15. Label Tag Library and Multi-Language

This chapter explains how to build and use Label Tag Library.
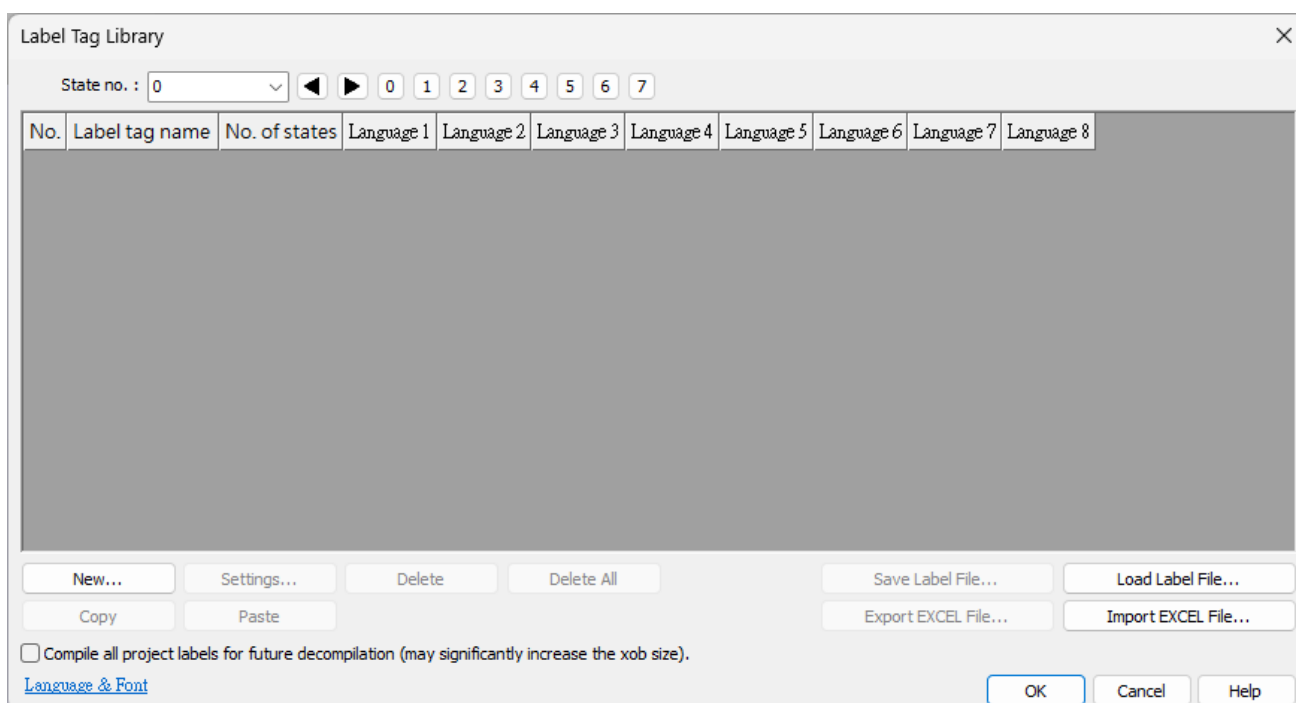
15.1.   Overview

The Label Tag Library feature enables a multi-language environment. When multiple languages are required, users can create the Label Tag Library and then select a suitable label in the project. The project will display the corresponding language in runtime based on the settings. EasyBuilder Pro supports up to 24 different languages simultaneously. This chapter will explain how to create and use the Label Tag Library.

15.2.   Label Tag Library Manager

Click [Project] » [Label] on the toolbar and the [Label Tag Library] dialog box appears.

Setting	Description
State no.	Indicates the current state. Each Label has a maximum of 256 states (state no. 0 ~ 255). The state no. is determined by [Language no.]. If less than 3 languages are used, the maximum state no. is 256. If more than 4 languages are used, divide 768 by the language number to get the maximum state no.. For example, the number of languages is 24, then there are only 768/24 = 32 states.
New	Adds a new Label.
Settings	Sets the selected Label.
Save Label File	Saves all Labels in .lbl format.

Load Label File	Loads the existing .lbl file to the Label Library.
Export EXCEL File	Saves all Labels in .csv, .xls, or .xlsx format.
Import EXCEL file	Loads the existing .csv, .xls, or .xlsx file to the Label Library.
Compile all project labels for future decompilation	With this option selected, all labels will be included in the compiled .xob file during the compilation process, allowing for the complete restoration of the Label Tag Library in the event of future decompilation. Note that this may significantly increase the size of the .xob file.

