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**Getting Started**

# **PASSOLO**

**PASS Software Localizer**

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# Information About This Manual

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## Foreword

PASSOLO is a program that provides support for text resource translation or software localization. For this, all textual components of a software that are displayed on-screen for the user are designated as text resources.

These include the menu structure with menus, commands, and access keys; the dialogs with buttons, checkboxes, and other control elements; as well as the “String Table” in which strings are dynamically linked during “Execution” (these include, for example, error messages or tool tips).

Numerous new functions have been integrated into this updated version of PASSOLO in order to simplify internationalization, both for the translator as well as for editors and project managers involved in the localization process.

The PASSOLO documentation comprises two manuals: The Reference Manual as well as this Getting Started Manual which is subdivided into three chapters:

- General Information
- Condensed Instructions
- Creating Multilingual Applications

The *General Information* chapter covers the typographic conventions employed in both this Quick Startup manual as well as in the Reference Manual. This chapter also described the procedures for installing and uninstalling PASSOLO.

The *Condensed Instructions* chapter uses smaller sample projects to describe the most important features and functions of PASSOLO.

Again using examples, the *Creating Multilingual Applications* chapter illustrates the options available for creating programs in multiple languages.

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# PASSOLO Editions

PASSOLO is available in five editions which differ based on the scope and terms of the individual licensing agreement.

## **PASSOLO Demo**

PASSOLO Demo is available free of charge and can be downloaded from our Web site at <http://www.passolo.com>. This edition only permits 50 text resources for each resource type to be edited. The same restriction applies to the transfer of translated strings to the target file and for import/export operations. Another restriction is, that projects cannot be saved with the demo version.

The PASSOLO demo version is intended solely for evaluation purposes and may not be employed for commercial projects.

## **PASSOLO Standard Edition**

The PASSOLO Standard Edition is designed for software developers and translators whose tasks are confined solely to the localization of programs. This edition does not include statistical functions and cannot be expanded by the addition of export/import interfaces to translation memory systems.

## **PASSOLO Professional Edition**

The PASSOLO Professional Edition is intended for project managers, editors, and translators responsible not only for localizing the software, but also for translating the associated documentation and managing localization projects. The new project view and other project related functions helps to manage even large projects. PASSOLO's statistical functions provide a tool to better calculate the scope of localization projects. The optional interfaces to translation memory systems help to increase the consistency and quality of translated documents.

The integrated script development environment makes it possible to change or add functions to PASSOLO.

## **PASSOLO Team Edition**

The PASSOLO Team Edition offers the same functions as the Professional Edition. Additionally, the Team Edition can be used to create and administrate a certain number of translation bundles. These translation bundles can be processed using the free Translator Edition, which includes all the required functions. Thus, with a single software license it is possible to delegate entire projects to external translators, including the task of adapting and testing the dialog layouts. This will simplify the workflow and reduces costs for the localization of large projects involving numerous external translators.

## **PASSOLO Translator Edition**

The Translator Edition is a free editor for translators. It can be downloaded from our Web site. Only translation bundles created with the Team Edition can be edited with the Translator Edition. Thus, all the members of a project team can make use of PASSOLO's powerful functionality without having to purchase a software license.

The Translator Edition cannot parse source files or generate target files, but it offers all the other functions for processing translation bundles. It includes all the editors and test functions required to guarantee top quality translations.

# General Information

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## Typographic Conventions

Before starting to work with PASSOLO, you should familiarize yourself with the general and special typographical conventions used in this documentation.

### General Conventions

For an explanation of the special terms used in this manual, go to *Windows Basics* on page 14.

The orientation aids listed below identify the following special information in the text:

Formatting	Meaning
Bold	In this manual, the names of all elements on the graphic user desktop (menus, commands, dialogs, buttons, etc.) as well as data types, functions, procedures, etc. are indicated by bold formatting.
Italics	Terms or characters that must be input, together with cross-references to chapters or sections, path and file names.
"Resource"	Terms or characters in the source or translation list.
CAPITALIZATION	Key designations.

# Keyboard Conventions

All keys are written in capital letters. For example, the control key is written as CTRL key (or simply CTRL), and the escape key as ESC. Since hardware manufacturers employ differing conventions, it is possible that the designations on your keyboard differ from those used in this manual.

Keys	Meaning
KEY1+KEY2	Several keys are frequently employed in combinations or in sequence. In this manual, such combinations are known as “shortcuts”.) If, for example, the shortcut SHIFT+F1 is used, it means you must press and hold down the shift key while pressing the F1 key.
ARROW KEYS  HOME, END, PAGE UP, PAGE DOWN	Use the arrow keys (UP, DOWN, LEFT, and RIGHT arrows) to move the cursor in a text field. Some directional keys can be combined with one another (e.g., CTRL+HOME).
Numeric keypad	Generally, your keyboard will be a so-called “expanded” keyboard, that allows you to use the numeric keypad to input numbers. Before doing this, you must first press the NUM LOCK key.

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## System Requirements

As a standard configuration, your computer should be equipped as follows:

- Pentium III processor operating at 500 MHz
- Parallel or USB port
- XGA graphics card operating at 1024 x 768
- At least 40 MB of free space on your hard drive
- Windows 95 / Windows 98, with 64 MB of RAM  
Windows NT 4.0, Windows 2000 or higher, with 128 MB of RAM

A multilingual Windows 2000 or Windows XP is recommended for projects with Asian languages.

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# Installation and Removal

Before you can use it, the PASSOLO software must first be installed under Windows 9x, Windows NT, Windows 2000 or Windows XP.

