



Description: Configuring Multilanguage support for GENESIS32

OS Requirement: The operating system required is Win 2003/XP/2000/NT.

General Requirement:

Presenting valuable process information in multiple languages is extremely important for machine builders who expand their markets. Also production plants with operators who do not master the English language, find a need in multi-language operator interfaces.

GENESIS32 v7.0 Unicode for Windows 2003/XP/2000/NT adds multi-language capabilities to your SCADA/HMI solutions. You only need to configure language aliases and your runtime system can switch to any language at any given moment.

The ICONICS Language Server manages a database with aliases and their corresponding translations. The language server provides the following capabilities:

- Multi-language text labels, tool tips, state fields in any visual presentation of GraphWorX32
- Unit conversions depending on language
- Language specific fonts
- Multi-language alarms and alarm reporting
- Multi-language trending and historical alarm reporting.
- Conversion of trend curve ranges.
- Import/Export language configurations.

First glance

GENESIS32 V7.0 Unicode installs with a fully working Multi-language example project. Click *Start/Programs/ICONICS GENESIS-32/Languages/Language Demo*. Your **runtime** application can switch to Czech, Russian, Dutch, ...

Configure your own project

To configure a multi-language project from scratch, please perform the following:

- Click *Start, Programs, ICONICS GENESIS-32, Languages, Language Configurator*.
- Select **File, New** in order to make a new configuration.
- Specify a configuration name **myLanguageCnfg.mdb** and **save** it.

The configurator has a convenient configuration tree in which you can make your changes.



Fig.1 Language configurator

- Right-Mouse click **Languages** and add your required languages (e.g. Dutch, English, French, Chinese,...)
- Right-Mouse click **Aliases** and add an alias called **Welcome**.
- Under your **Welcome** alias you will see the available languages and you could translate a few.



Fig.2 Configuring Language alias

Alias Folders

An alias folder can be used in your language configuration to organize your aliases in logical groups of aliases.

Expressions

You can program your PLC's language independently!

Expressions are used to convert the process values language specific. Gallons/Liters, cm/inches, etc. As an example, to convert a value from centimeters to inches the following (read) expression can be used $x = \{x\} * 2.56$

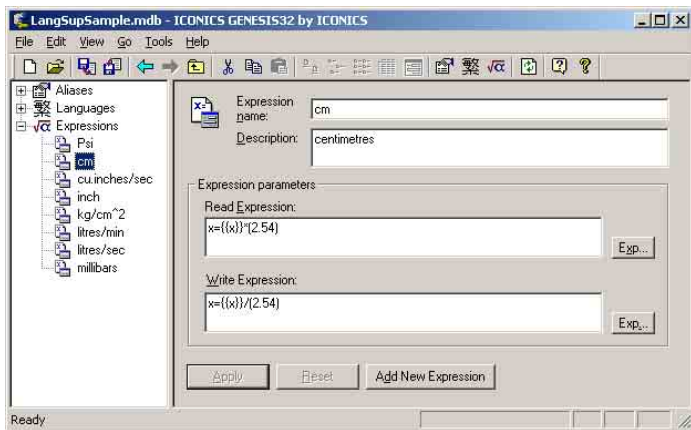


Fig.3 configuring expressions

Fonts

Each alias can change fonts if required when selecting a different language. GENESIS32 installs with Microsoft's Arial Unicode font (not standard with the Windows operating system), which will enable your application to use languages such as Russian, Chinese or Japanese.

Format

Process points using language aliases can also switch the format of the process value on the fly. As an example you may want to show the level in cm with a format xxxx, where the format in inches should be a bit more precise xxx.xx

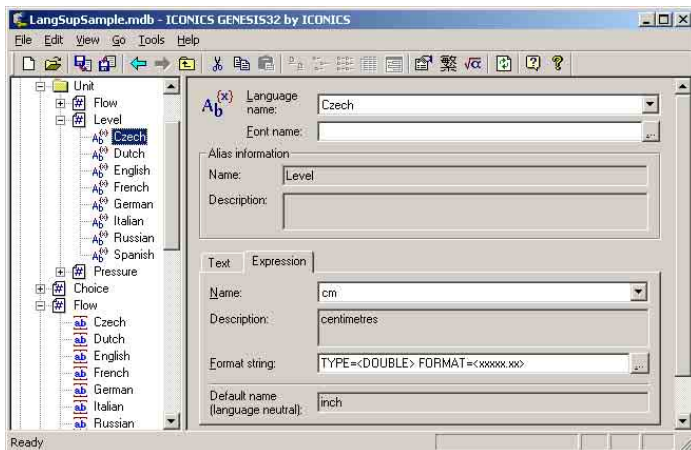


Fig.4 Configuring formats

MS Excel and then be used to translate your application. After finishing the translation, you can import the text back into your Language configuration database.

Configure the HMI graphics

Start GraphWorX32 and place a text label on your display. Instead of typing a text you will now type your alias name enclosed with the alias delimiters `/+ and +/` or simply browse using the language alias browser. For example `/+Welcome+/`. Depending on your selected language you will see the proper text during runtime.