Note

■ Unicode is not supported when importing and exporting an Excel file.
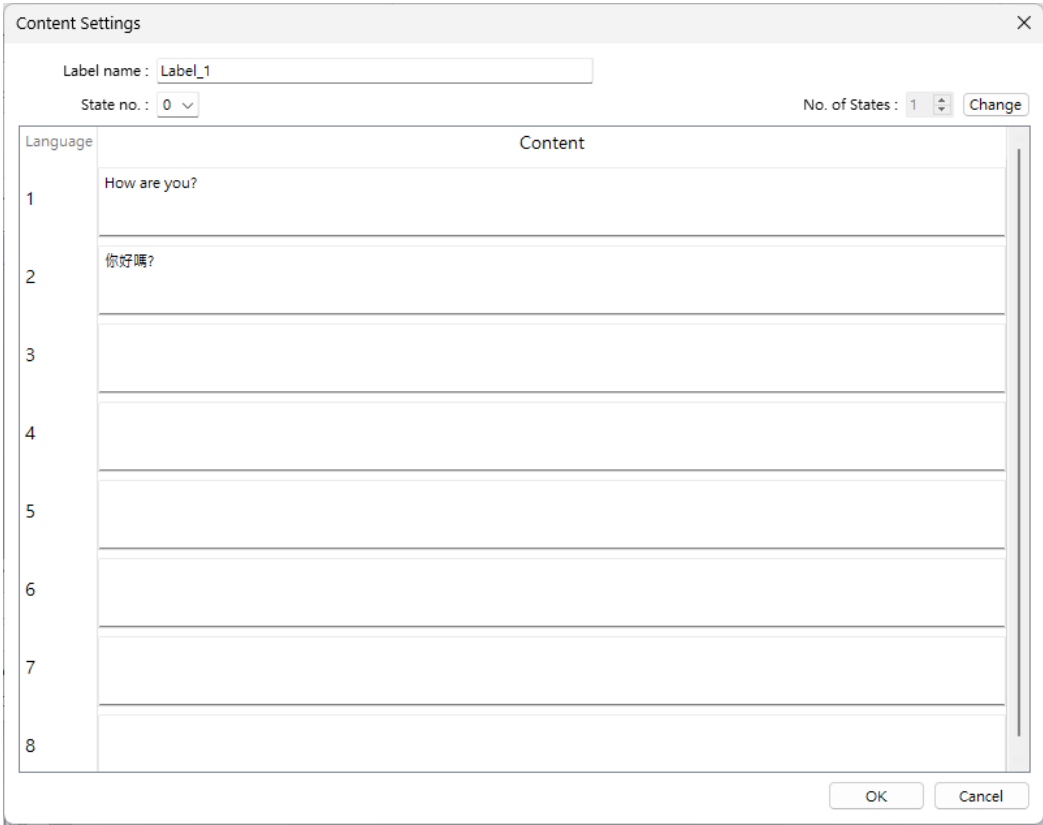
15.3. Steps to Create Label Tag Library

Please follow the steps to create a Label Tag Library.

1. From the Library menu, click [Label]. The Label Tag Library dialog box appears. Click [New] to specify the name of the Label and the number of states to be displayed by this Label.

2. Click [OK] and a new label is added to the Label Tag Library. Select the label and click [Settings] to edit its content.