## **Install the software as follows:**

The CD has an auto-start program that is carried out once the CD is placed in the CD-ROM drive. Click on the **Install PASSOLO** button to start the installation.

If the auto-start function is disabled on your system, use your Windows Explorer to open the PASSOLO CD, then start the installation by double-clicking on the *setup.exe* file.

If you have downloaded the installation from the Web, call up *setup.exe* on your local hard drive.

Follow the instructions provided by the installation program.

## **Remove (uninstall) the software as follows:**

- Go to the control panel (under Windows, click on **Start, Settings, Control Panel**), then double-click on the **Software** icon (or **Add/Remove Programs**).
- In the list of installed programs, mark the entry, **PASSOLO**.
- Click on the **Add/Remove** button.
- Confirm the prompt asking you whether you wish to remove the selected program.

## **The reference manual**

PASSOLO is constantly being expanded by new functions. These expansions must be described in the Reference Manual. For this reason, the Reference Manual is no longer provided in printed form, but instead, can be found in a PDF file located in the *Manuals* folder on the PASSOLO installation CD. PASSOLO's online help contains the same information as the Reference Manual.

In order to display and print the Reference Manual, you will need Acrobat<sup>®</sup> Reader from Adobe<sup>®</sup>. If you do not have this software program installed, you can load a copy from the *Acrobat* folder on the PASSOLO installation CD.

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# Dongle

PASSOLO is protected against unauthorized copying by a hardware copy protection device (dongle). A dongle is a small module installed on your computer's parallel or USB port. The driver for the dongle is automatically installed at the end of the installation procedure.

If PASSOLO determines that the dongle is not installed on one of the ports, the program only operates in the demo mode.

Before you can begin working with PASSOLO you must install the dongle on your computer's parallel or USB port. If you are unsure about precisely how to do this, refer to your computer's documentation or ask your technical support specialist or network administrator for help.

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**Note:** Do not install or remove the dongle while your PC is running. Doing so may destroy either the dongle or your PC's parallel port.

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## Unlimited Mode

In order for PASSOLO to operate without limitations, the dongle must be installed on your computer's parallel or USB port. If a printer or other device is already connected via the parallel port, connect this device's cable to the rear of the dongle. This will in no way affect the device's operation.

## Demo-Mode

If PASSOLO is unable to locate the dongle, the software will only operate in the demo mode. In the demo mode, only 50 text resources for each resource type can be edited. The same restriction applies to the transfer of translated strings to the target file and for import/export operations. Another restriction is, that projects cannot be saved.

## Installing and Configuring the Dongle Driver for Windows

The dongle driver is automatically installed at the end of the PASSOLO installation process. If the program fails to correctly install the dongle driver, you can also install it manually. The following section contains instructions for the manual installation and configuration of dongle drivers under Windows 9x and under Windows NT.

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**Note:** Only users with administrator privileges can install dongle drivers under Windows NT and Windows 2000.

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During installation, the *Rainbow\Sentinel* subpath is created in the PASSOLO program path. This subpath contains the programs to install dongle drivers.

Under the PASSOLO program path, the installation program for Windows NT is located along the path *Rainbow\Sentinel\Win\_nt\setupx86.exe*, while the program for Windows 9x is located along the path *Rainbow\Sentinel\WIN\_9x\sentw9x.exe*.

Proceed as follows to install the driver:

1. Click on the appropriate program icon. This starts the program, **Rainbow Technologies Sentinel**.
2. To install the dongle driver, go to the **Functions** menu and select the **Install Sentinel Driver** command. This opens a dialog window containing a predefined path.
3. Once driver installation has been completed, the message: “Driver Installed! Please restart your system” appears. To continue, click on **OK**.

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**Note:** If you encounter problems during the installation of the dongle driver, or if you need more information concerning the configuration, go to the Sentinel help file. For installations under Windows 9x, the help file is located along the path: *Rainbow\Sentinel\WIN\_9x\sentw9x.hlp*. If you are working under Windows NT or Windows 2000, the help file, *sentinel.hlp*, is located in the path *Rainbow\Sentinel\Win\_nt\i386*.

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# Language Selection

Since PASSOLO contains all resources both English and German, you must specify the language setting of your operating system when you start PASSOLO for the first time.

To switch from one language to the other, sequentially click on **Extras**, **Options**, **System** in PASSOLO, then select the desired language from the list of available languages. Before any change can take effect, you must first quit, then restart PASSOLO.

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# Windows Basics

The following section provides a brief introduction to the Windows desktop for users who are unfamiliar with it. However, we strongly recommend that you consult your Windows manual which contains extensive information on working with Windows.

## The PASSOLO Program Window

When you start PASSOLO, the PASSOLO program window opens, listing the most recently edited project.

The following figure illustrates the most important elements in this window:



**Menus:** The menu bar is located above the toolbar. You can select individual menu commands with either your mouse or the keyboard.

**Toolbar:** The toolbar contains buttons that you can click to select various commands more rapidly.

**Scrollbar:** Use the scrollbar along the right margin of the window to display data that are currently not visible.

**Status bar:** The status bar along the lower window margin displays information related to marked commands.

## Working With the Mouse

If this is the first time you have worked with Windows, familiarize yourself with the operation of the mouse and other basic Windows-related functions. Please read your Windows manual.

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**Note:** Always use the left mouse button. The right mouse button is only used to display context menus.

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Purpose	Action
Point	Position the mouse pointer on an element.
Click	Point to an element, press and quickly release the mouse button.
Double-click	Point to an element, then press and quickly release the mouse button twice.
Drag	Point to an element, press and hold down the left mouse button, then move the mouse pointer to a new position. Release the mouse button.

