to Workstation Localization

OpenEnterprise is an industrial-strength server-based supervisory control and data acquisition (SCADA) software application produced by Remote Automation Solutions. OE is highly scalable, and you can configure it as a simple single server/workstation or as a master-and-standby redundant server connected to a virtually limitless number of workstation clients.

Workstation

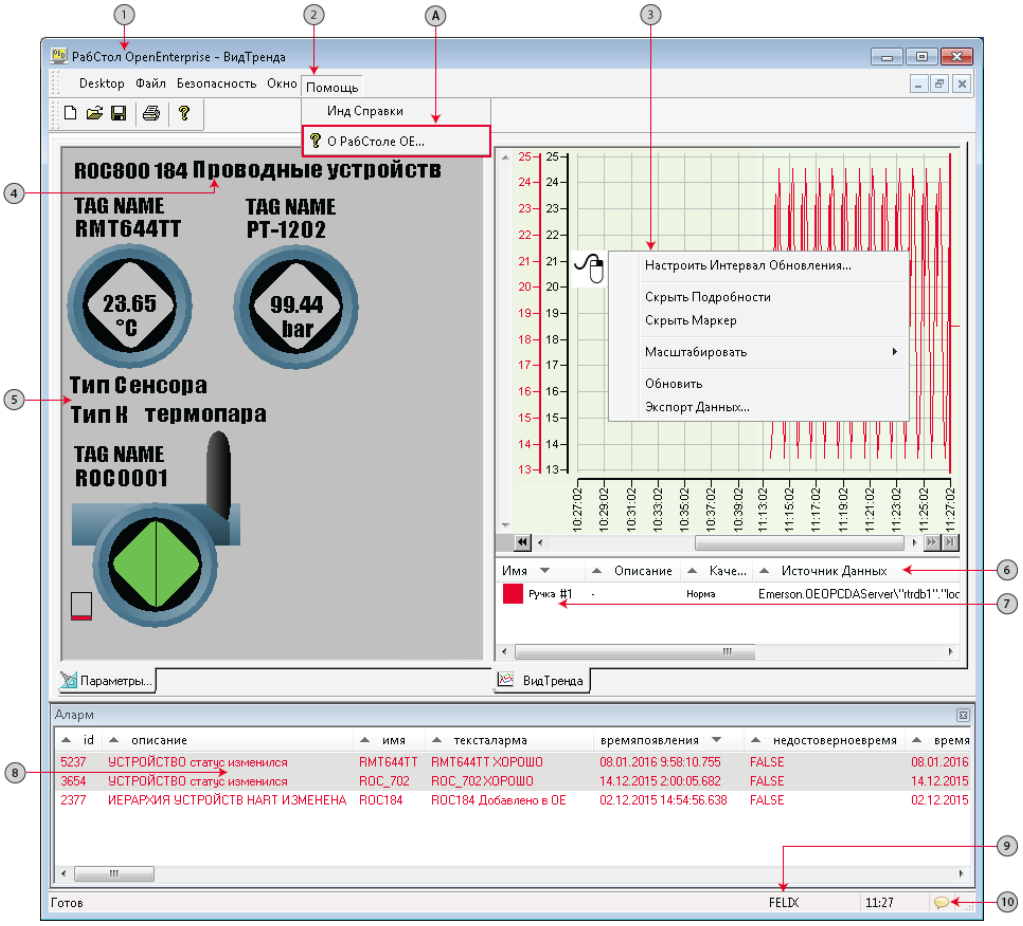
Workstation clients are used in control centres to monitor and supervise the SCADA system by operators and engineers.

OE Desktop

The OE Desktop is a container that is used to manage the windows of OE Workstation View components. Its main purpose is to provide a single, multi-windowed environment for OpenEnterprise, localization provides a method to translate the text in these views. (see *Figure 1.1*).

Figure 1-1. Localized OpenEnterprise Desktop

1. Title Captions.
2. Menus and drop-down menus.
3. OE Desktop context menus and text within a Trend chart area.



4. Manually translated text using the Graphics Localization functionality.

5. The Graphics HMI will translate any OE database text provided there is a translation available.
6. Column headings.
7. Trend details pane.
8. Alarm text.
9. Login username and status bar text (for example Alarm Client status and connected databases).
10. Localization enabled indicator icon.

The table below shows a summary of the localization features for each of the OE Workstation Clients:

Workstation Item Name	Areas Translated
Note: Any dialogs, context menus or message boxes displayed are shown localized, with the exception of the dialogs used by a system administrator to configure OE. Windows File Open/Save, Print dialogs and Date-Time controls will not be translated.	
OE Desktop	Static text in Menus, sub-menu items and title captions. Login username and status bar text (for example the Alarm Client status or connected databases). There is a localization enabled indicator icon in the status bar when Localization is enabled.
OE Login (see chapter 3 - Login dialog)	The Login Client allows an OE user to logon to OE Desktop using a translated name, this is configured by a systems administrator using the Security Configuration tool.
Graphics	The translated value of any OPC Tags from the OPC Server in Graphics displays are displayed (if translations are available).
(see Appendix B Localizing Graphics Displays)	A Graphics view can also be manually configured to translate text using the Graphics Localization functionality
OE Alarms Client	The Alarm View column headings and current alarm textual data such as the Description or Alarm Text. All numerical values displayed by the Alarm Client will be displayed in the same default format irrespective of whether localization is enabled or not.
Notes View	Columns headings for the Notes data. Any context menu shown by right clicking in the Notes window. The Create Note and Modify Note dialogs allow notes to be created in the same language/region as set up under Windows. Notes entered in English on a non localized system display in English this includes all or part of the note for example subject and message. The note length is limited to 850 characters when localization is enabled.
Trends	The OE Trend View context menus, text within the chart area (the date format uses the current Windows OS System's format). Details pane column headings and text data for the list of pens. The Data Source column in the list of pens is

Workstation Item Name	Areas Translated
	displayed in English. Note: The Pen Configuration dialog will not be translated and the numbers on the trend graph and the list of pens are displayed in the same format as they would be for a non localized system.
OE Menus (see chapter 3 – OE Menus)	The name of any menu group created using OE Menus is displayed translated when used in any of the OE Desktop clients above.
OPC Server	The OPC Server will return the value of OPC tags translated. Note: The Historical Data will not be translated, as the HDA Server does not translate any data.
Security Configuration Tool (see chapter 3 - Security Configuration tool)	The Security Configuration Tool User Properties dialog can be configured to use a Localized Name for an Operator using the OE Login Client.

1.1.1 Product Translations

Language Packs

Language Packs are required to translate core OpenEnterprise functionality such as column headers in the OE Alarm Client, dialogs, and OEDesktop menus. OE Language Pack (*.lpk) files and any updates are available from the Emerson SupportNet site. You need to add a languge pack to each Workstation using the Translation Manager utility. (See chapter 3 Language Packs)

1.1.2 Project Translations

Project Translations contain the additional translations required for customer specific strings, such as the name of a pump or well. After checking what translations are needed and obtaining the translated text you can use an MS Excel or XLIFF file to add these to the Workstation using the Translation Manager. (See chapter 2 Project Translations)

Note: You can send the MS Excel or XLIFF file to a translation provider to be translated provided the format of the file isn't changed.

Two templates are provided to use as a data entry file located on the Workstation in the (OEStore) O:\Translations folder:

MS Excel - ProjectTranslationsTemplate.xlsx

Figure 1-2. Example Content of an MS Excel Translation Template

English Text	Translated Text
Wellhead	Устьевое

XLIFF - ProjectTranslationsTemplate.xlf

XLIFF (XML Localisation Interchange File Format) is an XML-based format created to standardize the way localizable data are passed between tools during a localization process.

Backup and Maintenance

The Application Data folder contains the OE Product language packs, these are not critical as they can be obtained from Emerson, however the customer specific Project Translations should be backed up.
The translations sub folder **DataStore** is where OE creates the translation (.trl) files, when initially setting up a Workstation or when any changes have been made to the translation files these should be copied to each Workstation's DataStore folder by the OE System Administrator.

1.1.3 Getting Started – Key Processes in Localization

The following two flow diagrams give an overview of the main processes in Workstation Localization and the Translation Manager utility. See chapter 2 for a more information on how to use the Translation Manager utility.

Figure 1-3. Workstation Localization – Language Pack Installation and Updating.

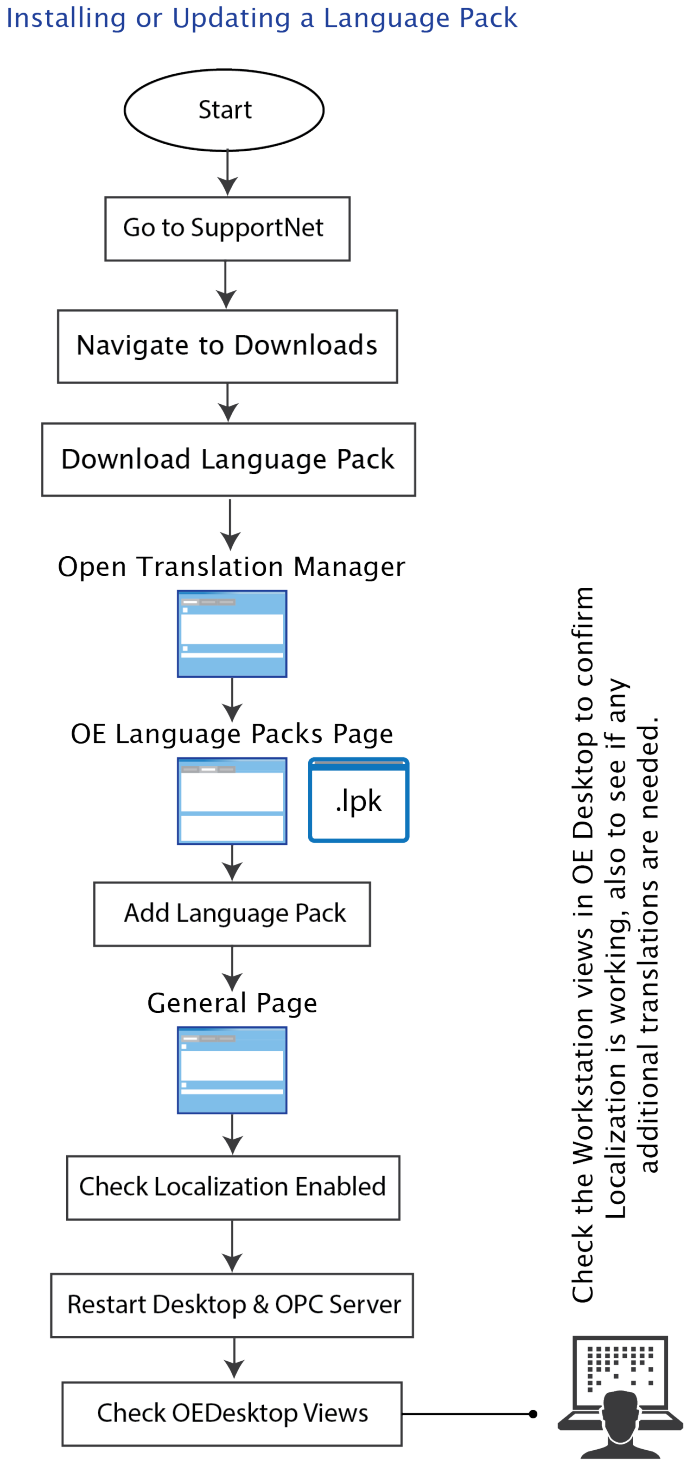
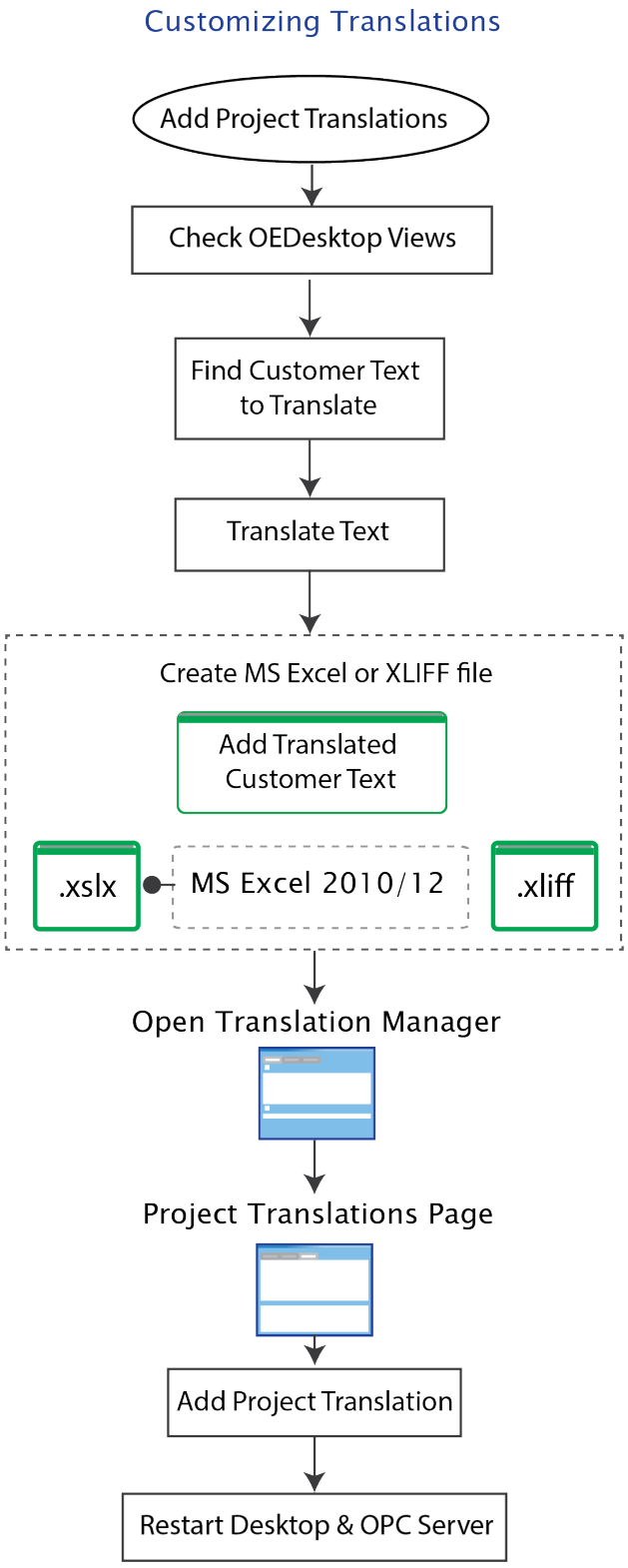