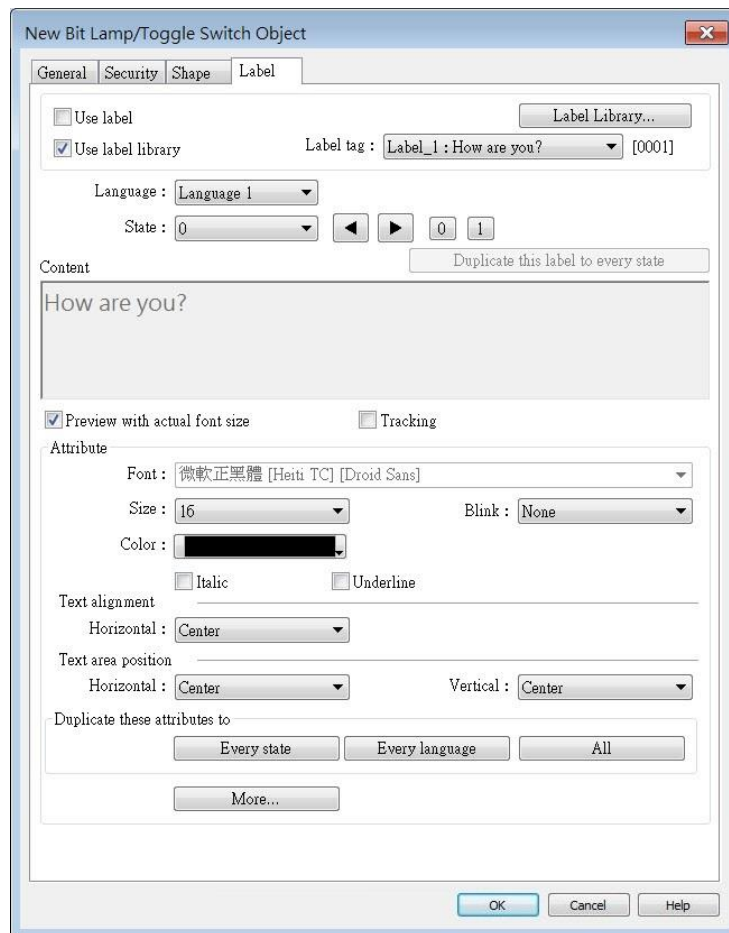3. Edit the corresponding language content.

15.4.   Using Label Tag Library

When there are defined labels in the Label Library, the labels can be found in the object's [Label] tab. Select [Use label library] check box, and select the label from the pull-down list [Label tag].
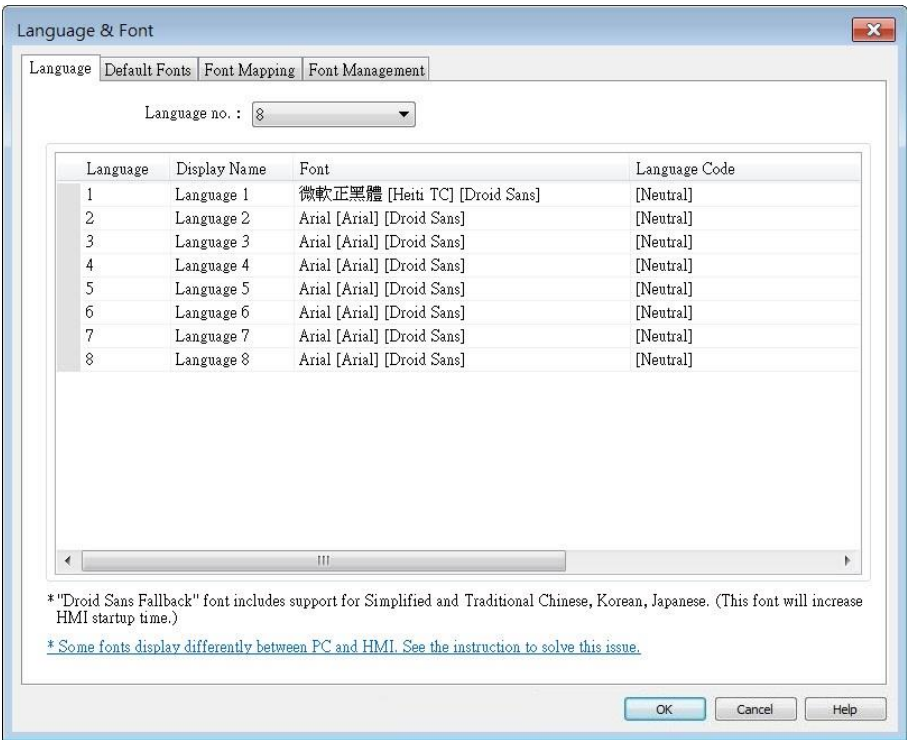
When a tag is selected, the content of the selected tag is shown in the [Content] field in its corresponding font style. Please note that from Language 2 to Language 24 can only be set the Font [Size], the others such as [Color], [Align], [Blink], etc. will follow the settings of Language 1.

## 15.5.   Selecting Language & Font

15.5.1.   Language

Click [Project] » [Language & Font] on the toolbar and the [Language & Font] dialog box appears.