## Selecting Commands

There are several ways in which you can select commands to perform their associated functions:

- Use the mouse to click on a button on the toolbar;
- Select a command from a menu;
- Use a context menu;
- Use shortcuts (key combinations).

## Using Icon Buttons

Using the toolbar, you can call up many of the most frequently used commands. The toolbar is located below the menu bar. Depending on the currently active main window, the toolbar will contain different buttons.

The different toolbars can be configured individually. For more detailed information, refer to the *Appendix* of the Reference Manual.

## Selecting Menu Commands

The PASSOLO command structure is divided into menus. Some commands immediately carry out their associated task steps, while others first display a dialog in which you can modify certain settings or specify options before the command is carried out.

## Selecting Commands With the Mouse

In the menu bar, first click on the desired menu, then click on the desired command. To close a menu without selecting a command, simply click on the menu again.

## Selecting Commands With the Keyboard

First, press ALT or F10 to activate the menu bar, then press the key that corresponds to the underlined letter in the desired menu name. To select the desired command, press the key that corresponds to the underlined letter in the command name or the underlined number ahead of the command. To close the menu without selecting a command, press ESC.

## Selecting Commands in Context menus

If you point to a particular element in PASSOLO or mark several elements (e.g., several string lists in a given project) and then click the right mouse button, a context menu appears. Context menus contain commands specific to the activated or selected element. Context menus appear at the point where the mouse pointer is currently located.

If you click in the area next to the context menu, it closes without any commands having been carried out. You can also press ESC to do this.

## Using Shortcuts

You can select some commands by using shortcuts displayed to the right of the associated command in the menu structure. For example, you can press F1 at any time to open the integrated PASSOLO online help function.

## Dialogs

When certain commands are selected, a dialog in which you can change settings or specify options often opens. If a given option appears shadowed, it is not available for the current action.

Some (more complex) dialogs are broken down into several, separate register cards which, together, make the option available.

Generally, it is easiest to use the mouse in a dialog. However, you can also select or enter the available options from the keyboard. For example, you can use the TAB key to move from one option to another, or press ENTER to select the **OK** button or ESC to select the **Cancel** button. When working in a dialog containing several register cards, press CTRL+TAB, to move from one card to another.


Your Windows documentation contains a complete list of all shortcuts available in dialogs.

## Context-sensitive Help

The online help function integrated in PASSOLO is a complete online reference source that you can call up at any time. Online help contains basically the same information as found in this manual.

To open the online help, press F1, or go to the **Help** menu and select the **Help Topics** command. Every dialog has an associated context help window that can be called up by pressing F1.

In the case of more complex dialogs, the online help provides information concerning each individual control element . To call up this help function, click

on  in the upper, right-hand corner of the dialog, then click on the control element.

# Condensed Instructions

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## Overview

Before familiarizing yourself with the PASSOLO functions in greater detail, this chapter offers you an opportunity for a quick start by providing condensed instructions. You will discover how easy it is to use PASSOLO to translate text resources and programs and internationalize them.

Using a simple example, we will present the basic functions in such a way that you will be able to create your own localized and operational program in just a few minutes.

The example we will use is known as SCRIBBLE.EXE and is located in the *Samples\ScribbleDeu* path on the PASSOLO CD. In this example, *SCRIBBLE.EXE* will be translated from English into German. However, you can also select a different target language in the following steps.

Localization involves 4 steps:

- Creating a new project and selecting the program to be translated;
- Creating and editing the source list;
- Creating and editing the associated translation list;
- Generating the localized version of SCRIBBLE.EXE.

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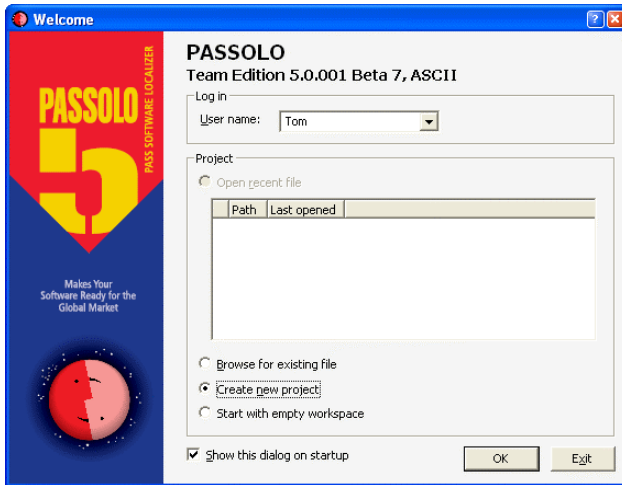
# File formats

The current version of PASSOLO can read all project files, saved with previous versions of PASSOLO. These project files are automatically converted into the new file format after the user has confirmed the conversion. Please note, that these new project files cannot be edited with older versions of PASSOLO.

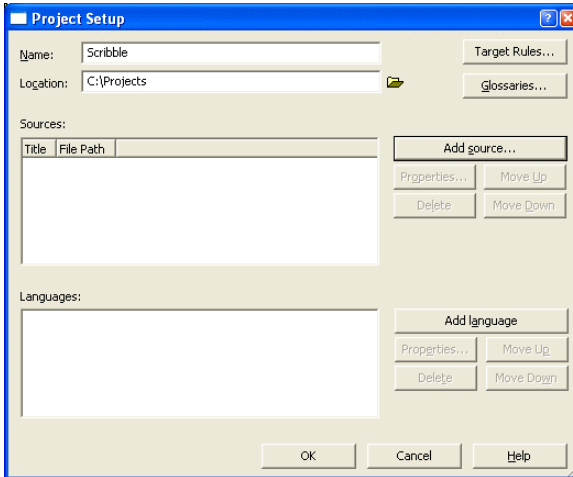
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# Creating the Project

Start PASSOLO. In the **Welcome Dialog** you choose **Create New Project**. If PASSOLO have been started already you can select **New** in the menu **File**.

