

Internationalization ToolWorX

Internationalizing the GENESIS32 Products

iconics

OPC Automation at your fingertips



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1 About This Document

1.1 Scope of the Document

This document describes how to create alternate language resource - dynamic link libraries (DLLs) for ICONICS' GENESIS32 product family.

1.2 Copyright

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TRADEMARK: AppLocalize is a registered trademark of Software Builders.

1.3 Revision History

Version 5.2.1 – JP	December 1998
Version 5.2.2 – JP	February 1999
Version 6.00 – RLA	January 2000
Version 6.01– RLA	February 2000 –Corrected DLL names.
Version 6.10– SHA	May 2001

2 Introduction

2.1 General Overview

The International ToolWorX product provides users with a method to translate various GENESIS32 applications into other languages. The following User Interface items can be modified and translated:

- **User Interface Menus**
- **Dialog boxes**
- **Message strings**

Note: The translated files will operate under Windows 95, Windows 98 and Windows NT, windows 2000 and Windows ME

2.2 Included Translation Files and Location

The internationalization resource DLL files used in the translation of any ICONICS GENESIS32 products can be found on the ICONICS GENESIS32 Product CDROM in the **E:\Tools\translations** directory. Where E: is the CDROM Drive.

2.3 Product Translation

Any one of the ICONICS products can be translated individually. For example individual products such as GraphWorX32, TrendWorX32, AlarmWorX32 or DataWorX32. Simply copy the files as listed in the product Translation table and follow the directions as listed in the following sections.

2.4 Recommended Translation Tools

ICONICS recommends AppLocalize 2.5 or higher, by Software Builders, for language translation. ICONICS has successfully used this tool in translation of its products and has had experience with it. Use of any other tool may not be guaranteed proper translation and reliable product execution.

For more information of the AppLocalize product, contact the Software Builders:

Address:	Software Builders 14 Rue JB Clement 93200 Saint-Denis France
Phone:	+33 1 49.40.09.99
Fax:	+33 1 49.40.09.
Email:	sbuilders@sbuilders.com (PGP mails welcome)
Web:	http://www.sbuilders.com

2.5 Product Translation Files

The table below lists all the GENESIS32 product family applications. One can translate one of the GENESIS32 individual applications or translate the entire family of products.

The following table lists the names of the GENESIS-32 applications that can be translated:

Product Resource Translation Table:

Product Category	Application	Model DLL name
GraphWorX32	GraphWorX32 VBA Container	GWX32_ENU.DLL
	GraphWorX32 Viewer ActiveX	GWXview32_ENU.DLL
	Symbol Librarian	SymbolLibrary_ENU.DLL
	Common Expression Editor	ICOExpressioneditor_ENU.DLL
	GraphWorX32 Keyboard/Keypad	ICOkeypad_ENU.DLL
TrendWorX32	TrendWorX32 VBA Container	TWX32_ENU.DLL
	TrendWorX32 Viewer ActiveX	TWXviewer_ENU.DLL
	TrendWorX32 Persistent Trending	TWXBgTrend_ENU.DLL
	TrendWorX32 SQL Logger	TWXSQLSvr_ENU.DLL
	TrendWorX32 SQL Configurator	TWX32cfg_ENU.DLL
	TrendWorX32 Reporting	TWXReport_ENU.DLL
	TrendWorX32 System Tray Text	TWXTray_ENU.DLL
	TrendWorX32 OLEDB Provider	TWXOLEDB_ENU.DLL
AlarmWorX32	AlarmWorX32 VBA Container	AWX32_ENU.DLL
	AlarmWorX32 Viewer ActiveX	AWXview32_ENU.DLL
	AlarmWorX32 OPC AE Server	AWX32Svr_ENU.DLL
	AlarmWorX32 Server Configurator	AWX32Config_ENU.DLL
	AlarmWorX32 Alarm Logger	AWXLog32_ENU.DLL
	AlarmWorX32 Logger Configurator	AWX32LogCfg_ENU.DLL
	Alarm OLE Automation	AlarmOLE_ENU.DLL
	Alarm WorX32 System Tray Text	Awxtray_ENU.DLL
	Alarm Reporting ActiveX	AwxRep32_ENU.DLL
ScriptWorX32	Scripting VBA6 Container	ScriptWorX32_ENU.DLL
DataWorX32	DataWorX32 Configuration	DWX32_ENU.DLL
GENESIS Licensing	Genesis32 Licensing	GenRegistrarServer_ENU.DLL
	Genesis32 Licensing	Genregpp_ENU.DLL
Security Configuration	Genesis32 Security	Security_ENU.DLL
Login Client	Login Application	Login_ENU.DLL
GENESIS Tray Utility	System GENESIS Tray Utility	Gentray_ENU.DLL
Dr. DCOM Utility	Dr. DCOM Network Utility	DrDCOMclient_ENU.DLL
OPC Data Spy Utility	OPC Data SPY Client Utility	Dataspy_ENU.DLL
OPC Tag Browser	Universal OPC Tag Browser	TagBrowser_ENU.DLL
Applications Event Logger Utility	Logs Events to NT Event logger	Applog_ENU.DLL
Screen Manager Utility	Screen Manager Application	ScrMgrBar_ENU.DLL
GenBroker Configuration Utility	GenBroker Communications Utility	Genbrokerconf_ENU.DLL
Language Configurator	Language Switching Engine	LangugeConf_ENU.DLL

3 Creating a Resource DLL for GENESIS-32

3.1 Alternate Language Resource DLLs

Alternate language resource DLLs are the means by which GENESIS32 applications (like, GraphWorX32) and ActiveX components (like, TrendWorX32 ActiveX) can change the language of their user interface.