Setting	Description
Language no.	Specifies the number of languages used in a project.
Font	Shows language names and the fonts used for each language. A font description can be entered. [Language Code] allows changing the language used for push notification about the events in EasyAccess 2.0, when [Push notification (EasyAccess 2.0)] is enabled in Event Log. Click the icon to watch the demonstration film. Please confirm your internet connection before playing the film.

15.5.2. Default Fonts

This settings page is used to configure fonts for characters not supported by the selected font. When such characters (e.g., Simplified Chinese, Traditional Chinese, Korean, and Japanese) are used, EasyBuilder Pro will automatically use the font specified here.
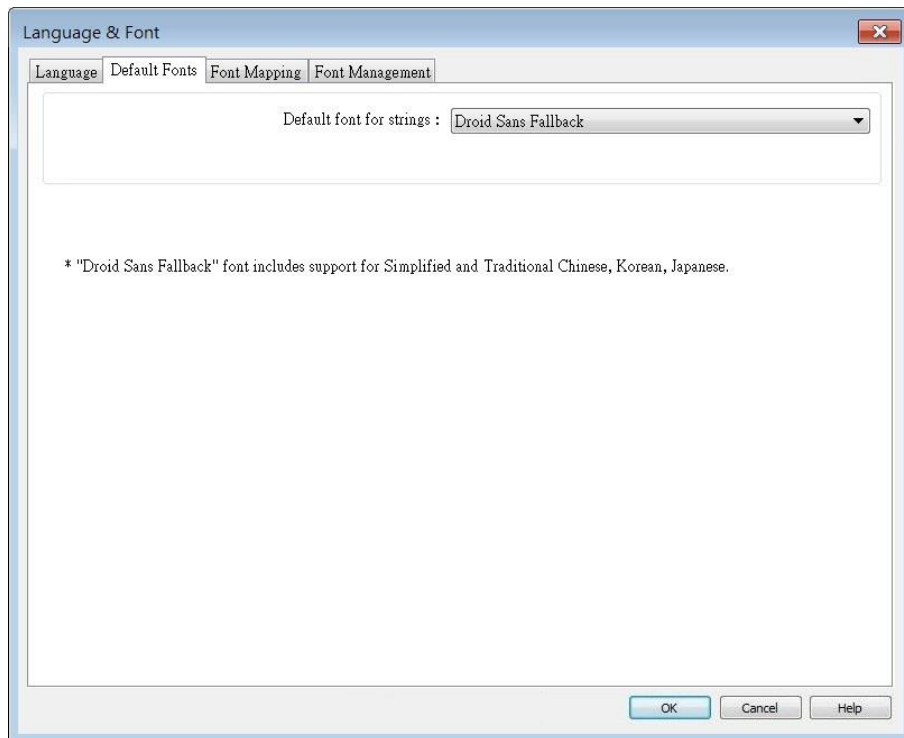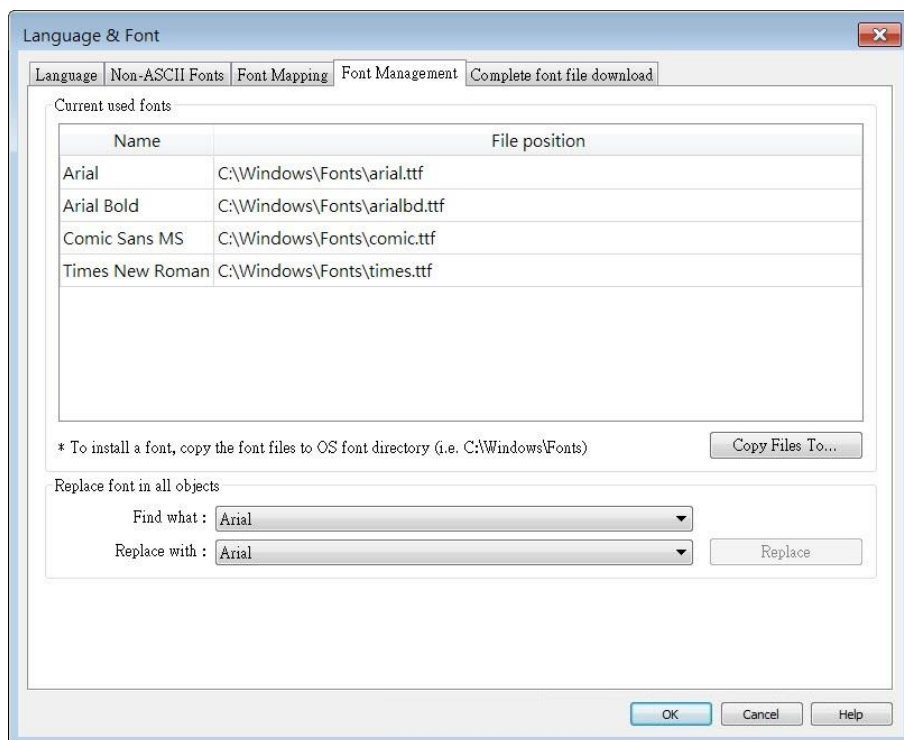
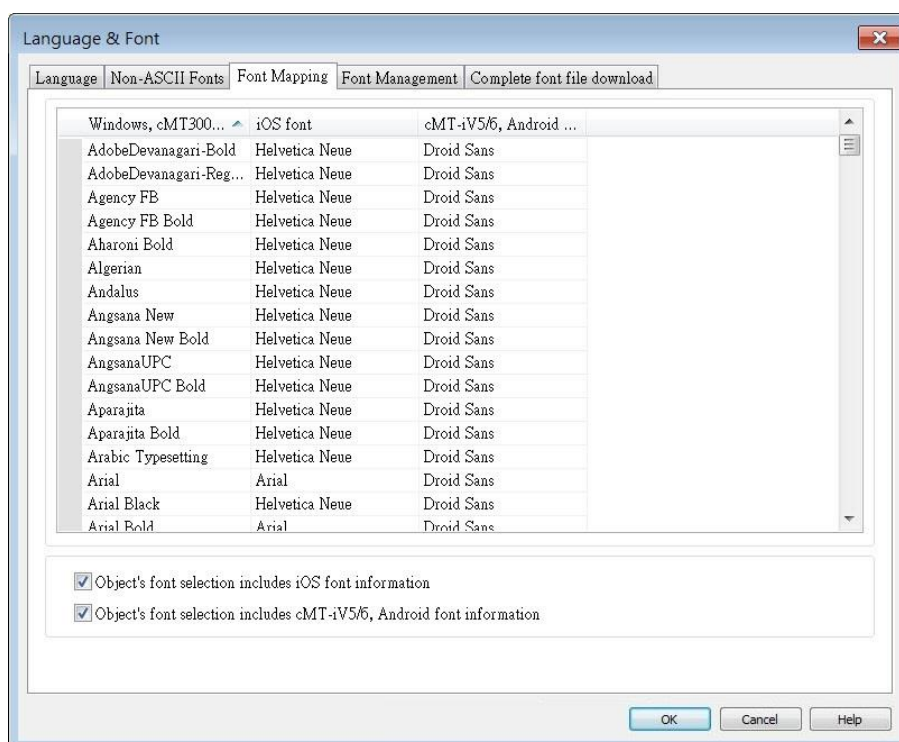| Setting	Description
Default font for strings	When characters not supported by the selected font are used, EasyBuilder Pro will use this font as the default font.