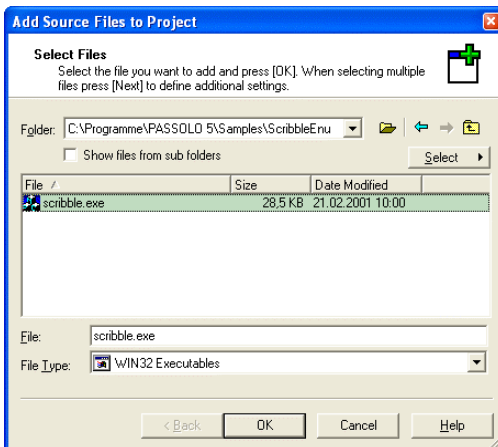


In the **Project Setup** dialog that then appears, enter a working title for the project (e.g., *Scribble*) in the **Name** field and, in the **Location** field, enter the path along which the project is to be saved (e.g., *C:\Projects*).

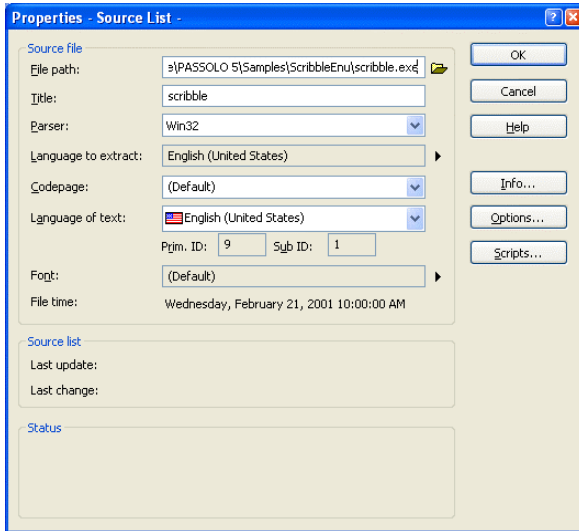


Next, use the **Add source** button to select the program you wish to localize (in this case, SCRIBBLE.EXE). This program is located on the PASSOLO CD in the path, *Samples\ScribbleEnu* and can be copied to any desired local path.

In the **Select Files** dialog choose **WIN32 Executables** as file type.



Once you have selected SCRIBBLE.EXE, the **Properties – Source List** dialog appears. Here you can specify the current language of the resources to be extracted.

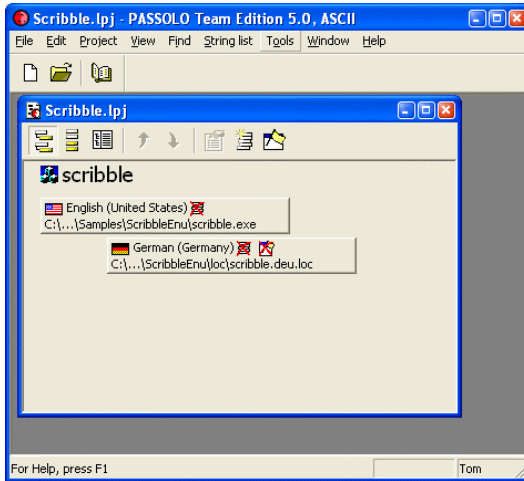


Confirm the settings by clicking on **OK**.

Next, select the **Add language** button to specify the language into which SCRIBBLE.EXE will be transferred for this project. In this sample we use *German (Germany)*.

Confirm the entry in the dialogs with **OK** to create the project. If the specified project path does not yet exist, a prompt appears, asking you to confirm the path.

In the project window that subsequently opens, the selected program will be shown as the source file, and the specified language as the target file.



Localization projects can have many different structures and the individual components can all be at different editing stages. The information in the project window, together with the options in the **Project Setup** dialog allow you to easily administer and edit very complex translation projects, even those being translated into several languages simultaneously. For more detailed information, refer to the section *The Project Setup Dialog* of the Reference Manual.

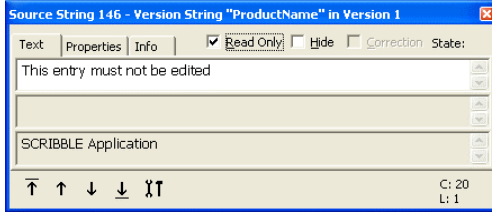
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## Creating and Editing Source Lists

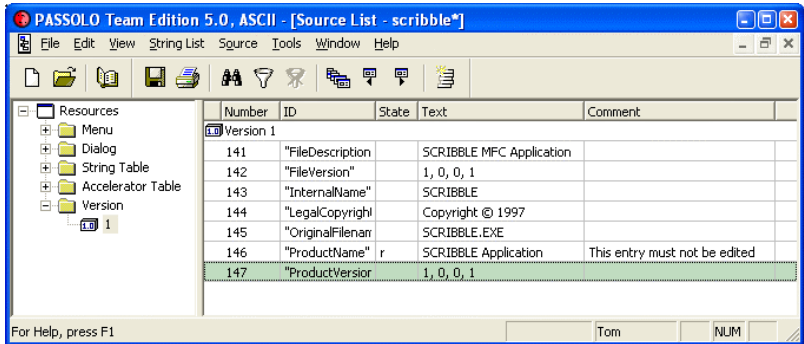
Now open the source list by double-clicking on the upper field in the project window which stands for the source file. Since no string list has yet been created, a corresponding message appears to notify you of this. Confirm this message by clicking on **Yes**.