Alternate language DLLs allow GENESIS32 applications to change the language of their user interface on the fly, without needing to reboot the machine or run/restart different versions of the GENESIS32 applications.

The International ToolWorX product provides users with a method to translate various GENESIS32 applications into other languages. The following User Interface items can be modified and translated:

- **User Interface Menus**
- **Dialog boxes**
- **Message strings**

A language DLL does not change the language for system dialog boxes (for instance, the file open dialog) and system messages. These dialogs and messages are dictated by the language version of Windows you are running on your computer and the language version of the MFC DLLs installed on your computer.

3.2 Naming Convention

Alternate language DLLs must conform to the following naming convention to be recognized by GENESIS32 applications:

AppName_StandardThreeCharacterCountryCode.dll

So, for instance, a German language DLL for GraphWorX32 (Gwx32.EXE) would have the name:

GWX32_DEU.DLL.

For applications with more than one Model DLL listed, ALL language DLLs must be created before the application's new language can be used. For instance, in order to translate Genesis32 Licensing, there must be an appropriate **GenRegistrarServer** DLL and an appropriate **GenRegPP** DLL.

The table below lists the three-character codes for various languages and locales.

Language/Locale	Code	Script
Greek	ELL	Other
Russian	RUS	Cyrillic
Turkish	TRK	Latin 2
Polish	PLK	Latin 2
Czech	CSY	Latin 2
Slovak	SKY	Latin 2
Hungarian	HUN	Latin 2
Danish	DAN	Latin 1
Dutch (Standard)	NLD	Latin 1
Belgian (Flemish)	NLB	Latin 1
English (American)	ENU	Latin 1
English (British)	ENG	Latin 1
English (Australian)	ENA	Latin 1
English (Canadian)	ENC	Latin 1
English (New Zealand)	ENZ	Latin 1
English (Ireland)	ENI	Latin 1
Finnish	FIN	Latin 1
French (Standard)	FRA	Latin 1

Language/Locale	Code	Script
French (Belgian)	FRB	Latin 1
French (Canadian)	FRC	Latin 1
French (Swiss)	FRS	Latin 1
German (Standard)	DEU	Latin 1
German (Swiss)	DES	Latin 1
German (Austrian)	DEA	Latin 1
Icelandic	ISL	Latin 1
Italian (Standard)	ITA	Latin 1
Italian (Swiss)	ITS	Latin 1
Norwegian (Bokmal)	NOR	Latin 1
Norwegian (Nynorsk)	NON	Latin 1
Portuguese (Brazilian)	PTB	Latin 1
Portuguese (Standard)	PTG	Latin 1
Swedish	SVE	Latin 1
Spanish (Standard/Traditional)	ESP	Latin 1
Spanish (Mexican)	ESM	Latin 1
Spanish (Modern)	ESN	Latin 1

Thus, the standard Dutch language DLL for TrendWorX32 Reporting would be named **TWXReport_NLD.DLL**, and the Hungarian language DLL for the Universal Tag Browser would be named **TagBrowser_HUN.DLL**.

Note: The recommended Internationalization and translation tools should be used to create accurate and reliable products.

3.3 Creating a new Language DLL

Every language resource DLL needed for internationalization is represented by a sample American English DLL named by the convention described above (American English carries the code **ENU**). This sample is not actually used by the application, as American English is the internal language of all Genesis32 applications. All DLLs are found in the directory in which their parent application's EXE file resides.

To create a DLL for another language, follow this procedure:

- Start AppLocalize.
- Click **File | New**, to create a new translation project.
- Click **Description | Languages**, and click on the first available space in the **Languages** column. A dropdown list appears. Select the target language. Click **OK**.
- Click **Actions | Add/Merge from base resources file...**
- Select **EXE, DLL, ...** as the source file type.
- Click **...** to browse for the DLL to be translated. Click **Run** to add the file to the project.
- Click **View | Hierarchical View** to display an explorer-type window of the resources contained in the file.
- The explorer bar exhibits standard explorer behavior. To expand a branch, double-click on the root of that branch while it is collapsed, and vice versa.
- To translate a single item, right-click the item, then select the target language from the popup menu. Click on the **Enter Text** box, and change the text to translate the item. Click **OK** to continue.
- When translation is completed, click **Actions | Generate Translated Resources File...**. Change the destination so that the new file is in the same location as the application's EXE file, and so that the file name conforms to the naming convention as already described. Uncheck the **Change Version Info** box. Click **OK**. The new language DLL will be compiled.