15.5.3. Font Management

Setting	Description
Current used fonts	This table shows all the fonts used in this project and the file position of its font file.
Copy Files To	Copy the font file to the specified position.
Replace font in all objects	Change font at a time for all the objects using that font.

15.5.4. Font Mapping

This tab lists the fonts used in Windows / cMT3000 and the mapping fonts in iOS / cMT-iV5 /cMT-iV6 / Android devices.

| Setting	Description
Object's font selection includes iOS / cMT-iV5 / cMT-iV6 /Android font information	When the checkbox is selected, the fonts in iOS / cMT-iV5 / cMT-iV6 / Android that map to the select font in object property settings will be shown.
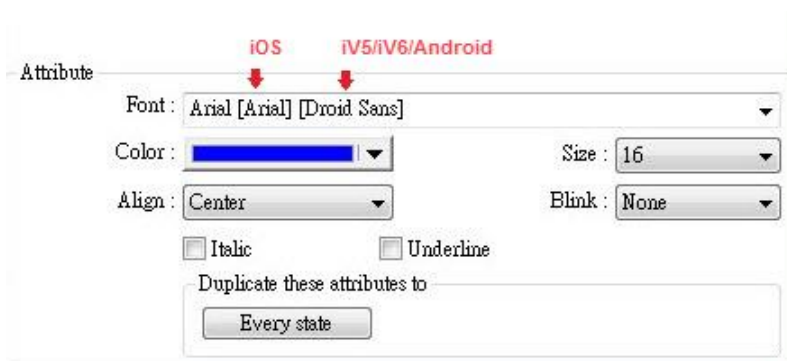
15.5.5. Complete font file download