The source list contains all text resources in the program being translated. You can edit these in advance in order to optimize the subsequent localization process. For example, you can mark resources that are not to be translated for technical reasons as being write-protected or you can even hide them completely. In addition, you can add comments to strings in order to assist the translator.

For example, the entry “SCRIBBLE Application” in the version resource is not to be translated and is therefore to be marked as being write-protected. In the string list, select this resource by double-clicking on it, activate the **Read Only** checkbox, add an explanatory comment in the comment field, and close the dialog.



The text resource, “ProductVersion”, is to be hidden for localization. Double-click on the entry, activate the **Hide** checkbox, and close the dialog. Use this method to mark any other resources. Once editing of the string list has been completed, you will see the individual marked items and associated comments in the string list.



For more detailed information, refer to the section, *Editing a Source List*, in the Reference Manual.

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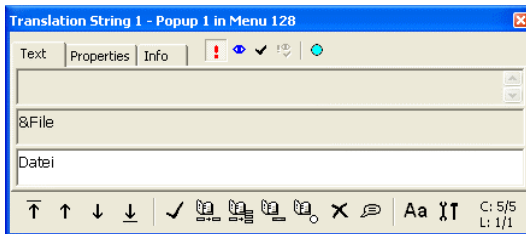
# Creating and Editing the Translation List


Now you must create the translation list. In the project window, double-click on the lower, indented field that stands for the target file. Since this string list has also not yet been created, a corresponding message appears here as well. To create the translation list, click on the **Yes** button.

The translation list that then appears will contain all the text resources from the *SCRIBBLE.EXE* source file in the column labeled “Deutsch”, and all the strings to be translated from the resources in the column labeled “English (US)”: Menu entries, dialogs, etc.. Since no resources have, as yet, been translated, all entries are shown in red. Based on the previous editing of the source list, the entry, "ProductName", will be displayed in gray since it cannot be changed. The entry, "ProductVersion", will not appear at all, since it was hidden.

Thus, the display corresponds to the settings specified in the source list.

To begin translation, double-click on the first entry in the menu. The resources in the source and target files are shown in the **Translation String** dialog that now appears. In the lower field, overwrite the entry “&File” with the German translation “Datei”. Intentionally forget to set the ampersand (&) for the access key.



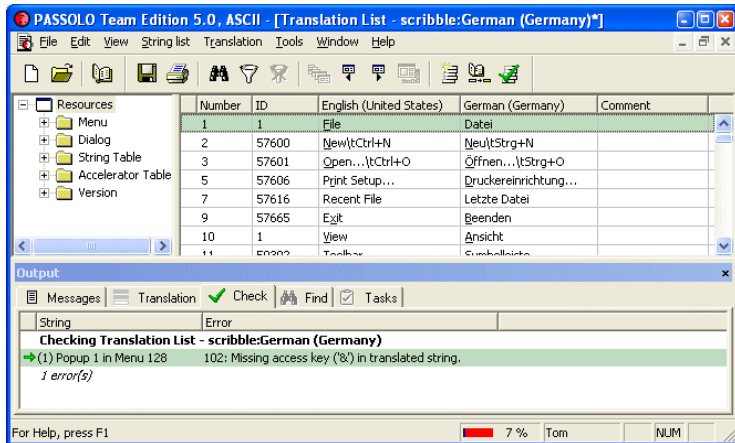
To move to the next entry and translate it, click on  in the dialog or press CTRL+MOVE DOWN or ENTER. Resources that you translate will be shown in black in the translation list.

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**Note:** If you are entering a multiple-line string, DO NOT use the ENTER key to enter a line break. Instead, use CTRL+ENTER

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If you call up the check functions implemented in PASSOLO (click on **Translation**, then **Check Translation**), the access key that was “forgotten” in the example will be recognized and an associated error message appears in the lower area of the window. Double-click on the message in this output window to jump directly to this resource and correct the error. You can also repeatedly press F4 to jump to individual errors if the check recognized several.

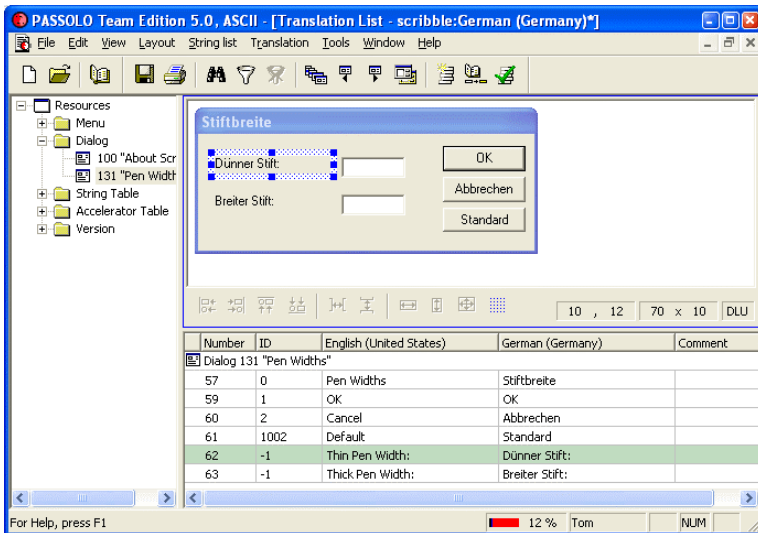


For more detailed information, refer to the section, *Review Functions*, in the Reference Manual.