Figure 1-4. Workstation Localization – Project Translations



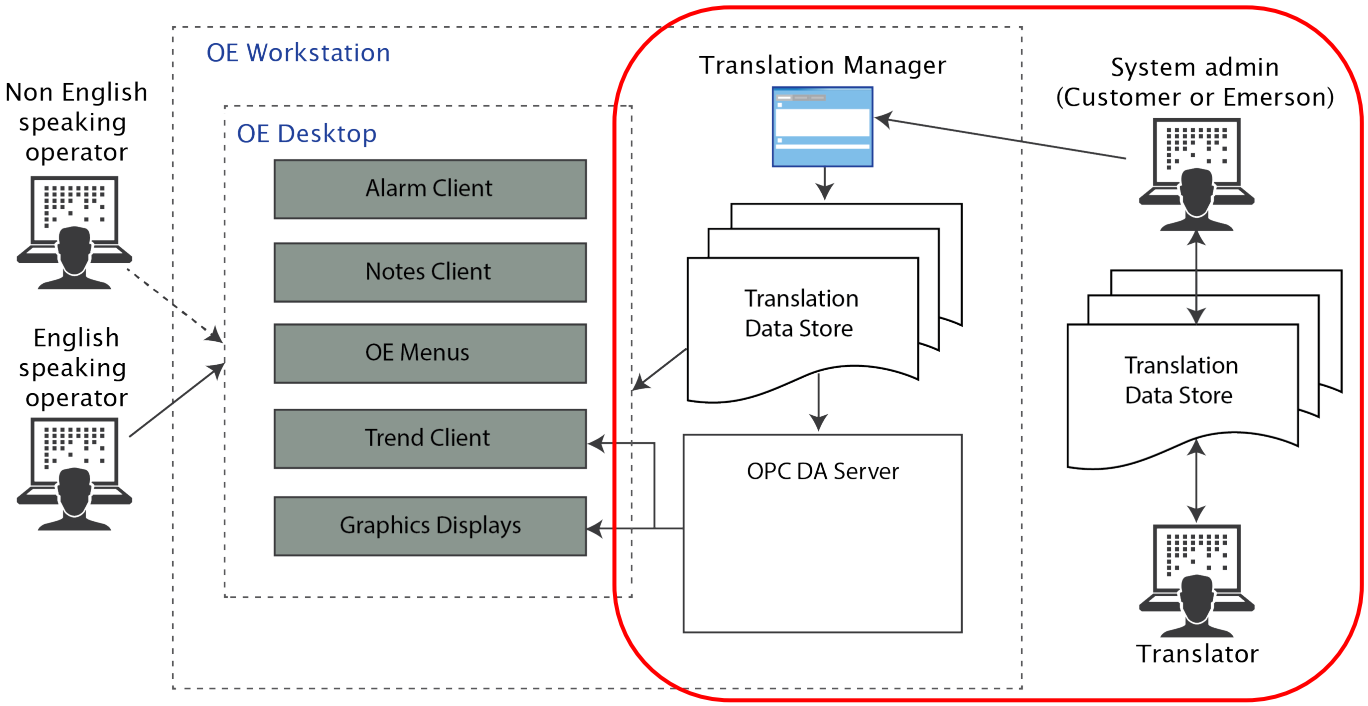
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2 Translation Manager

2.1 Translation Manager - Overview

Workstation localization enables translations at runtime to enable a non-English speaking operator to use the Alarm Client, Notes Client, Trend Client and Graphics displays in another language.

Figure 2-1. Workstation Localization Components Diagram



As shown in *Figure 2-1*, the Translation Manager is a utility that a system administrator can use to manage the configuration of localization on the OE Workstation.

You can:

- Enable/Disable Localization on the OE Workstation
  This enables/disables localization on the Workstation.
- Enable/Disable localization for an individual user
  You can allow an OE user to see English text in OE even when localization is enabled, by adding a windows user to the localization disabled users list.
- Process Customer Created Translation Files
  Using an MS Excel or XLIFF file to add them to the Translation Data Store so that they can be used by the OE system.

- Set the Override Language
  Specify an override for the language/region that will be used when localization is enabled.
- View Overridden Product Translations
  View a list of customer created translations that have overridden OE product translations.

An English speaking operator (for example an English speaking system administrator or support person) will be able to use the same components of the OE Desktop in English after a change to the configuration of the OE Workstation.

The translations required to display text and data in the OE Desktop components in another language are sourced from the “Translation Data Store” present on the OE Workstation.

The “Translation Data Store” contains both OE product translations (installed from an OE Language Pack) and Project Translations that a customer can create.

The OPC Server translates OPC tag values at run time for the Trend Client and Graphics displays using the translation files on the OE Workstation.

The Translation Client (TC) performs on-the-fly translations of elements of the OEDesktop UI. The translations themselves are stored in files on disk on the Workstation and read in by the TC at runtime. Whenever a translatable component needs to display some text that can be potentially read by an operator it will call on the TC to perform a runtime translation. This translation involves performing a lookup on the data from the files to see if a translation for the given phrase exists, if it does the translated phrase will be returned and displayed.

The language used when localization is enabled is the language set up within the Windows operating system on the OE Workstation.

Note
The Windows operating system displays the dialogs “Print”, “Save As” and “Open File” in the language setup within Windows on the workstation and the date/time format in for a particular language is obtained from the standard date/time formats held by the Windows operating system.

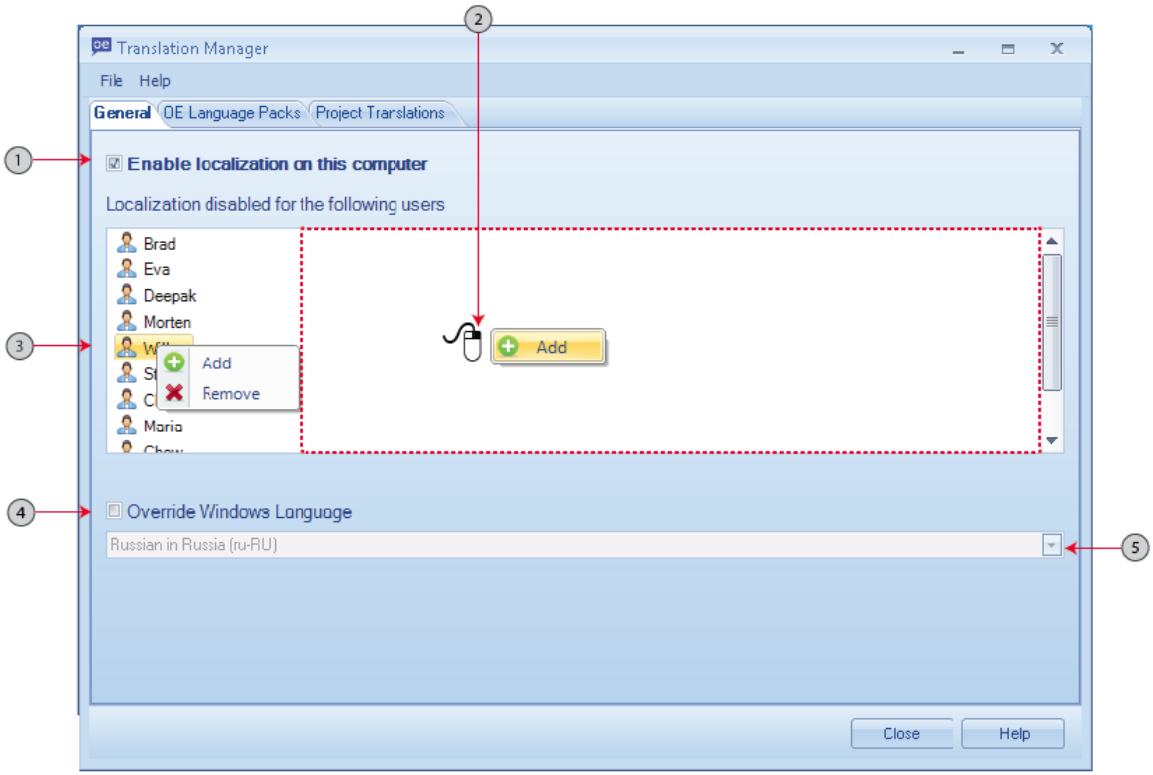
Note
A restart of OEDesktop and OPCServer is required to pick up any changes to the configuration of localization on the OE Workstation.

2.1.1 Translation Manager - General Page

You use the translation manager general page to enable or disable localization and to disable localization for Windows users that have been added to the translation manager, for example to allow an English user to see English text in OE when localization is enabled.

Note
Text in the OE database is English even when installed on a workstation using a non English Windows operating system. Enabling localization translates the text for the OE Desktop clients and Graphics at runtime.

Figure 2-2. General Page

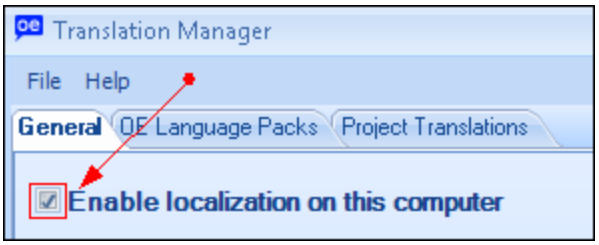


2.1.1.1 Enabling Localization

(1) Select this check-box to enable localization. (see *Figure 2-2*).

Once a Language Pack has been added to OE you can enable Localization.

From the **Translation Manager** > **General** page select the **Enable localization on this computer** check-box.



Note: The Windows OS Region/Language also needs to be set to the same as the Language Pack.

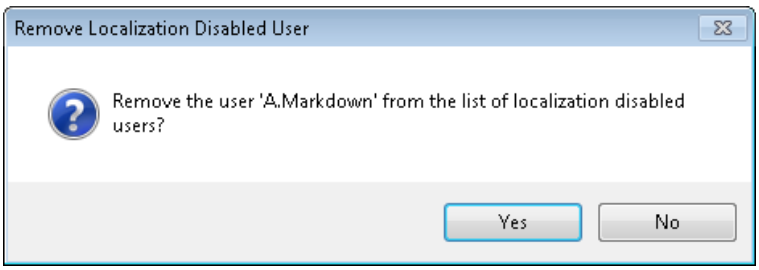
2.1.1.2 Managing localization for individual user

(see Figure 2-2).

2 Right-click in this area to add a Windows user to the localization disabled users list.

3 Right-click on a user to remove a user from the list.

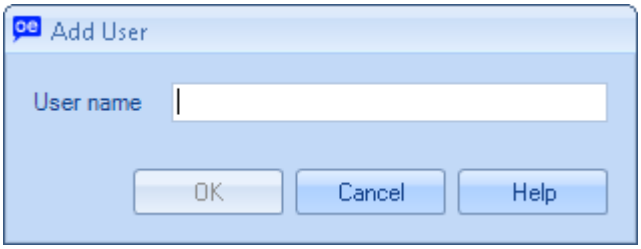
A message box opens asking you to confirm the deletion, click **Yes** to delete the user.



2.1.1.2.1 Translation Manager - Add User dialog

Use the translation manager **Add User** dialog to add a user to the system with localization disabled.

1. Open the Translation Manager.
2. Right-click in the center pane on the General page.
3. The Add **User** dialog opens.



4. Enter a Windows User name and click OK.
5. The user is added to the list.

2.1.1.3 Setting the Override Language

Specify an override for the language/region that will be used when localization is enabled.

4 (see Figure 2-2).

Use this drop-down menu to select a language pack when **Override Windows Language** is selected. Only the installed language packs are available to use.

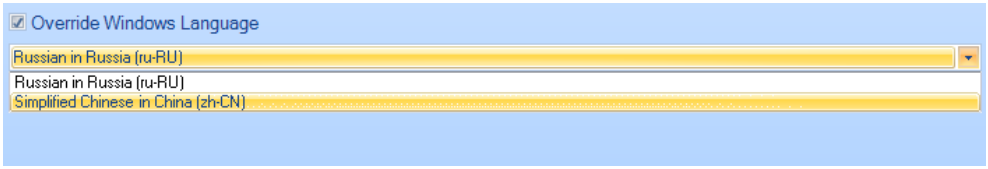
Note

The override is intended to be used during the commissioning of a system to allow an engineer to set up the translations. Windows should be changed to the required language/region when using the OE Workstation in a live environment otherwise Windows dialogs such as “Open File”, “Save File” and “Print” will appear untranslated.

2.1.1.4 Override Windows Language

Used during the commissioning of a system to allow an engineer to set up the translations.

1. Open the Translation Manager.
2. Select the **Override Windows Language** check-box.



3. Select the language/region override from the drop-down window.
4. Restart the **OE Desktop** and **OPC Server**.

The OE Workstation views are translated using the language selected.