If the text on a webpage is not displayed correctly in the PLC Web Browser, the complete font file can be downloaded to HMI to add support for this font to the PLC Web Browser.
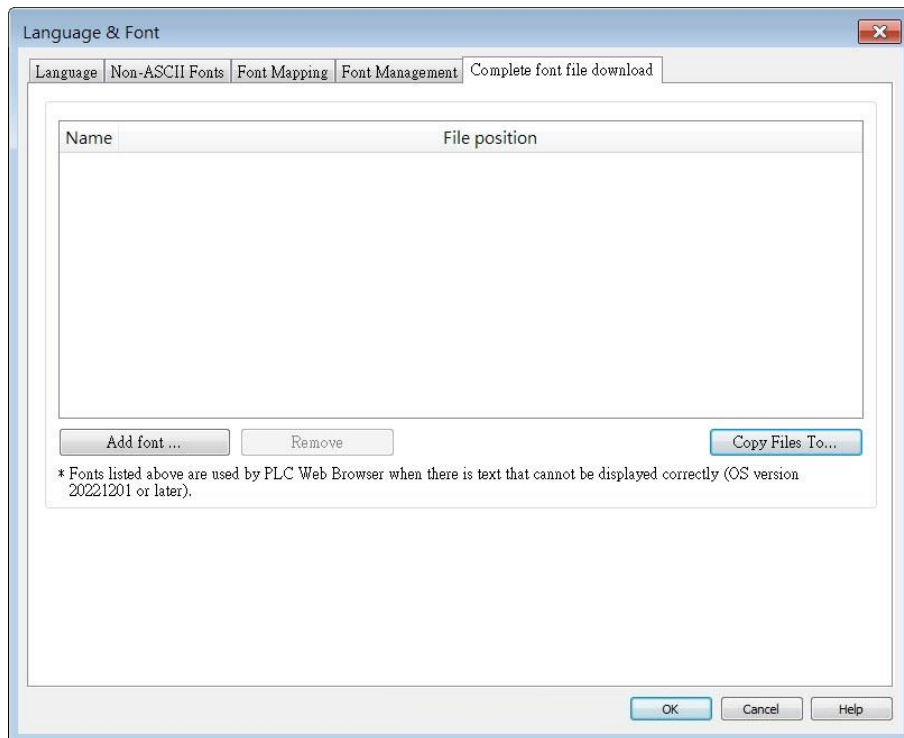
15.6. Settings of Multi-Language

When displaying the texts in multiple languages, the system register "[LW-9134]: language mode" should be used too.

The value of [LW-9134: language mode] is ranged from 0 to 23. Different values correspond to different languages.

If not all languages are selected to compile and download, [LW-9134] will work differently.

For example, user defines 5 different languages in the Label Tag Library:
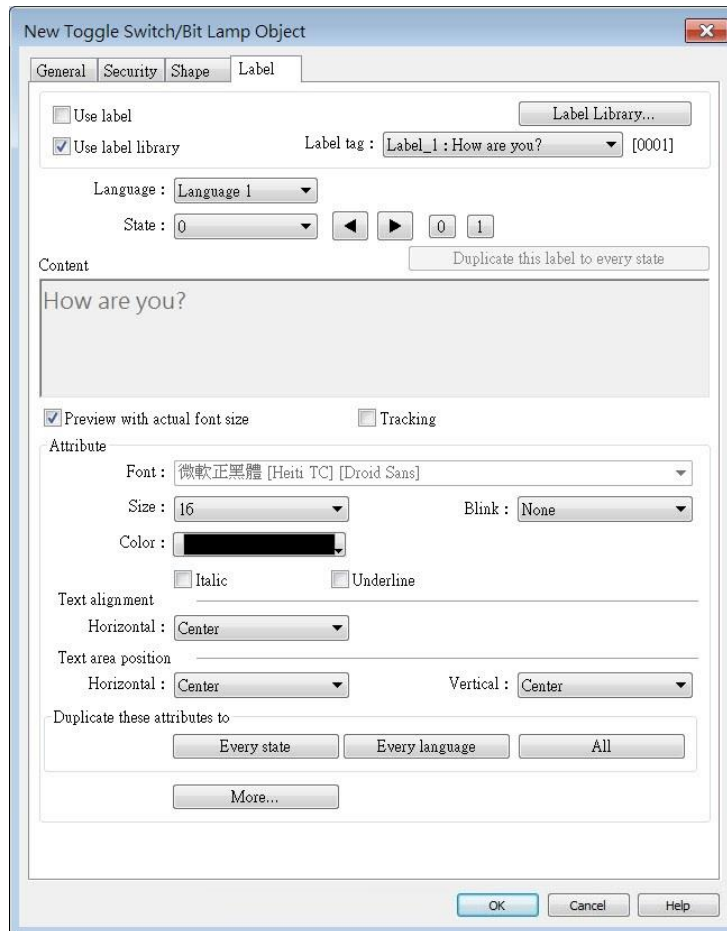
1: English, 2: Traditional Chinese, 3: Simplified Chinese, 4: French, 5: Korean