3.4 Testing the new Language DLL

The alternate language DLL is now ready to be tested. To test your DLL:

- Run the application.
- Select **View | Select Language**
- In the "Select Language" dialog, choose the language for the DLL you just created
- Click **OK** and the application will switch to the chosen language

Note: Some applications do not allow for explicit changes to the default language from the **View** menu. In these cases, change the default locale by using the **Regional Settings** item in the Windows **Control Panel**. Upon changing this setting, it will be necessary to restart the GENESIS32 product whose language DLL you wish to test.

4 Requirements for Language Translation

4.1 Introduction

Translating ICONICS HMI/SCADA and Control products to any language can be defined as having several efforts. These efforts can be done all at once or as needs require.

- **Bare Bones Translation**
GraphWorX32 Runtime Operation Only
- **Minimal Translation:**
Bare Bones +
Getting Started Document
- **Functional Translation**
Minimal Translation +
All Runtime Components defined in section 4.2.2
- **Recommended Translation**
Functional translation +
All Configuration Components defined in section 4.2.3
- **Total Translation**
Recommended Translation +
All Optional Products and Components defined in 4.2.4
Complete Installation translation +
All Documentation and All Software

For example for German speaking countries, (Germany, Austria, Switzerland, Lichtenstein, Luxembourg) a translated version of GENESIS32 is required. For translating GENESIS32 into the German language the resource DLLs will need to get the **DEU** identification.

Example: **Gwx32_DEU.DLL**. The GraphWorX32 component represents the translated to German GraphWorX32 product.. Other components, which do need translation, are listed below.

4.2 Components to be Translated

The components, which need to be translated to any language, are broken into several categories as described in the following sections.

4.2.1 Getting Started Manual

The Getting started document provides the minimum documentation to install and operate the GENESIS32 product. Installation, Error messages and Minimum Computer requirements are described in the Getting Started Document and it is recommended that document be translated localized.

4.2.2 ICONICS – GENESIS32 Runtime Components

TWXviewer	TrendWorX32 Viewer ActiveX
TWXSQLSvr	Trend SQL Logger Server
TWXReport	TrendWorX32 Reporting
TWXBgTrend	Persistent Trending
TWXoledb	TrendWorX32 OLEDB provider interface
TWXTray	TrendWorX32 System Tray & control panel

AWXView32	Alarm Summary Viewer ActiveX
AWXRep32	Alarm Report & Analysis ActiveX
AWX32svr	Alarm OPC Alarm/Events Server
AWXLog32	Alarm SQL Logger
AlarmOle	Alarm OLEExpress Subscription
AWXTray	AlarmWorX32 System Tray & control panel

GenLIC32	GENESIS32 Licensing Server
GWXview32	Graphics Viewer ActiveX
GWXTray	Graphics System Tray
GenRegistrar	Registration Server / Event Server
GenRegPP	License Monitor
Login	Login Client
Security	Security Configuration
TagBrowser	Universal OPC Tag Browser DLL
GenTray	ICONICS System Tool Tray

4.2.3 ICONICS - GENESIS32 Configuration Components

AWX32	AlarmWorX32 Container
AWX32Config	Alarm Server Configurator
AWXLogCfg	Alarm Logger Configurator
TWX32	TrendWorX32 Container
TWX32Cfg	Trend SQL Server Configurator
ScriptWorX32	ScriptWorX32 User Interface
SWXTray	ScriptWorX32 System Tray & control panel
ICOExpressioneditor	Iconics General Expression Editor
ICOsecuredesktop	Iconics Security to prevent Alt-Shft-DEL Editor
Securedesktop	Iconics Security Systems Tray
SymbolLibrary	GraphWorX Symbol Library
GenBrokerConf	GenBroker Configuration Communications Utility
GenBrokerTray	GenBroker System Tray
GenEventTray	Alarm / Event Server System Tray
LanguageConf	Language Configuration Utility for Unicode products (NT/2000) Only
MSDE Manager	MSDE Manager Utility

4.2.4 ICONICS OPTIONAL PRODUCTS & ActiveX's

DWX32	DataWorX32 Container
DWXTray	DataWorX32 System Tray
Dr. DCOM	DCOM Network Setup and test Utility
DataSPY	OPC Data Spy Test Client Utility
TagBrowser	OPC Tag Browser EXE
Sermgrtray	Screen manager System Tray
TWXSQlTool	TrendWorX32 SQL Tool
GWXGauge	Graphics Gauge Activex
GWXVessel	Graphics Vessel Activex
GWXSwitch	Graphics Switch Activex
GWXNumeric	Graphics NumericActivex
GWXSlider	Graphics Slider Activex
SWXPeriodic	Periodic Scheduler Script ActiveX
SWXEvent	OPC Event Script ActiveX
SWXSCRAalarm	OPC Alarm Script ActiveX