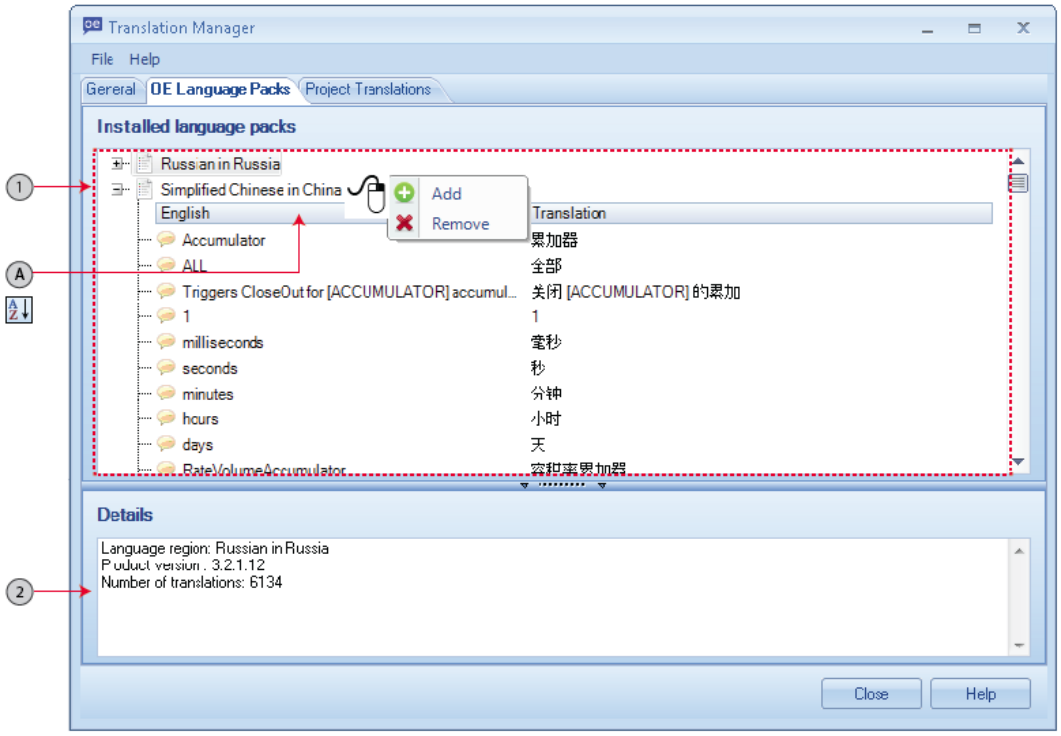
CAUTION

Using the override on a site using a Remote Desktop Services server (terminal server) will override the Workstation for all the terminal server users.

2.1.2 Translation Manager – Language Packs Page

You use the translation manager **OE Language Packs** page to manage language packs. Language Packs are required to translate core OpenEnterprise functionality such as column headers in the OE Alarm Client, dialogs, and OEDesktop menus. OE Language Pack (*.lpk) files and any updates are available from the Emerson SupportNet site.

Figure 2-3. Language Packs Page



A (see Figure 2-3).

Click the column header to alphabetically sort the list of translations in the OE Language Pack.

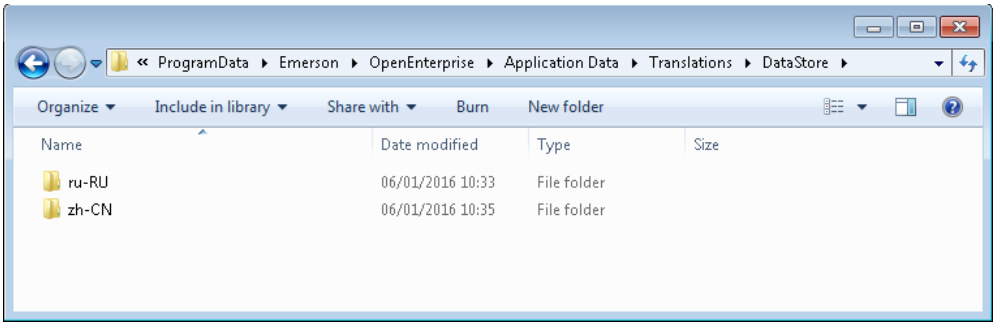
1

Right-click in the **Installed language packs** pane to add a language pack.

Note

The OE language pack files are placed in the "DataStore" folder created under the "C:\ProgramData\Emerson\OpenEnterprise\ApplicationData\Translations" folder on the workstation.

Figure 2-4. Translations Data Store



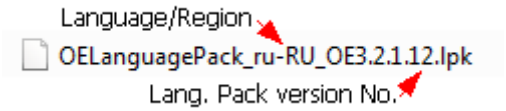
(2) **Details** pane - Displays details of the current selected language pack.

Details of the language pack shown will include:

- Language/region for example “Russian in Russia”.
- The product version of the language pack for example. “3.2.1.12”.
- The number of translation contained with the language pack.

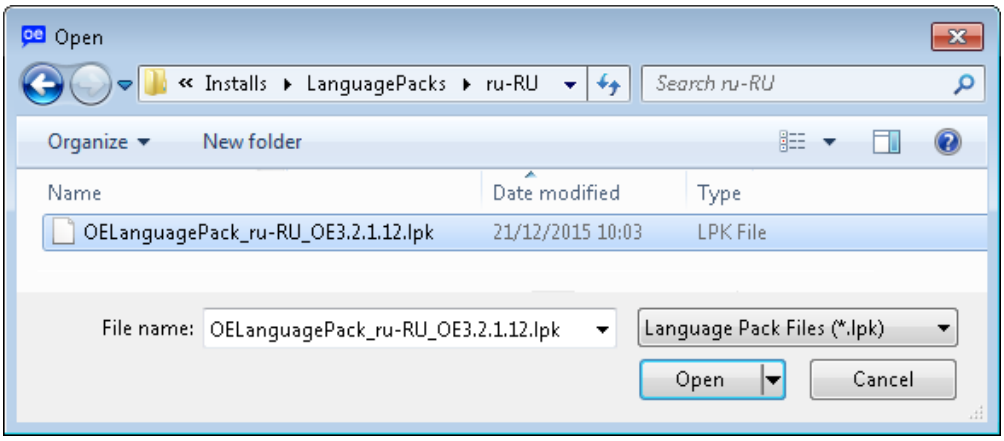
2.1.2.1 Adding a Language Pack

Ensure you have the correct Language Pack.



1. Open the Translation Manager.
2. Select the OE Language Packs page, right-click in the Installed Language Packs Pane.
3. Click Add Windows open dialog opens.





4. Use the Windows **Open** file dialog - select the OE language pack (**.lpk**) file to add.

Note
This replaces all the files for a Language/Region if a language pack was previously installed.

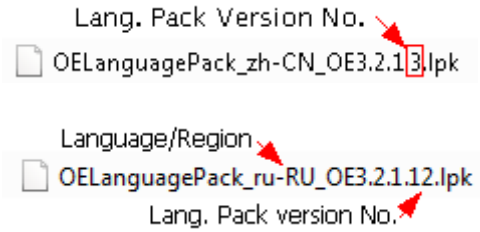
2.1.2.2 Getting a New Language Pack

Ensure you have the correct Language Pack. (See 4.2.1 Language Pack Details or)

From time to time Emerson will release new language packs with additional translated content.

Once you have obtained the language pack from Emerson copy to a local directory on the Workstation PC. (See 1.1.1 Product Translations)

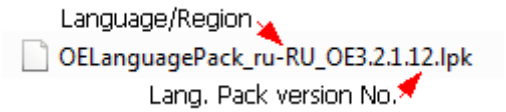
Use the **OE Language Packs** page to Add the new language pack



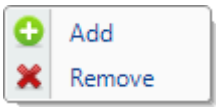
2.1.2.3 Updating a Language Pack

Updating a language pack is the same process as adding a language pack.

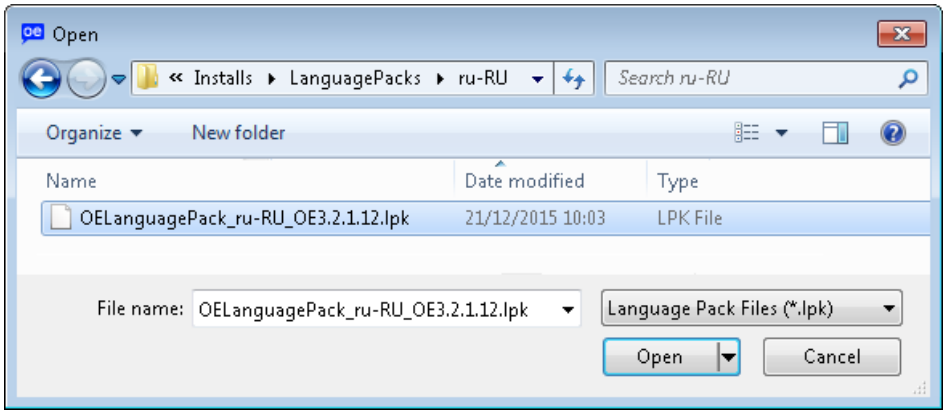
Ensure you have the correct language pack file.



1. Open the **Translation Manager**.
2. Select the **OE Language Packs** page, right-click in the **Installed Language Packs** pane.
3. Click **Add**.



4. Use the Windows **Open** file dialog - select the OE language pack (**.lpk**) file to add.



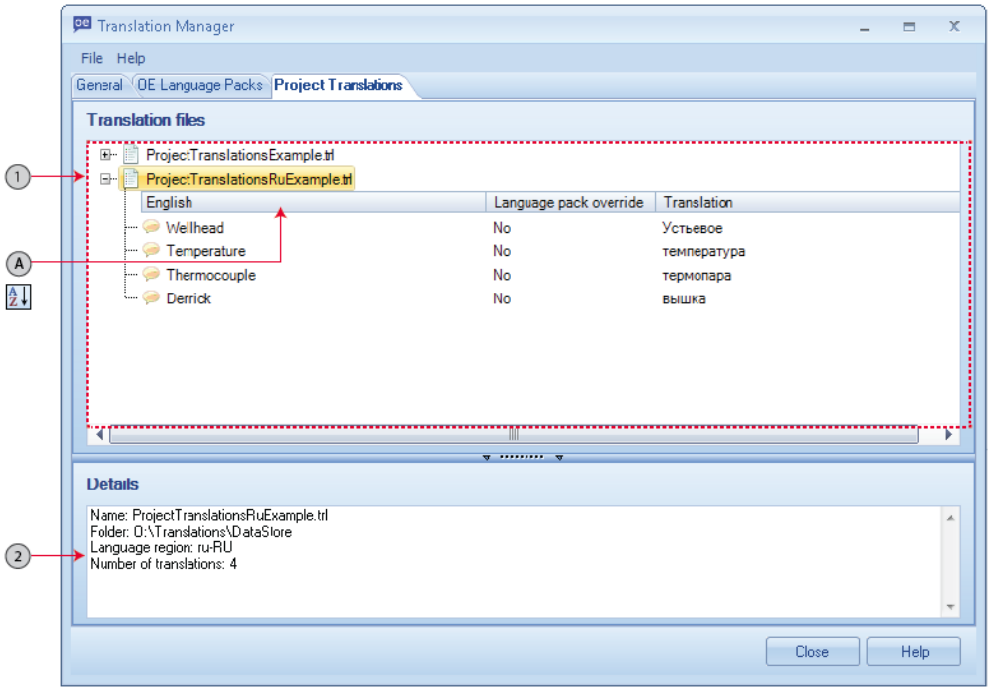
Note

This replaces all the files for a Language/Region if a language pack was previously installed.

2.1.3 Translation Manager – Project Translations Page

You use the translation manager Project Translations page to manage the translations required for customer specific strings, such as the name of a pump or well.

Figure 2-5. Project Translations Page



A (see Figure 2-5).

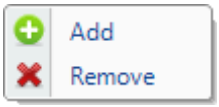
Click the column header to alphabetically sort the list of translations in the project translations file.

1 Translation **files** pane

Right-clicking anywhere in the Translation files pane shows a menu to either Add or Remove a translation file.



Use the **Add** button to add a new translation file or to update an existing translation file's content.



The remove button will only be shown if there are one or more translation files. The remove action will apply to the currently selected translation file.

Click ⊞ to expand the Translations file to view a list of project translations.

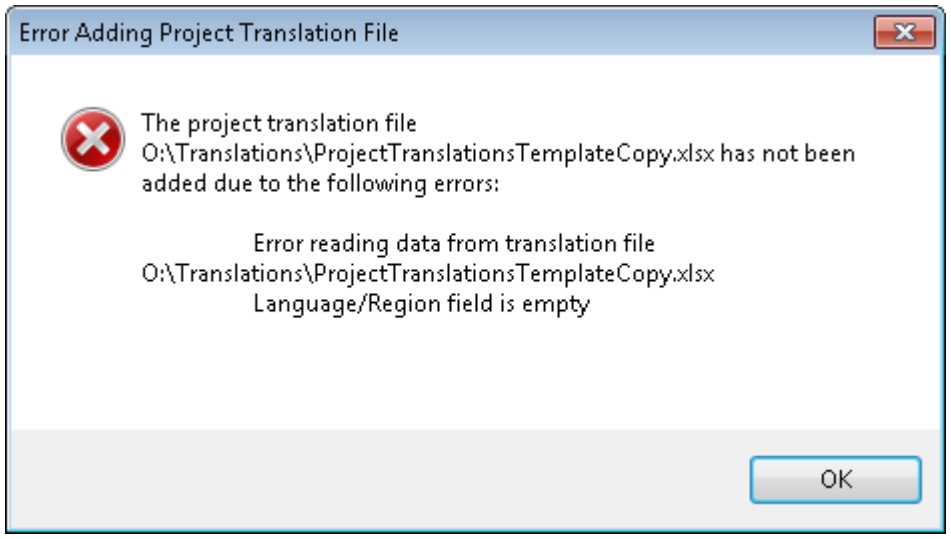
Note

The Add or Remove function is not row dependent but works the same way from anywhere in the translation file window, OE uses the filename to determine which file will be modified, added or removed.