If only Language 1, Language 3, and Language 5 are selected to compile then the corresponding values of [LW-9134] are:
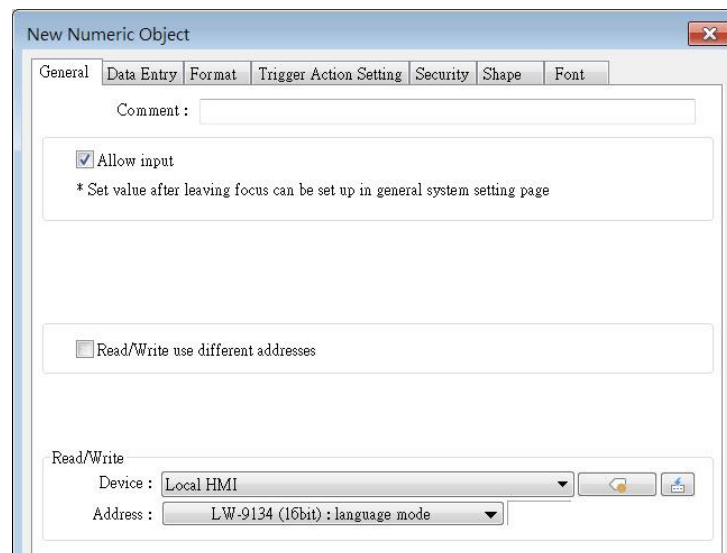
0: English, 1: Simplified Chinese, 2: Korean

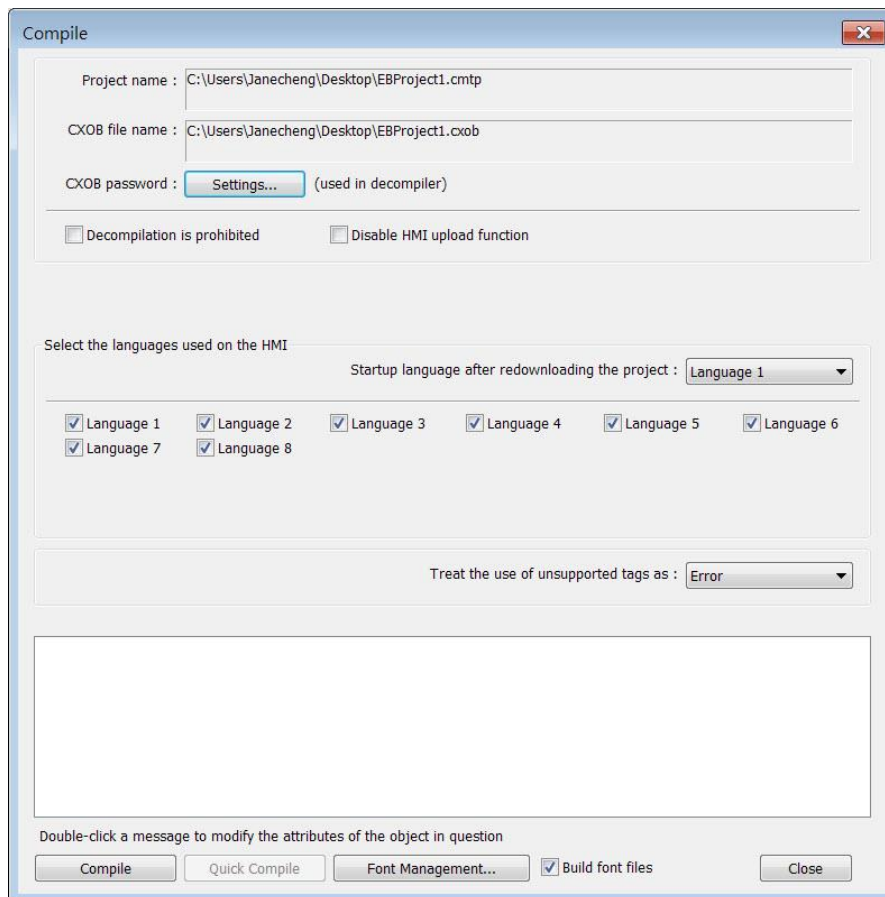Please follow the steps to use multiple languages.