# Working With the Dialog Editor

Dialogs can not only be edited in the translation list, but also with the aid of a dialog editor available especially for this type of resource. In this editor, the dialogs are displayed just as they appear in the program when it is running.

Among other dialogs, the Scribble program contains one called “Stiftbreite”. In the left area of the translation list window, call up the tree structure of the resources so that the dialog “131” appears under the “Dialog” entry.



In the dialog editor, you can edit resources in the same way as in the translation list. In addition, however, you also have the option of moving the elements in the dialog or of aligning several elements flush left, flush right, or centered. This allows you to use the dialog editor to carry out all the adjustments to the graphic user desktop required for the localization.


Familiarize yourself with this dialog editor function by localizing “Dialog 131”. To open the **Translation String x** dialog, double-click on one of the control elements to be localized.

For more detailed information, refer to the section, *The Dialog Editor*, in the Reference Manual.

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# Generating the Localized Program

Once you have completed the localization and saved the translation list, switch to the project window, **Scribble.lpj**. To open the window, either select the **Window** menu or press CTRL+TAB.

Click on the lower field (target file), then click on **String List** followed by **Generate Target File**. You can also click on  on the toolbar PASSOLO then generates the localized version of the first program you translated.

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**Note:** You can change the path and file name of the target file. To do this, go to the project view and click on the translation list, then use the right mouse button to call up the **Properties – Translation List** dialog. You can specify a different target file in the **Filename** input field.

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# Updating Existing Translation Projects and String Lists

After you have created a localized version of the first program you translated, you will get a new program version. Modifications were made to the new source version, so that you must modify your translated program. For example, a dialog in the source file was expanded by additional functions, thus making it necessary to update the associated source list. In this case, you must also update your application in order to support these new functions in the translated program as well.

Updates involve 3 steps:

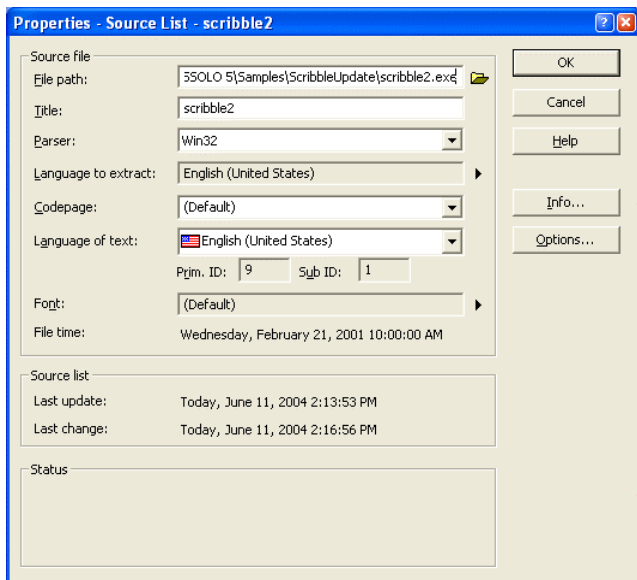
- Updating the source list;
- Updating and editing the associated translation list;
- Generating the localized, updated version of SCRIBBLE.EXE.

On the path *Samples\ScribbleUpdate* of the PASSOLO CD, you will find a project that has already been translated from English to German. Aside from the original English version, *Scribble.exe*, the new version, *Scribble2.exe*, is also located on the same path.

## Preparing for the Update

Start PASSOLO and open the project, **Scribble.lpj**. Since the source application was changed, you must first modify the properties of the “outdated” source list in order to include the additional or modified text resources in the project.

In the sample project, the source file name has already been changed in the source string properties.



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**Note:** If the updated version of a source file has the same name as the previous version, you can simply overwrite the previous version with the new one, then perform the string list update.

If you want to keep a copy of the old version of the program, and therefore store the new version on a different path, you must enter the desired new path for the updated version in the source list properties. In this case, mark the corresponding field for this source list in the project window, select the **Properties** command from the context menu, enter the path for the updated source file under **File name** in the dialog, then click on **OK**.


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### Updating String Lists

You now need to update the older source list with the designated update (in this case, SCRIBBLE2.EXE) by selecting **Update String List** from the context menu. In the **Create/Update String Lists** dialog that now appears you can specify whether only the selected source list or all string lists in the project are to be updated. Click on **OK** to start the specified update. Status and other information, together with any error messages concerning modified or new resources appears in the output window.

You can now go to the source list and check which resources have been modified by opening this string list and searching for new or modified entries. Modified or new text resources are easily identified in string lists because they are displayed with the attribute “c” (changed) or “n” (new) and appear in blue. While the source list only displays the individual, modified entry, a double-click in the entry opens the **Properties x** dialog which will show you the text resource that was originally located at this point in the code.

For modifications to a source list, the associated translation lists must also be modified since the subsequently generated target files must also contain the modified or new text resources. The function to update string lists and create strings is the same.

Now open the updated translation list. New or modified resources are displayed in red in the translation list. You can have these test resources displayed in a filtered list by clicking on  on the toolbar and checking that the **Show translated strings** checkbox is activated.

### Generating the Update

Now edit all text resources still requiring translation, then save the translation list. Finally, generate the updated target file by marking the lower file of the target file in the project window and selecting the **Generate Target File** command from the context menu. PASSOLO then generates the localized version of the first program you updated.