Note

If an error occurs when adding or removing a project translation file a dialog listing errors is shown and the system will be left in the state prior to the add or removal process.

Figure 2-6. Project Translations File Error



(2) Details pane (see Figure 2-5).

This displays the following details of the current selected translation file:

- Name of the selected translation file for example ProjectTranslationsAssets.trl
- The location of the Translations\DataStore folder containing the translation file
- The language region for example "ru-RU"
- The number of translations in the project translation file

Note

Textual data generated from within an RTU is not included in the OE Product language pack but will require additional custom translations.

2.1.3.1 Adding a Translation File

In addition to the OE translation pack you may need to add additional custom translations for example user names, assets (pumps, wells, compressors), and plant areas.

Using the MS Excel Template

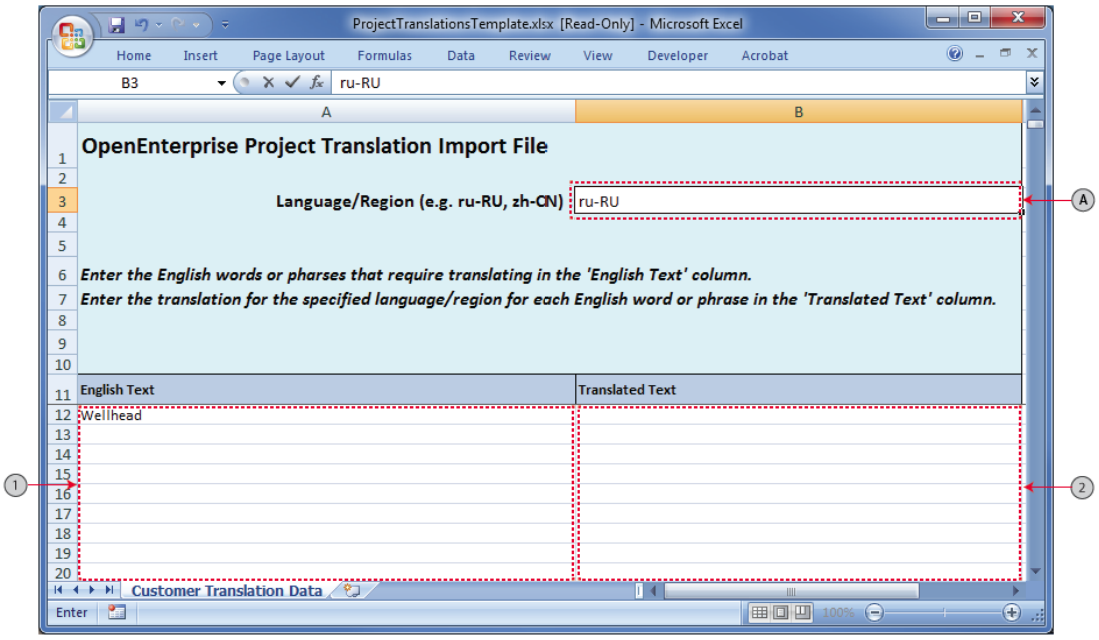
To add custom translations using the Excel template file perform the following steps:

1. Open the ProjectsTranslationsTemplate.xslx file.

Note

Ensure that the language region text box (A) contains the exact text for the language region as show below, for example "ru-RU" when using a Russian language pack. When the custom translation is added to OE a corresponding Translation Data Store .trl file will be created with the same name as the template file. Multiple translation data store files can be used however if a translation data store file has been created with a different language region to the applied language pack, that file's content will not be used.

Figure 2-7. MS Excel Project Translations Template



2. Type the English text in the left column. (1)

Note

If a translation already exists in the applied language pack it will be highlighted in the Project Translations window as shown below.

Figure 2-8. Translation Manager Project Translations Window

English	Language pack override	Translation
Wellhead	No	Устьевое
Temperature	No	температура
Thermocouple	Yes	термопара
Derrick	No	вышка

3. Type the corresponding translated text in the right column. (2)

4. Save the Excel file using a different name (the template is read only) to use with the Translation Manager.

Note

A translation from the files under the “OEStore\Translations” folder (custom translations) will take precedence over the same translation from the files under the “ProgramData\Emerson\OpenEnterprise\ApplicationData\Translations” folder (OE Product).

2.1.3.2 Adding a New Translation

Adding a new translation to a customer translation file that has previously been imported to the Translation Data Store can be performed as follows:

1. Edit the customer translation file.
2. Add the new translation to the file.
3. Save the changes to the file.
4. Use the Translation Manager Add action to update translation file in the Translation Data Store.

2.1.4 Translation Manager –Translation Client

The Translation Client (TC) is a process which runs on the Workstation machine and performs the translations at runtime.

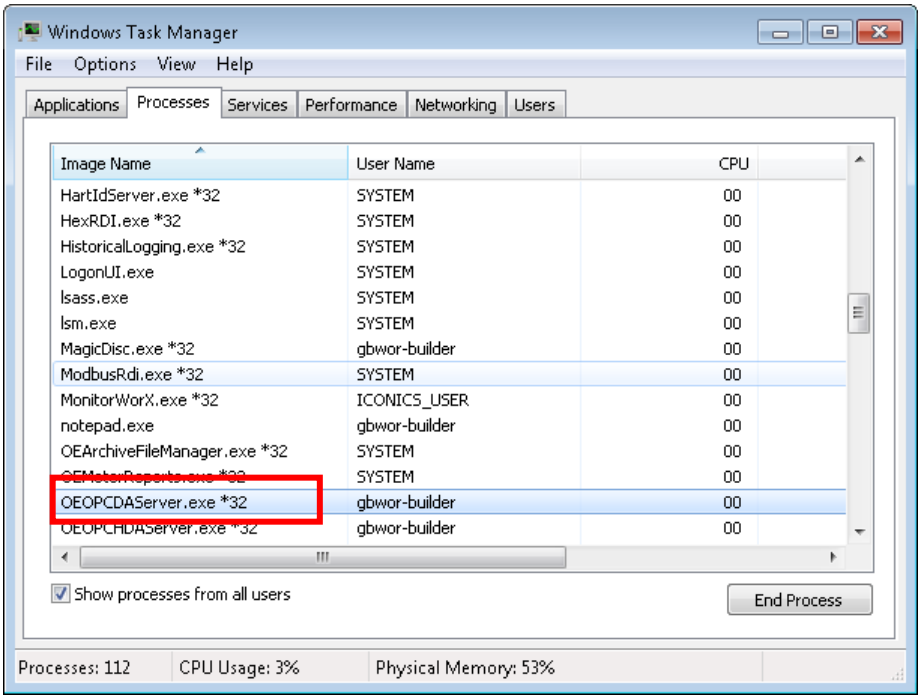
The translation manager collates sets of files that store all the required translatable strings and their known translations in the various languages supported by OpenEnterprise.

2.1.5 Restarting Desktop & the OPC Server

A restart of OE Desktop and the OPC Server is required to pick up any changes to the configuration of localization on the OE Workstation.

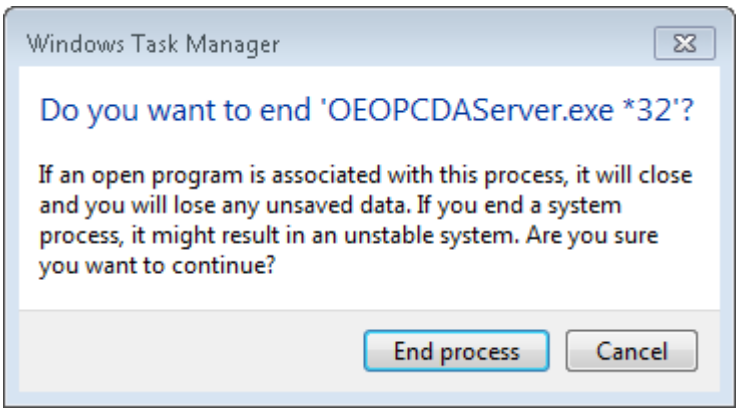
1. Close any OE Workstation Client Views or OE Desktop windows, this includes Graphics.
2. Launch the Windows Task Manager utility from the Windows Taskbar.
3. Scroll to find the OEOPCDAServer.exe ***32** in the **Processes** list **ImageName** column.

Figure 2-9. Windows Task Manager – OPC Server Process



4. Click **End Process.**

The "Do you want to end 'OEOPCDAServer.exe *32'?' confirmation dialog displays.



5. Click **End process**.

2.1.6 Using Placeholders in a Translation

Phrases requiring translation will often contain data values. The basic phrase structure may be used many times but the values within it will alter, for example:

Pump1 changed state to stopped.

Pump2 changed state to running.

Pump3 changed state to failed.

This illustrates that to provide static translations for every case is impractical. To solve this the translation system 'Placeholder' mechanism can be used to find patterns of strings. Placeholders are delimited with square brackets in the translations. The above example can be represented with a single phrase with placeholders:

[PUMP] changed state to [STATE]

The following is an example of a placeholder in a .trl file with a Russian translation:

```
<translation>
    <englishText>Triggers CloseOut for [ACCUMULATOR] accumulation</englishText>
  <translatedText>Организуется Сброс для накопления
[ACCUMULATOR]</translatedText>
</translation>
```

Placeholders can be in different locations within the translated text to allow for the fact that different languages have different word-ordering rules.

Figure 2-10. Placeholder in MS Excel template

English Text	Translated Text
[DATE] METER [NUM] UPDATED	[DATE] РАСХОДОМЕРА [NUM] ОБНОВЛЕНО

Figure 2-11. Corresponding text in Graphics without translation



Figure 2-12. Corresponding text in Graphics with translation



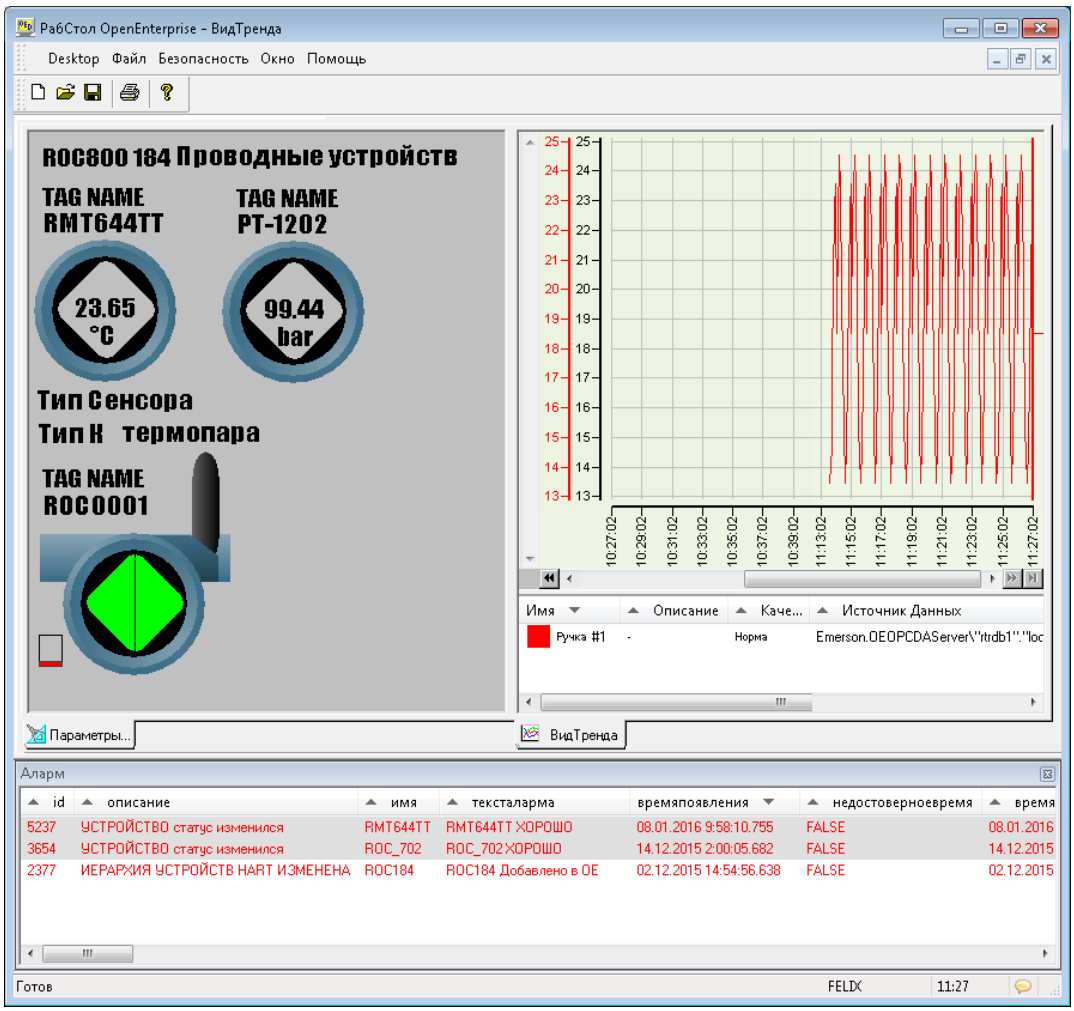
When presented with a phrase for translation, the Translation Client will look at any supporting values supplied with the translation and try to locate Placeholders. For example, when translating the Alarm Client the entire row will be translated at the same time. This allows columns such as Alarm Text to be used for resolving values in the Description.

3 OE Desktop Localization Configuration

3.1 Additional Configuration

If Workstation Localization is enabled for the OE user, the OE Desktop menus and their sub-menu items display translated (if translations are available). The Workstation Clients are also translated. (See chapter 1.1 for a summary of the localization features for each of the OE Workstation Clients).).

Figure 3-1. Workstation Localization OE Desktop



As shown in *Figure 3-1*, the OE Desktop is shown translated.

This chapter shows the following configuration options:

- **Adding a Localized Name for an individual user**.
- **Adding Project Translations for OE Menus**.