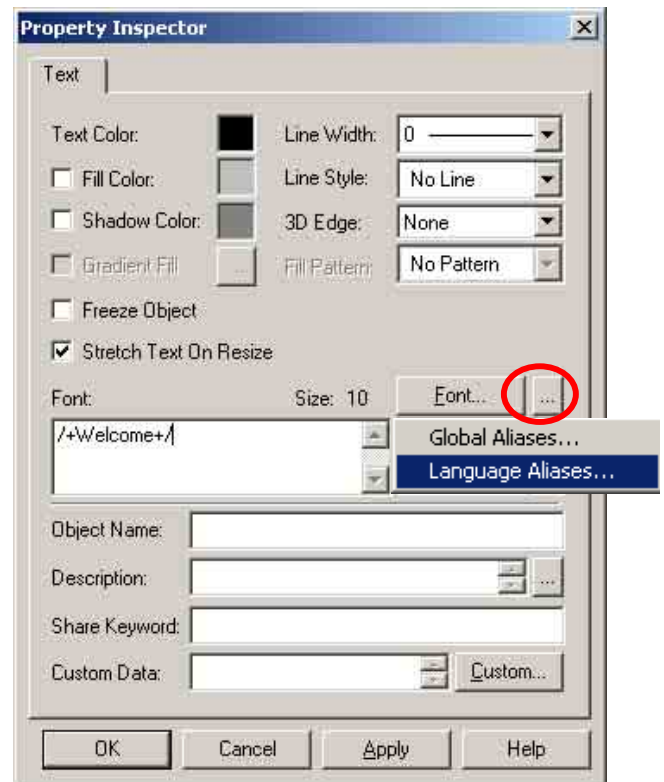


Fig.5 adding language aliases in GraphWorX

Dynamic actions (Size, Process Point, etc) also allow you to configure a language alias. The dynamic value will then take the language settings into account when converting the process values.

Alarming

Language aliases can also be used in your alarm servers.

Import/Export Dictionary

The language configuration can be imported and exported to a text file. This can be used to share your configuration with others translators across the globe. Just click on Export Dictionary in the file menu. This text file may be imported into

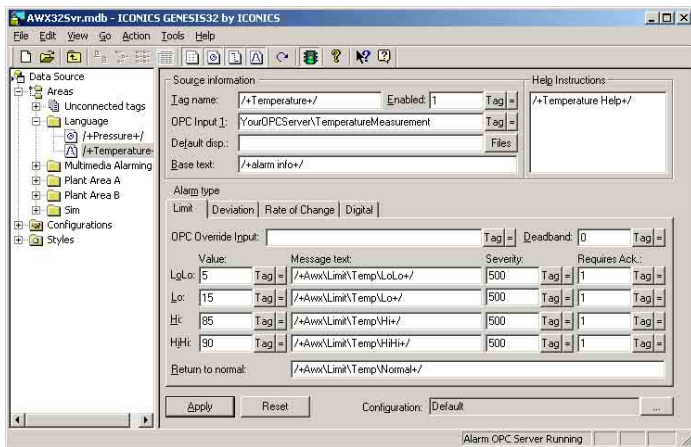


Fig.6 Adding language aliases in AlarmWorX

The alarm viewer will use the aliases to display the translated tag names, alarm messages and so on. The alarm viewer also allows you to use aliases in the column names. The alarm logger can log the alarms translated into your favorite language or “un-translated”. You would choose un-translated in case the Alarm Reporter will do the reports in multiple languages.

Trending

The trend viewer will use the aliases to show the correct descriptions, units and ranges.



Fig.7 Adding language aliases in TrendWorX

Switching Languages

During runtime the language can be switched through a menu selection, a pick action or VBA scripts using OLE Automation.

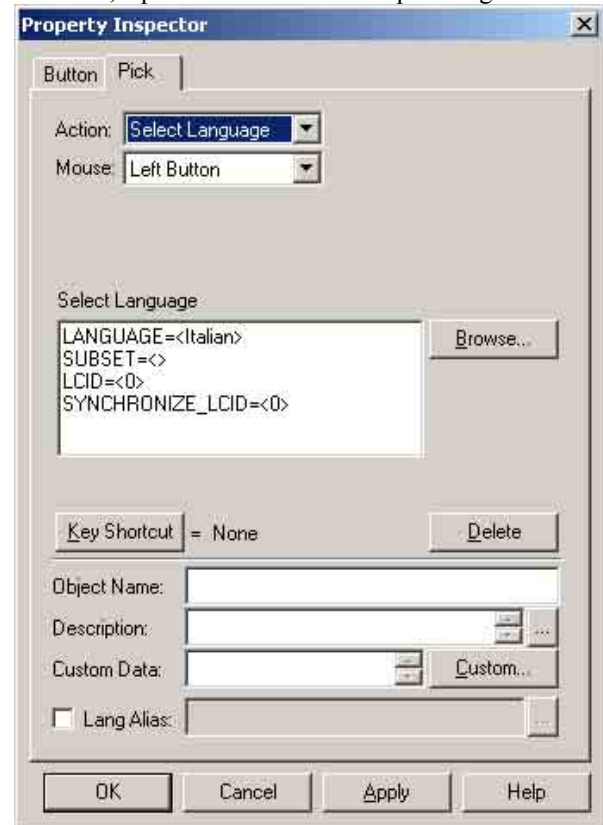


Fig.8 Switching Languages with a pick action