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## Transferring Existing Translation Projects to PASSOLO

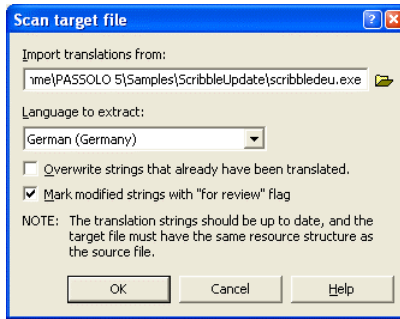
Some time ago you wrote a program (source version 1) and localized it (target version 1). You have now prepared the follow-up version or upgrade for this application (source version 2) and want to translate it. In such a case it would be practical to use the already existing translation (target version 1) as a basis for the new one.

However, if the first target version is not available as a PASSOLO project (the backup copy of the earlier project was accidentally deleted or a different resource editor was used), PASSOLO offers you the option of importing translation lists. This procedure – known as aligning – is also useful for generating translation lists that PASSOLO can use as translation memories for other projects.

On the *Samples/ScribbleUpdate* path of the PASSOLO CD there is a Scribble project in which the English version of Scribble is to be translated into German as the source file. The same path also contains the German version of Scribble.

To align programs that exist in two languages into a single translation list, proceed as follows:

1. Create a new PASSOLO project (refer to the information under *Creating the Project* on page 19).
2. Then generate the source string and translation list of source version 1 (refer to *Updating Existing Translation Projects and String Lists* on page 27).
3. In the project window, mark the translation list and select the **Scan Target File**, command from the **String List** menu to call up the dialog of the same name:



4. In the **Import translation from** field, enter the name and path of target version 1 (in this example: *scribbledeu.exe*). If the translated program contains several languages, select the desired target language in the **Language to extract** field.

By activating the **Overwrite strings that already have been translated** checkbox you can specify that any text resources already localized in the translation list are overwritten during the import.

If you activate the **Mark Modified Strings with "for review" flag** checkbox you specify that automatically translated strings will be marked as being “for review”.

5. Once you have defined the individual options, close the dialog by clicking on **OK**. When you subsequently open the translation list you will see that the translated strings were transferred from target version 1, and only the text resources that are identical in the source and target programs are marked in red (still need to be translated).

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# Working with External Translators

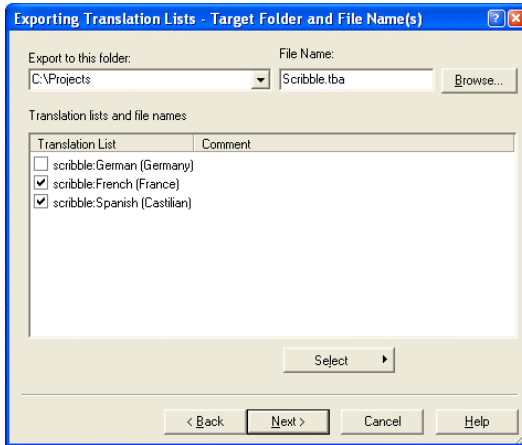
Both the Professional Edition and the Team Edition offer special functions that allow you to outsource parts of a project to external translators, including the work of modifying and testing the program dialogs. For the localization of large projects involving numerous external translators, this simplifies the work process and helps reduce the costs.

So-called translation bundles package all the data required for external editing or processing of part of a project into a single file. A translation bundle can contain any number of translation lists and target languages. In addition, a translation bundle can also include glossaries, macros for custom test functions, or notes for the translator in the form of Word files. The translation bundle also contains the data for menus and dialogs.

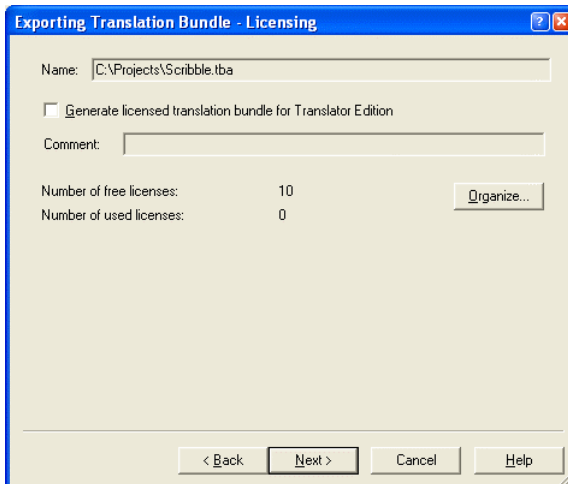
To translate this format, the translator also has to use PASSOLO. If a translation bundle was created using the Team Edition, the translator can work with the free Translator Edition of PASSOLO. This edition can be downloaded free of charge from the PASSOLO Web site at <http://www.passolo.com>. The Team Edition can create and manage a certain number of translation bundles. For further information on the Team Edition and on working with external translators, please refer to the Reference Manual (*Exporting Translation Bundles* and *The PASSOLO Team Edition*).

## Exporting Translation Bundles

The PASSOLO CD contains a scribble project (in the *Samples\ScribbleEnu* directory) that has already been translated from English to German – the project also defines two more target languages, which are not translated. To export a translation bundle from this project, first create the string lists (menu: **String List / Create/Update String List**) Then choose **Export** from the **File** menu, select **PASSOLO translation bundle** from the list of export formats, then click **Next**. PASSOLO will then lead you through the required settings.



In the first dialog, **Exporting Translation Lists – Target Folder and File Name(s)**, you can enter the name of the translation bundle and select the translation lists to be included. A translation bundle can contain multiple languages. Select **French** and **Spanish**, and click on **Next**.




The **Exporting Translation Lists – Licensing** dialog is only displayed if you are working with the PASSOLO Team Edition. To create a licensed translation bundle, activate the **Generate licensed translation bundle** checkbox. This translation bundle can then only be opened and edited using the PASSOLO Translator Edition.