3.1.1 Security Configuration Localization

An OE Workstation user can either use their standard OE Username or a Localized Name to login.

Note

You need to be an OE System Administrator to configure the Localized Name in the Security Configuration Tool available from the OE Container Administrative Tools pane

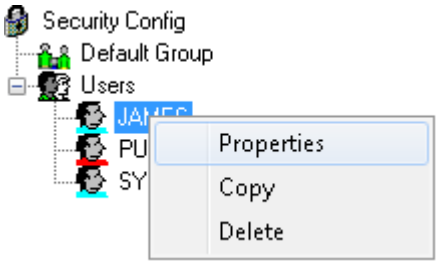
Figure 3-2. Localized Name in the Users Properties Page



3.1.1.1.1 Adding a Localized Name

Open the Security Configuration tool to add a Localized Name.

1. From the OE Container > Administrative Tools pane, select Security
2. Right-click on the username and select Properties.



3. Enter the Localized Name for the user and click OK.

Note

You will also need to add the Localized Name to a Translation File in order for it to be displayed translated within the OE Desktop.

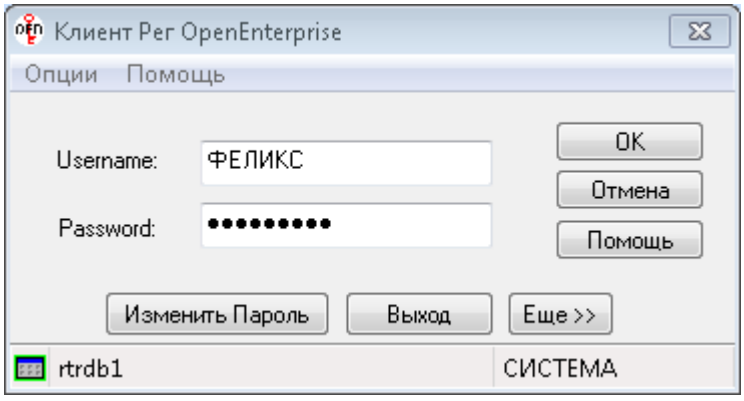
Note

A restart of OEDesktop and OPCServer is required to pick up any changes to the configuration of localization on the OE Workstation. (See chapter 2.1.5)

3.1.2 Workstation Login Client

The user will be able to use the localized name to login to the Workstation.

Figure 3-3. Workstation Login Client



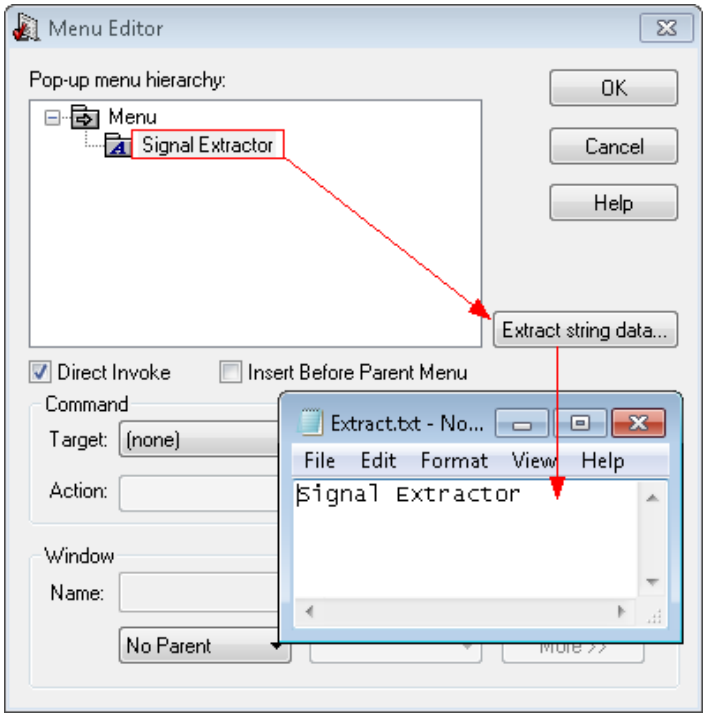
The password can also be entered using the installed Windows OS language for the Workstation login.

3.1.3 OE Menus - Extract String Data

The **Menu Editor** dialog has a function to export any custom OE Menu text to a .txt file, this is intended for use by a system administrator to configure OE. You can add these items to a **Project Translation** file.

Use the OE Menu Editor **Extract string data** button to export menu text items to a .txt file.

Figure 3-4. Menu Editor – Extract string data button



Note

The default directory for saving the file is the OE Store folder.

Note

You will also need to add the translated text to a Translation File in order for it to be displayed translated within the OE Desktop.

Note

A restart of OEDesktop and OPCServer is required to pick up any changes to the configuration of localization on the OE Workstation. (See chapter 2.1.5)

4 Localization Settings and Troubleshooting

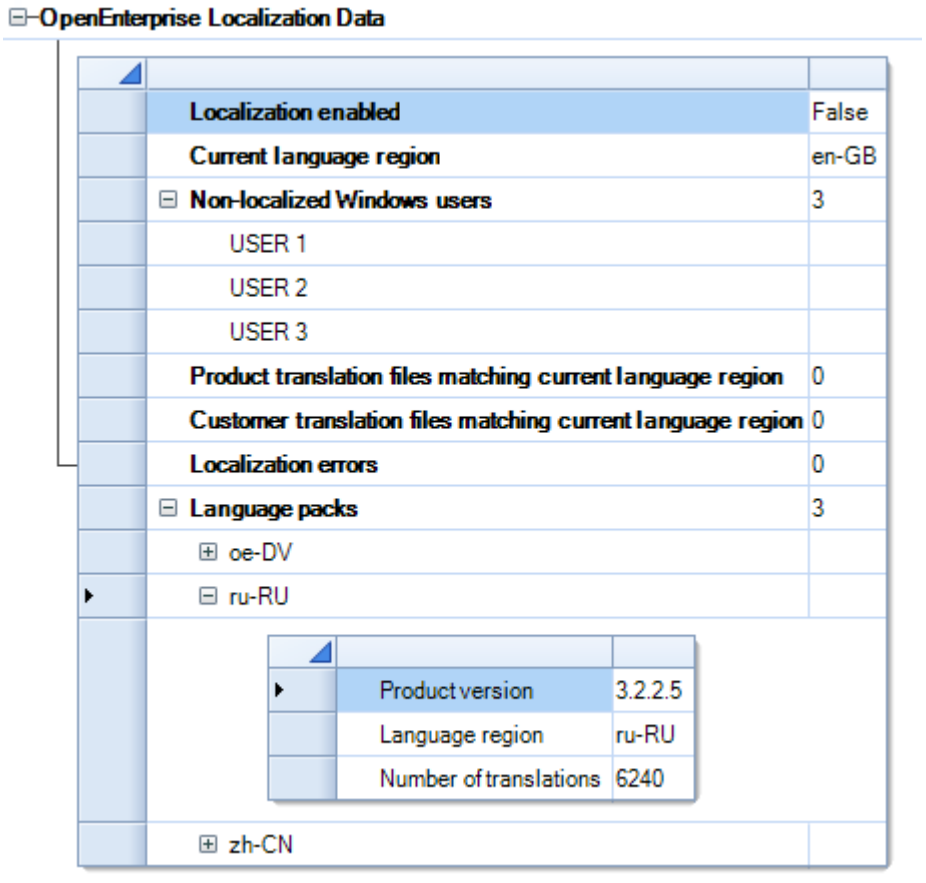
This chapter details how to review the Workstation Localization settings and how to troubleshoot.

4.1 System Report

The system report shown below will include the following localization information for the current Workstation machine.

- Whether localization is enabled or disabled.
- A list of Windows usernames for any Non Localized Users
- The language/region set up within Windows
- The number of OE Product Translation files that exist on the OE Workstation matching the current language/region set up within Windows
- Any localized errors currently on the system

Figure 4-1. OE System Report Localization Data Section

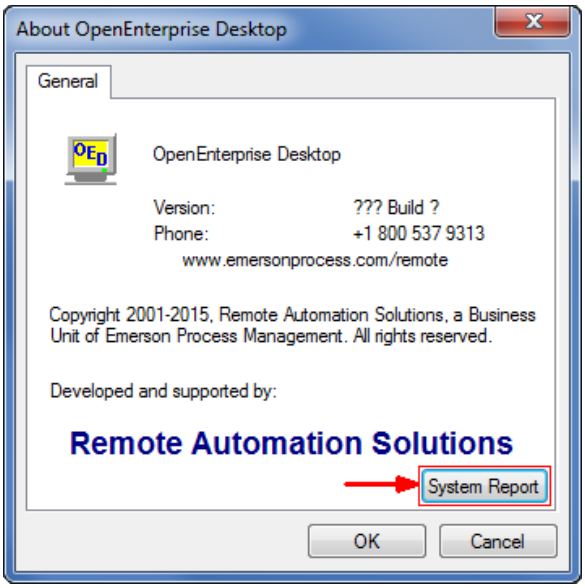


4.1.1 Running the System Report Tool

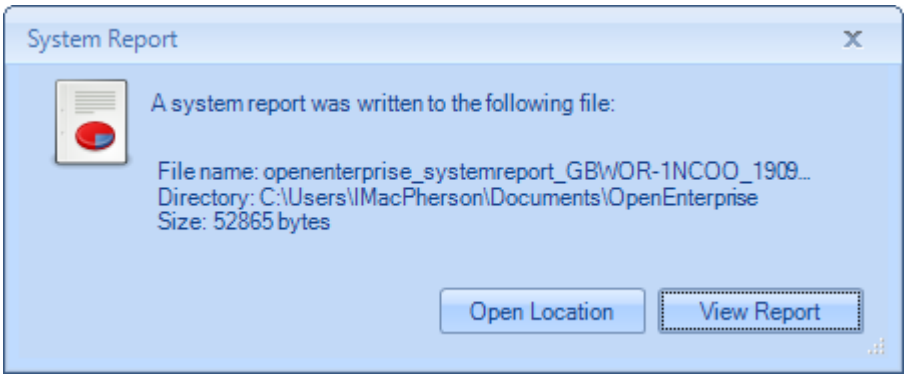
The OE Desktop can generate a System Report from the About dialog in OE Desktop.

From the OE Desktop menu:

1. Select Help > About OE Desktop.



2. Click the System Report button to run the report.



3. Clicking OK opens the system report.

Note

This will only display information available on the workstation it is generated on. Therefore, no system licensing information is shown in the report if it is a workstation only install.

4.2 Checking the Localization Details

The Translation Manager utility shows a detail pane below the following panes.

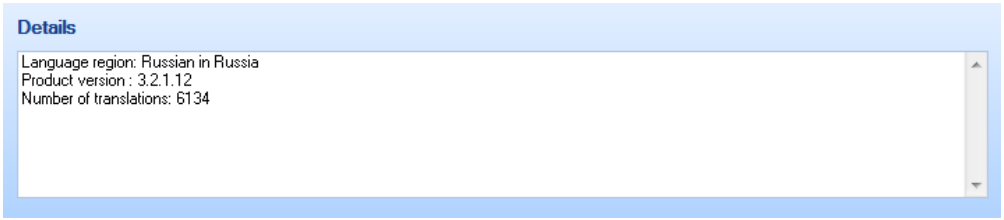
4.2.1 Language Pack Details

Translation Manager > OE Language Packs page > Details Pane - Displays details of the current selected language pack.

Details of the language pack shown will include:

- Language/region for example “Russian in Russia”.
- The product version of the language pack for example. “3.2.1.12”.
- The number of translation contained with the language pack.

Figure 4-2. Language Pack Details Pane



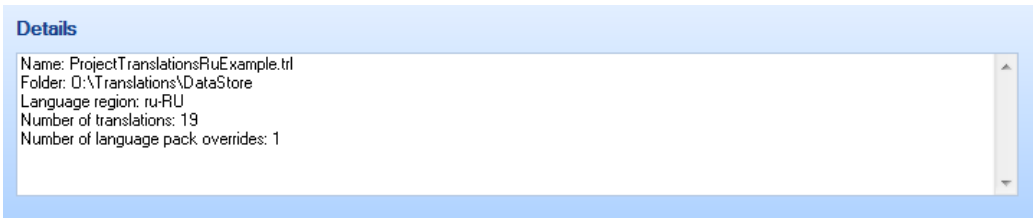
4.2.2 Project Translation Details

Translation Manager **> Project Translations page > Details pane**

This will display the following details of the current selected translation file:

- Name of the selected translation file for example ProjectTranslationsAssets.trl
- The location of the Translations\DataStore folder containing the translation file
- The language region for example "ru-RU"
- The number of translations in the project translation file

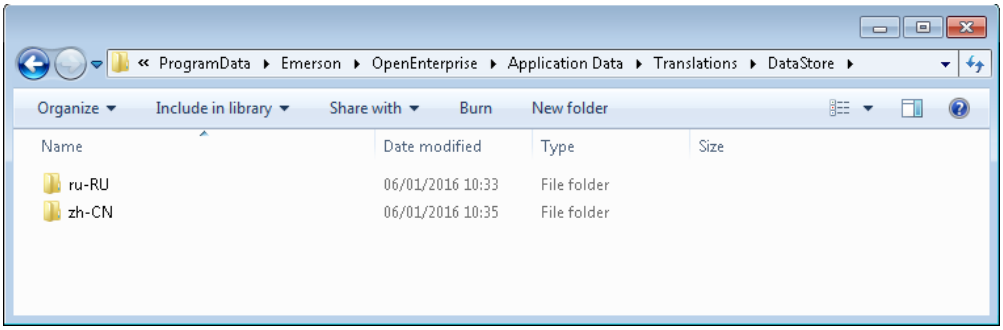
Figure 4-3. Project Translations Details Pane



4.2.3 Where are the Language Packs Stored?

The OE language pack files are created in the DataStore folder created under the ProgramData\Emerson\OpenEnterprise\ApplicationData\Translations folder on the workstation.

Figure 4-4. OE System Report Localization Data Section



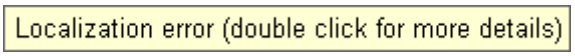
4.3 Troubleshooting

4.3.1 Localization Errors

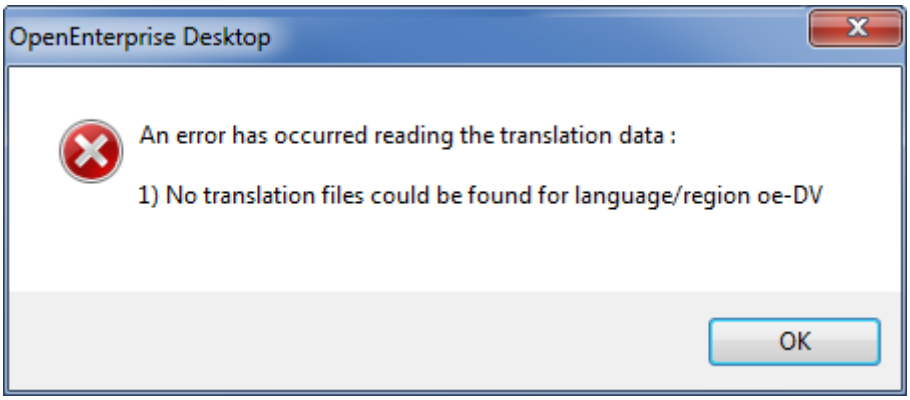
If localization is enabled but no translation files can be found with the language and region set up under Windows a “Localization error” icon is displayed in the status bar of the OE Desktop.



Hovering the mouse pointer over the “Localization Error” icon in the status bar of the OE Desktop displays a tooltip with the text “Localization error”.



Double-click on the “Localization Error” icon in the status bar to display a dialog showing details of the error in English.



4.4 Translation Manager - Settings File

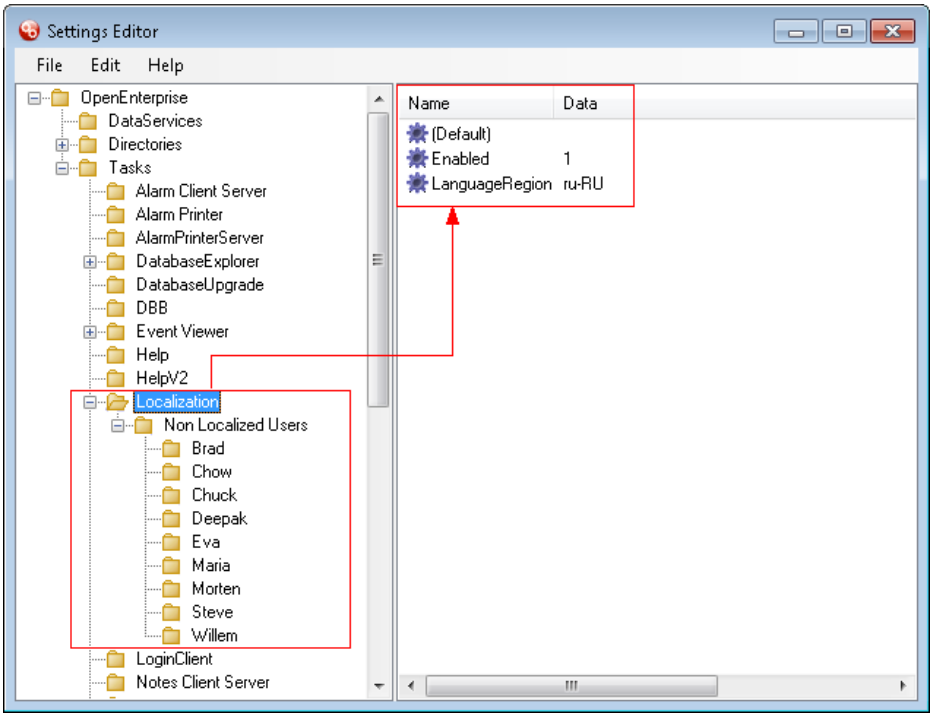
In addition to the Translation Data Stores, some of the Localization configuration is stored in the OpenEnterprise Settings File. These settings are controlled through the Translation Manager.

The Enabled flag controls whether localization is turned on or off for the workstation as a whole. By default, it will be turned off.

Non Localized Users will see the text in the Workstation in English.

You can use the Settings File to view the list of Non Localized users.

Figure 4-5. Settings File



The LanguageRegion value is not set by default. When localization is enabled the language region is controlled by the language region setting of the logged on Windows User.

When the **Override Windows Language** check-box is set in the Translation Manager (as it is above) Localization will use the setting specified, regardless of the Windows setting.

Note

This setting is primarily meant for engineering purposes such as project commissioning and internal development. It will affect the workstation as a whole so ALL Windows Users will experience the override setting.

A value DateTimeLanguageRegion can be added to the Localization settings to specify a different language region to use for translating date/times. This is designed to be used for development and testing only. It enables date/times to show a different value from English after translation when using the development language pack. The development language pack has the language.

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Appendix A. Glossary

A

ACCOL	ACCOL™ is an acronym for Advanced Communications and Control-Oriented Language, the library of function blocks used in ControlWave Designer to program ControlWave and Bristol33xx devices.
Access Area	Every device, plant area and signal in the OpenEnterprise database belongs to an access area. Access Area security controls what objects within a table can be viewed by the User. Users must be granted the access area of an object in order to view it in the HMI. Access area security is configured using the Security Configuration tool.
Active Query	Type of query the OpenEnterprise database supports that reports changes in data back to the client as those changes occur (without polling) . This mechanism is very fast and efficient.
AMS Device Manager	An Emerson software component which allows interaction with HART devices in the RAS RTU network. The Device Manager uses the RAS host system interface (HIS) to display device hierarchy and HART device data using the static HART device description information (stored in DD files) and to communicate with HART devices.
API	Application Programming Interface, the collection of protocols and associated tools used to build software applications.
Archive File Manager	A server-based software tool that enables you to manage the process of moving archive files online and offline.
Archive File Configuration tool	A software tool that enables you to quickly configure archive files.

B

Background Query	A background query is used to get specific values back from the database. You can configure calculations and workflows to run (“trigger”) when a database value changes. Background queries can also pre-query data (usually non-signal data) to be used in calculations.
Baud Rate	Unit of signaling speed derived from the number of events per second (normally bits per second). However if each event has more than one bit associated with it the baud rate and bits per second are not equal.
BSAP	Bristol Synchronous/Asynchronous Communication Protocol; the protocol OE uses to communicate with ControlWave RTUs.

C

Calendar	A yearly time template.
CC	Communications Controller. A suite of software components that provides port sharing and protocol sharing for OE applications when communicating with RTUs.
CL	Control Language; a scripting language contained within the Polyhedra database.
CPU	Central Processing Unit.

C

CRC	Cyclical Redundancy Check error checking.
CW	ControlWave

D

DA	Data Access
Data Bits	Sets the number (typically 8) of data bits contained in an asynchronous byte, or character.
Data Cache	A “data cache” is a term for all the values held in memory that have been queried by background queries.
DD	Device Descriptor. A DD for a HART-enabled field device provides AMS with all the parameters and capabilities of that device, as provided by the manufacturer, including the device icon that OE displays on the device tree graphic.
Deadband	A value that defines an inactive zone above the low limits and below the high limits. The deadband prevents a value (such as an alarm) from being set and cleared continuously when the input value oscillates around the specified limit. Defining a deadband also prevents the logs or data storage locations from being over-filled with non-significant data.
Device	A device in the OE database that maps to a physical RTU.
Device Template	A device in the OE database that can be used to create (“clone”) a new device.
Diagnostic Logging	If enabled, this allows logging of communications to and from wired HART® and *Wireless*HART® devices.
Diary	A time frame that may act as a “container” for a pattern. The diary has an assigned beginning and ending time. The Scheduler (which must be running in order for scheduled diaries to work) automatically starts the diary at the specified time. You can configure a diary to repeat continuously, to run for a specified number of times, or run just once.
DNP3	DNP3 is a robust protocol used in process control systems such as OE. Providing communication between control equipment and data acquisition devices, DNP3 was originally developed for use in electric and water utility SCADA systems.
Dynamic text	Text the OE OPC Server (also known as the OPC Data Server) generates either from a signal or from a value in the database. See *static text*.

E

EFM	Electronic Flow Metering or Measurement

F

FF	Foundation Fieldbus
Field device	An RTU which has been added to the OE database...
Field Tools™	A software product from Remote Automation Solutions. Technicians at the wellhead use Field Tools to connect with RTUs and HART transmitters in order to set up, tune, and perform field maintenance work for the SCADA

F

	network. Field Tools interfaces with the AMS HART Device Configurator (a limited release of AMS Device Manager that accesses device menus and icons, and launches the AMS Device Manager device screens from an external tool). Field Tools also provides an interface to the RAS network of HART devices.
FloBoss 107	A microprocessor-based device that provides flow calculations, remote monitoring, and remote control. A FloBoss is a type of ROC.

H

HART®	Highway Addressable Remote Transducer.
HART/IP	“HART over IP”: a method to transport HART communications to an IP address that is running a HART server.
HCF	HART Communications Foundation, the standards development and support organization for the HART communication protocol.
HDA	Historical Data Access
Historian module	A software component that creates historical data.
HMI	Human Machine Interface. Basically, the data that is presented to the control room operator from the processing plant.
HSI	Host System Interface. Specific software that allows AMS Device Manager to communicate with the OpenEnterprise system.

I

IBP	Internet Bristol Protocol over UDP
ICMP	Internet Control Message Protocol
IEC 62591	Standard from the International Electrotechnical Commission (IEC) that specifies an interoperable self-organizing mesh technology in which field devices form wireless networks that dynamically mitigate obstacles in the process environment. The Remote Automation Solutions’ IEC62591 Interface module provides ROC, FloBoss, and ControlWave Micro devices with this functionality.

L

Language packs	A file (.lpk) OE’s Translation Manager utility uses to translate core OE functionality and create the localized version of OE.
Lists	Collections of ACCOL signals. Each signal list is assigned a number from 1 to 255. Signals within the signal list are referenced by their position in the list. Each list can contain any mixture of analog, analog alarm, logical, logical alarm, or string signals.
List view	Part of the HMI that displays list content.
Local Alarm	Local alarms can be raised depending on numerical or digital attribute values in the database. Note: String and Date/Time attributes cannot generate alarms.
Localization	Translating a product into a different language.

L

Localized name	A user's translated name, defined using the Security Manager, that enables the user to log into a workstation.

M

MIS	Management Information System. A computer system, usually based on a mainframe or minicomputer, that provides management personnel with up-to-date information (such as sales and inventory) on an organisation's performance. MIS output information in a form that is useable by managers at all organisational levels (strategic, tactical, and operational).
Modbus	A popular device communications protocol developed by Gould Modicon.
MSD	Signal address. A two-byte numerical address for a signal within a ControlWave RTU. Also referred to as PDD.

N

Network Configuration Utility	The component of the AMS Device Manager software designed to maintain all parameters you can change for an OpenEnterprise network including communication settings.
nw3000	The Network3000 range of RTUs for which the BSAP RDI was first developed.
.NET	Microsoft technology that abstracts coding away from the operating system and provides a library of objects for use within an application. Also takes care of memory de-allocation. .NET is the technology of choice for OpenEnterprise Version 3.x applications

O

OE	OpenEnterprise™, the SCADA application from Emerson Process Management Remote Automation Solution.
OE Language Pack	A file that contains the translations for a particular language for a given build of OpenEnterprise. This can be installed via the Translation Manager.
OEStore	The application file store for Workstation views and other related files. OEStore is a substituted directory created during the installation of an OE Workstation. OE maps the folder *C:\ProgramData\Emerson\OpenEnterprise\OEStore* to the drive letter O. (This is the default location but can be changed using the SettingsEditor).
OPC	Object linking and embedding for Process Control applications; a set of seven open standards for connectivity and interoperability of industrial automation and the enterprise systems.

P

Pattern	Templates that OE uses to change the value of an analog or digital signal over a period of time.
PI	Suite of applications including Enterprise Historian, Asset Framework, Calculation Engine, Notification and Visualization manufactured by OSISoft Inc.
Polling	The act of collecting data from an RTU. This can occur either manually or

P

	automatically.
Product Translations	Translations to the product's general functionality (such as column headings, dialogs, or core menus).
Project Translations	Translations required for customer-specific strings (such as the name of a pump or a well).
Protocol	A set of standards that enables communication or file transfers between two computers. Protocol parameters include baud rate, parity, data bits, stop bit, and the type of duplex.
Protocol Bridge Device	A HART device (such as the HART Multiplexer or 1420 Smart wireless gateway) that has other devices connected to it either wired or wirelessly.

R

RAS	Remote Automation Solutions, a business unit of Emerson Process Management, focused on serving the oil and gas industry.
RBE	Report By Exception
RCC	Remote Comm Controller, a machine running the Remote Comm Manager which allows the OE client server to manage the machine's devices and communications.
RDB	Remote Database Access
RDI	Remote Device Interface; a program that communicates with the control program in the device to obtain data.
Redundant device pair	The ControlWave/Bristol 33xx redundant control systems use communications redundancy and dual CPUs and power supplies. This redundant system monitors primary and hot standby CPUs, automatically detects failures, and triggers a switchover from the primary CPU to the hot standby CPU. The process also switches all communication channels and automatically transfers data, alarms, and historical information.
ROC	Remote Operations Controller, a microprocessor-based unit that provides remote monitoring and control.
ROCLINK 800	Microsoft® Windows®-based software used to configure functionality in ROC, DL8000, or FloBoss devices.
rtrdb1	The default database DATSERVICE name for the OpenEnterprise database.
RTU	Remote Terminal Unit. A device which interfaces objects in the physical world to a SCADA system by transmitting telemetry data to the system and/or altering the state of connected objects based on control messages received from the system.