The next three dialogs allow you to add glossaries, macros and user-specific files to the translation bundle. Finally, clicking on the **Finish** button saves the translation bundle.

# Editing Translation Bundles

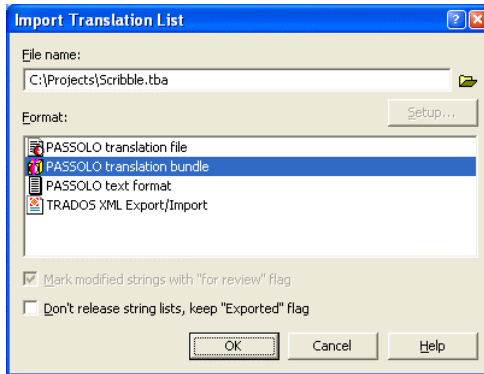
Depending on whether you created a licensed or unlicensed translation bundle, you can use the Translator Edition or the current version of PASSOLO to edit the generated file, *Scribble.tba400* or *Scribble.tba*, and translate the contained text resources.

Please note the following points when working with translation bundles:

- Exported translation lists are locked in the translation project, which means they cannot be modified. Exported translation lists are marked with this symbol  in the project window.
- The translator must not create multiple copies of the translation bundle. Only a single matching translation bundle can be imported. There is no way to merge translation bundles edited separately by different translators. If you run short of licensed translation bundles, you can sequence the translation process accordingly or purchase a Team Edition with more licensed translation bundles.
- The translator cannot make any further changes to the translation bundle after sending it back to be imported into the project. Following the import of the translations, a new translation bundle can be created and sent to the translator. Any subsequent changes made to the original translation bundle will be lost.

## Importing a Translation Bundle

Now, open the original project. To import the translation bundle, choose **Import** from the **File** menu.



Select the appropriate file, and choose **PASSOLO translation bundle** from the list of formats in the **Import Translation List** dialog. The file is then imported, and the translated text resources, as well as any dialog changes, are inserted into the current project.

# Creating Multilingual Applications

This chapter introduces three procedures with which multilingual applications can be created.:

- Multiple languages by generating different executables;
- Multiple languages through the use of language DLLs;
- Multiple languages through the use of multilingual resources in an executable.

All three procedures are supported by PASSOLO. The advantages and disadvantages of each procedure will be addressed. Sample projects illustrate the required source code modifications for the PASSOLO projects.

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# Multiple Languages by Generating Different Executables

This process operates without the need to modify the source code, and is practical if modifications to the source code are not possible or if each language is intended for a different installation and different distribution media.

**Advantage:** Does not require modifying the source code.  
When a new language is added, the existing executables do not need to be revalidated.  
Runs reliably under all operating systems.

**Disadvantage:** A separate executable is generated for each language being supported.  
Administering and installing multilingual applications is difficult and time-consuming.

The *Samples\ScribbleDeu* example on the PASSOLO CD demonstrates this procedure.

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# Multiple languages through the use of language DLLs

The software is expanded in such a way that the display language is specified when the program starts. The program contains the resources in a standard language. Additional languages are made available in the form of language DLLs. Since the program itself contains a complete set of resources, this method ensures that the program can be executed even if the other language DLLs are not available.

Advantage: Only a single executable; additional languages each in the form of an individual DLL.  
If a new language is added, the executable does not need to be validated with the existing languages.  
Runs reliably under all operating systems.

Disadvantage: The source code must be modified..  
Administering and installing multilingual applications is difficult and time-consuming.

The example, *Samples\Rscdll* on the PASSOLO CD illustrates the required source code modifications. The sample application was created using the Visual C++ Application Wizard and uses the MFC. The necessary adjustments to the **rscdll.cpp** module are identified by “// PASSOLO”.

Depending on the [PASSOLO]/LangDLL entry in the **rscdll.ini** file, the associated language DLL is loaded and used as the display language. If the DLL cannot be loaded, the internal resources are used.

In the PASSOLO project, each target file must have the extension “DLL”. The example, *Samples\RscDLL*, contains a PASSOLO project with the required settings.

The PASSOLO project can be set up so that the language DLL is created directly from the executable. In this way, the Visual C++ workspace does not need to be expanded by a separate project for a source language DLL.

To do this, each target file in the PASSOLO project must have the extension “DLL”. The example, *Samples\RscDLL*, contains a PASSOLO project with the required settings.

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# Multiple Languages Through the Use of Multilingual Resources in an Executable

The program contains the resources in all languages. The software is expanded in such a way that the display language is specified when the program starts.

**Advantage:** Only a single executable.  
Administering and installing multilingual applications is easy.

**Disadvantage:** If a new language is added, the executable must be revalidated in the existing languages.  
Does not run reliably under all operating systems

The example, *Samples\MultiRSC*, on the PASSOLO CD illustrates the required source code modifications. The sample application was created using the Visual C++ Application Wizard and uses the MFC. The necessary adjustments to the **multiRSC.cpp** module are identified by “// PASSOLO”.

Depending on the [PASSOLO]/LangID entry in the **multirsc.ini** file, one of the existing resource languages is activated. This language switch only works under Windows NT, not under Windows 95/98. This is due to the functions to load resources used by the Microsoft Foundation Classes 4.2.

In the PASSOLO project, the source file must be specified as the target file for each target language with this procedure. In other words, the target languages are written back to the source file. This setting can be made either in the **Properties** dialog of each translation list, or via **Project Setup/Default Target File ...**. The example, *Samples\MultiRSC*, contains a PASSOLO project with the required settings.

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**Note:** This procedure can also be used without any source code modifications. In this case, the operating system uses the language and country settings in the system control panel to decide which resource languages will be loaded.

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