S

SCADA	Supervisory Control And Data Acquisition; a type of industrial control system (ICS). Industrial control systems are computer-controlled systems that monitor and control industrial processes that exist in the physical world. SCADA systems historically distinguish themselves from other ICS systems by being large-scale processes that can include multiple sites and large distances.
Signals	The data points placed in or collected from a device.

S

Static text	Text that is fixed (such as the name of a dialog or text entered into a display); see *dynamic text*.

T

Template	In OE, a physical device which is used as a pattern to simplify the process of adding new physical devices to a network. You apply the template – and its associated data configurations – to the new device to quickly configure it. Additionally, you can configure the new device to reflect any changes you may make to the template device.
Tokens	Tokens determine workstation security. Specific Human Machine Interface (HMI) functionality is allowed or denied through tokens. Tokens are required for file access, OPC write access, built in application context menus and custom menus. Token security is configured using the Security Configuration tool.
Translation Data Store	The collection of files that OE uses to create the product translation as well as any customer-specific project translations.
Translation Manager	A software utility installed on a OE workstation that controls the various localization features on that workstation.

U

Unicode	Computing industry standard for the consistent encoding, representation, and handling of text expressed in most of the world's writing systems. Storage of each character is stored in more than one byte and therefore characters from languages other than English are available. However the wider characters mean that Unicode text needs to be treated differently in code from ASCII.
Update mask	A configuration tool that identifies specific portions of a device's configuration to address when updates occur. A mask can prevent or facilitate updates.
UTC	Coordinated Universal Time (UTC), a worldwide civil time standard.

W

WHA	*Wireless*HART® Adapter
Wizard	A series of software screens that guides you through a specific task.

X

XLIFF	XML Localisation Interchange File Format; an XML-based file format that standardizes how localized data passes between tools during the localization process.
XML	Extensible Markup Language, a markup language that is both machine- and human-readable.

Appendix B. Localizing OE Graphics Displays

There are various options within the Graphics application for providing local language support within displays in addition to Workstation Localization.

1. Language Aliasing

OE Graphics includes Language Aliasing support. By using it you can setup a display to show text in a different language and use the expressions function to convert values for example from metric units to imperial units.

Note

Language Aliasing is separate from the localization configuration in the rest of OE – it is purely within the displays.

The Language Aliasing Configurator (LASConfig.exe in C:\Program Files (x86)\Common Files\ICONICS) is the application used to define language aliases and expressions for language switching. These language configuration settings are saved in a language configuration database also not related to the localization configuration in the rest of OE. The Language Aliasing Security Application token is required for users to access the Language Aliasing Configurator.

Figure 1. Graphics Application Language Aliasing Configurator – Text Tab

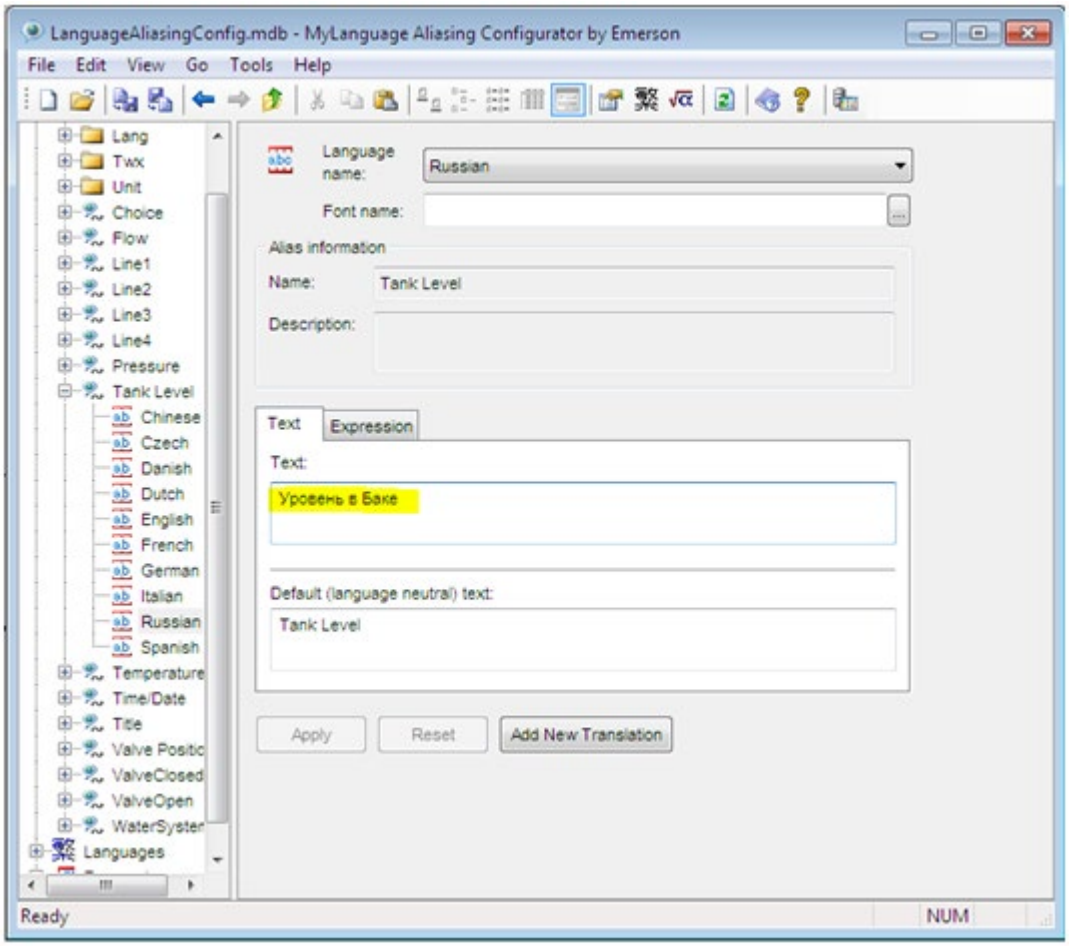
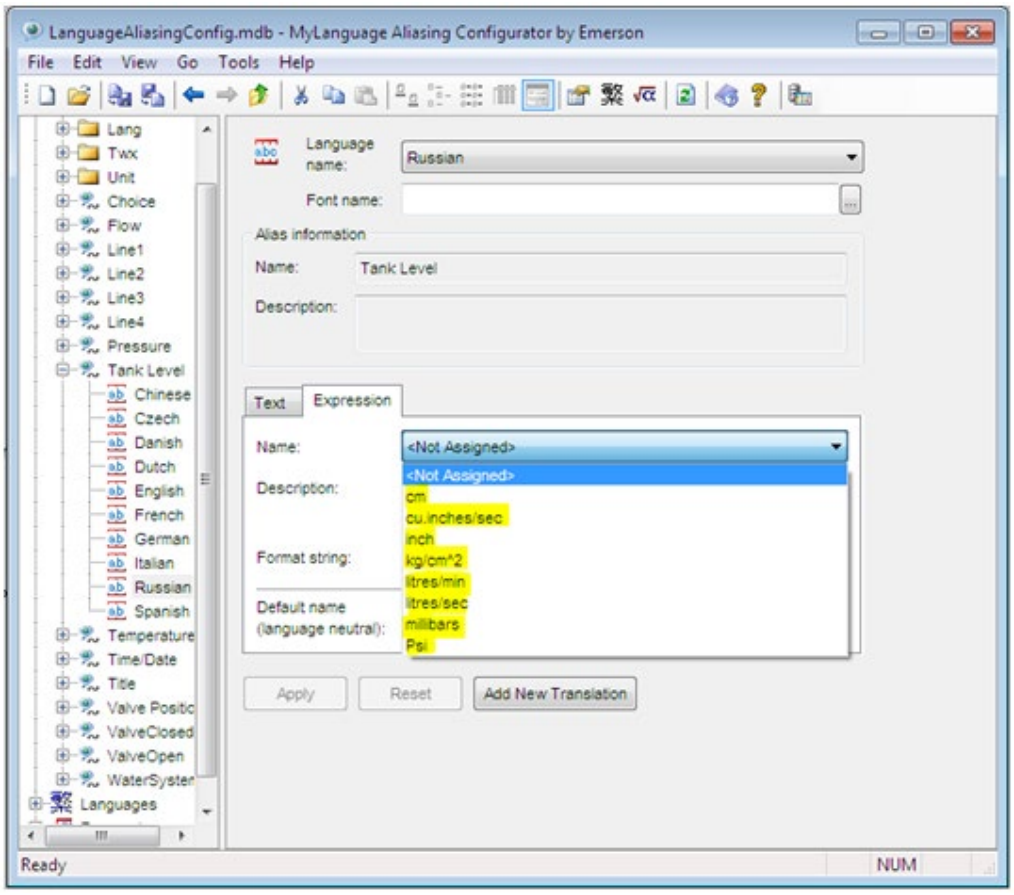


Figure 1. Graphics Application Language Aliasing Configurator – Expression Tab

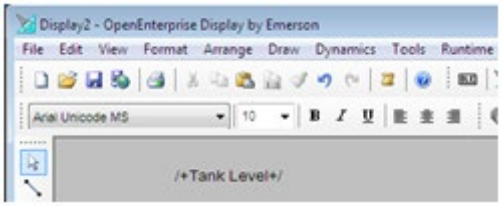


Labels

To translate an alias defined in the **Language Configurator**, it has to be surrounded by **/+** at the beginning and **+/** at the end (**/+Tank Level+/**).

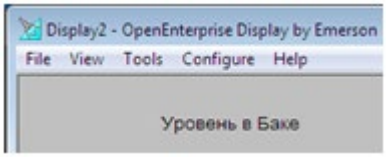
If in **configure** mode, you have the following text label.

Graphics Application in Configure Mode



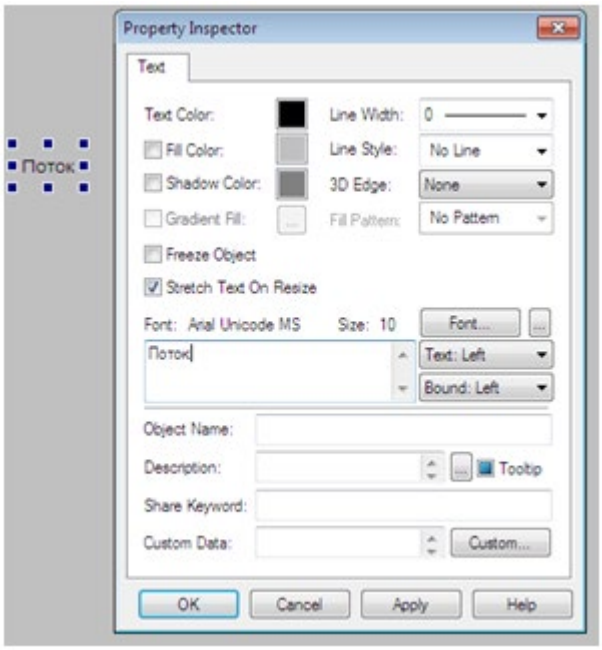
In **runtime** it is going to be translated.

Graphics Application in Runtime Mode



Also, the text in a label can be pre-translated.

Graphics Application in Configure Mode Property Inspector

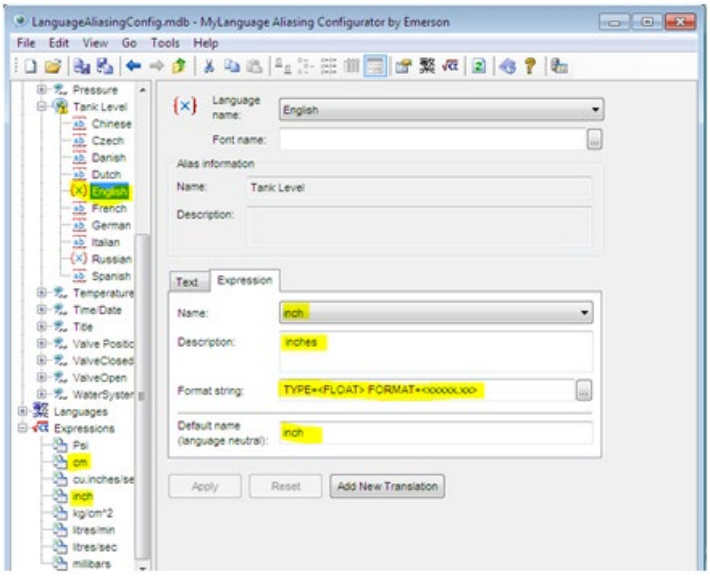


2. Expressions

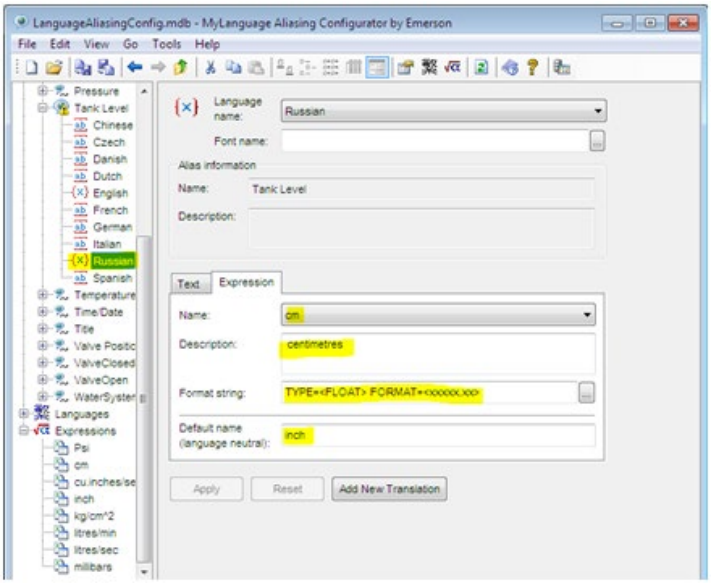
Expressions can be used to make units conversion.

In the **Language Configurator** you can define the following conversion, using the default expressions **cm** and **inch**.

Language Configurator English Language Expression using “inches”

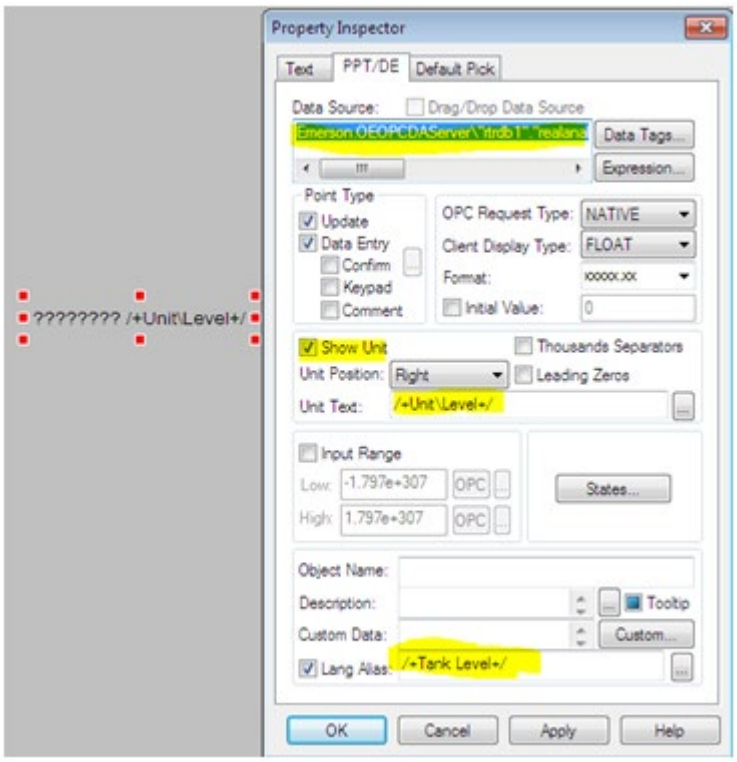


Language Configurator Russian Language Expression using “centimetres”



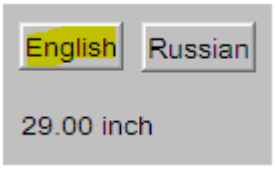
Having this and a realanalog value in the database, the following setup should be done in a display in order to make that value convert from inches to centimeters, depending on the current language.

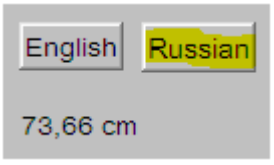
Graphics Application in Configure Mode Property Inspector



Note: Checking “Show Unit” is not mandatory.

Here is how it would look in Runtime mode:



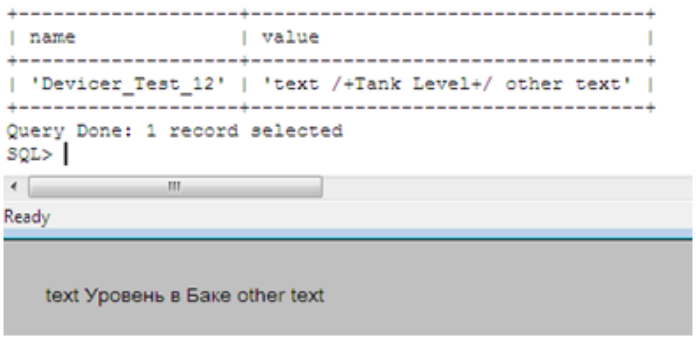


3. OPC Strings

Unicode characters cannot be stored in the OE database. The OPC Server will automatically encode then when writing them and decode back when displaying.

Language aliases can also be stored in the database. For example, having alias **"Tank Level"**, if we store **"/+Tank Level+/"** in a string value, it will display the translated value. Before and after the characters that surrounds an alias, we can put other text.

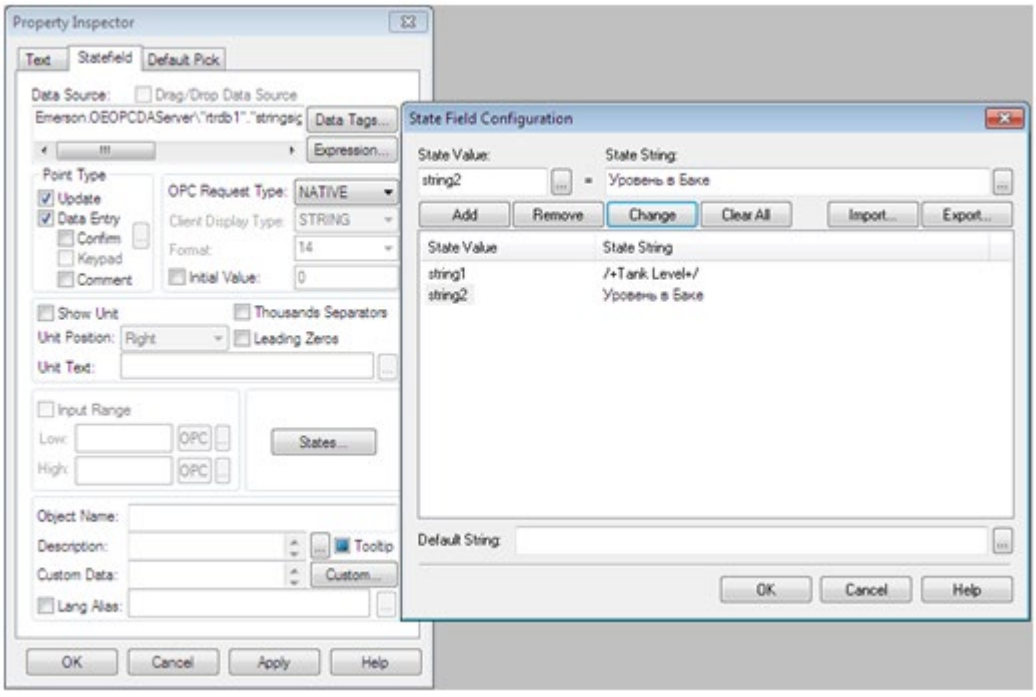
SQL Client above showing a database value with the result in Graphics below



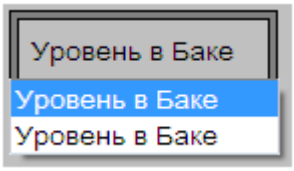
4. Translated lists (State fields)

When using State fields, you can map database values to pre-translated string values or to Language Aliases.

Graphics Application Property Inspector State Field Configuration



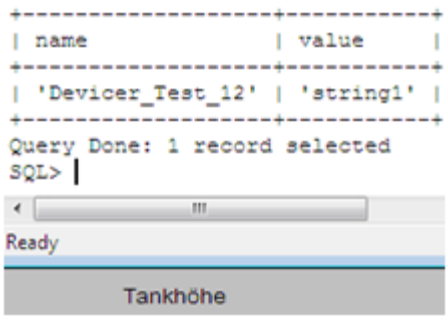
For the states set above, in runtime we will have.



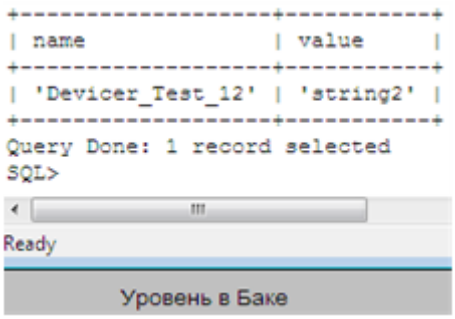
So, the first value will get translated if the language is switched and the second will be static.

These two strings will be stored in the database as “string1” or “string2”.

SQL Client above showing a database value with the result in Graphics below



SQL Client above showing a database value with the result in Graphics below

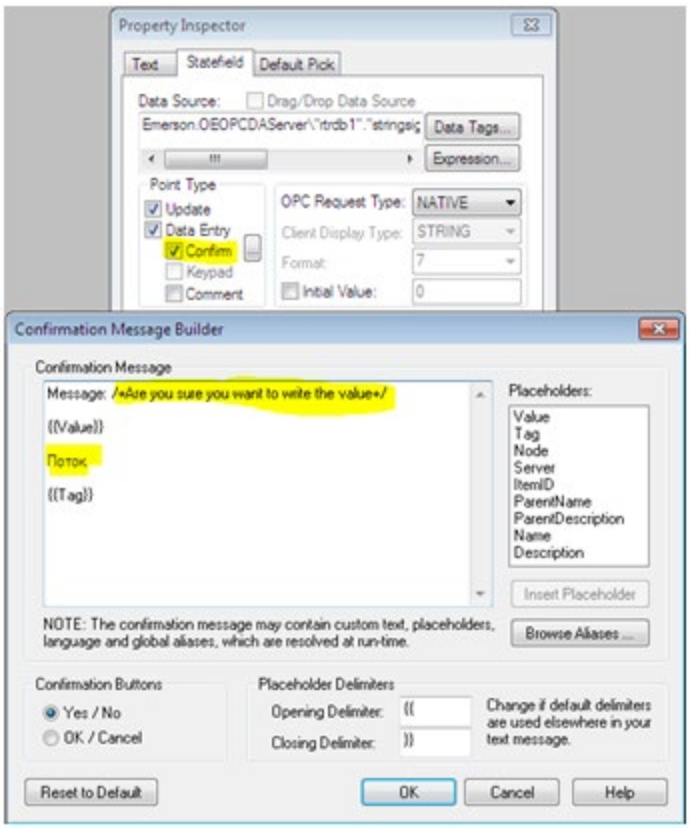


Confirmation Messages

Some dynamic connection type items (Process Points and Data Entry, Download Value pick action, Toggle Value pick action, Location/Slider and Rotation Dial) have a **Confirmation Message Builder** that helps the you create confirmation messages that you will see when writing values to a Graphics display.

Confirmation messages can contain pre- translated strings as well as Language Aliases.

Graphics Application Property Inspector Confirmation Message Builder



Appendix C. Placeholders Reference

There are various options within the Graphics application for providing local language support within displays in addition to Workstation Localization.

1. Numeric Placeholders

In addition to locating Placeholders by using other columns being translated, the Translation Client will try to identify numeric and Boolean values. For example:

Pump level change from 23.45 to 56.67

Pump level change from 12.34 to 34.56

Again, to provide a translation for every possible value would be impossible. These two phrases could be represented by the translation:

Pump level change from [VALUE1] to [VALUE2]

The Translation Client looks for integers, floating point values and Boolean ('True', 'False', 'true', 'false' etc).

2. Text Value Placeholders

Certain phrases would be candidates for being Placeholders but may not be available as supporting columns at the time of Translation or they may not resolve to a single word. The Translation Client will check for these specifically.

The text value placeholders will be defined in an XML file TranslationClientSettings.xml under the node <textValues> for example:

```
<textValues>
  <textValue>High Range</textValue>
  <textValue>High High</textValue>
```

Although this file is a configuration file, it will be an internal configuration file and changing the order of the translations may cause the translation mechanism to fail. Therefore it will be embedded within the TranslationClient assembly to avoid tampering.

3. CustomTranslationClientSettings.xml

It is possible for a customer to provide additional sentence placeholders. This may be useful in translating phrases coming from an RTU. For this purpose, in addition to the embedded resource file TranslationClientSettings.xml, there is a secondary 'custom' file named CustomTranslationClientSettings.xml installed in the location.

C:\Program Data\Emerson\OpenEnterprise\Application Data\Translations

<?xml version="1.0" encoding="utf-8"?>

<translationClientSettings>

 <firstPhase>

  <textValues>

  </textValues>

```
  <numberPlaceholderPrefix>
  </numberPlaceholderPrefix>
  <wordDelimiters>
  </wordDelimiters>
 </firstPhase>
 <additionalPhase>
  <textValues>
  </textValues>
  <wordDelimiters>
  </wordDelimiters>
 </additionalPhase>
</translationClientSettings>
```

Customer specific entries can be added to this file if required. These will then be appended to those read in from the internal settings file. Unintended duplicate entries within any individual section will be ignored. I.e. only one instance of a unique text value within any one section is parsed.

4. Number Placeholder Prefixes

There are certain Placeholders that have the format AAnnnnnn. E.g. RC000001. Although not necessarily translatable they may be used within other phrases. The translation client may need to be able to recognise these particular patterns to be able to translate phrases they appear in. The known number prefixes will be defined in TranslsationClientSettings.xml:

```
<numberPlaceholderPrefix>
  <prefix>Bit</prefix>
  <prefix>MB</prefix>
  <prefix>RC</prefix>
  <prefix>SET</prefix>
  <prefix>DP</prefix>
</numberPlaceholderPrefix>
```

5. Word Delimiters

The Translation Client will potentially need to split phrases up into words in order to separate out the Placeholders (if they cannot be found from other columns being translated at the same time). Spaces will be the initial word delimiter used. However, there will be others such as '.' and ':'. For example, it is common to see a devicename with a colon after it. This will not be recognised as a potential placeholder unless the colon is used a delimiter between words.

```
<wordDelimiters>
  <delimiter>.</delimiter>
  <delimiter>:</delimiter>
  <delimiter>#</delimiter>
  <delimiter>|</delimiter>
  <delimiter>/</delimiter>
  <delimiter>\</delimiter>
  <delimiter>[</delimiter>
  <delimiter>]</delimiter>
  <delimiter>(</delimiter>
  <delimiter>)</delimiter>
  <delimiter>-</delimiter>
  <delimiter>=</delimiter>
  <delimiter>'</delimiter>
  <delimiter>,</delimiter>
</wordDelimiters>
```

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D301807X012
November 2020

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