1. Create a Text/Comment object and select [Use label library] checkbox.

2. Create a Numeric Input Object and use the system register [LW-9134].

3. When compiling, select the defined languages.

4. The simulation is shown as followed: If the value of [LW-9134] is changed, the content of the Text object will be changed.

English

LW9134 : language mode | 0 |

简体中文(SIMPLE)

LW9134 : language mode | 2 |

한국어 웹(KOREAN)

LW9134 : language mode | 4 |

✎ Note

■ When using a cMT / cMT X Series model, system register [LW-9134] is used to change the language mode in server, while [PLW-9134] is used to change the language mode on a portable tablet device.

■ Only the label tags that are used in the project file will be contained in the *.cxob / *.exob file generated after compilation; therefore, no unused label tags will be contained in the

project file obtained by decompiling a *.cxob / *.exob file.

📥 Click the icon to download the demo project that illustrates how to use the Option List object to switch between multiple languages. Please confirm your internet connection before downloading the demo project.

▶️ Click the icon to watch the demonstration film. Please confirm your internet connection before playing the film.
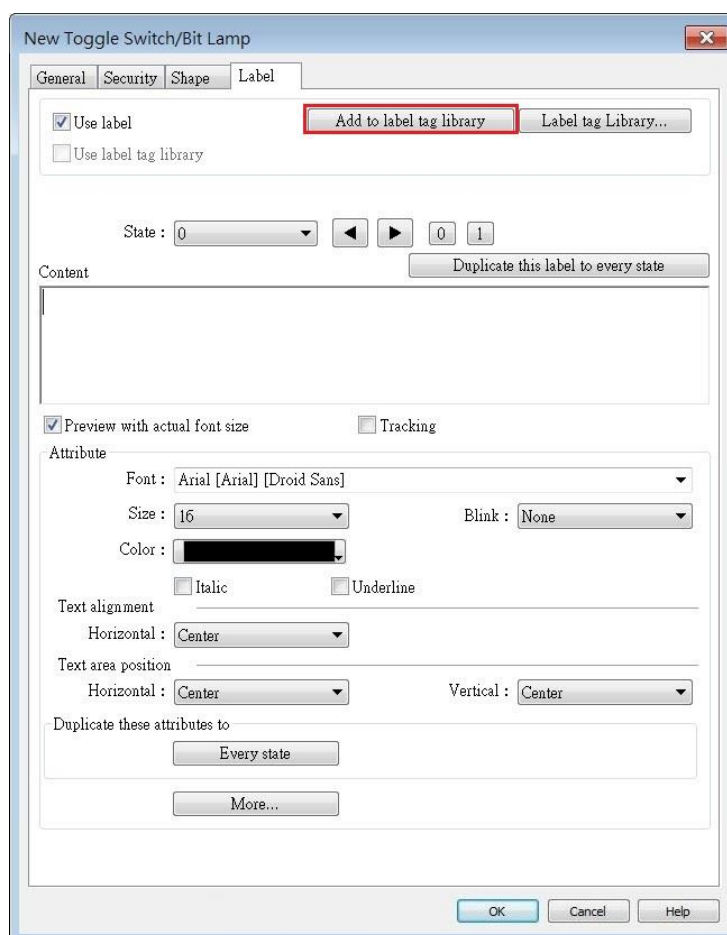
15.7.   Quickly Add to Label Tag Library

The "Add to Label Tag Library" function simplifies the process of adding text to the Label Tag Library. This section illustrates how to quickly add various texts to the Label Tag Library.

15.7.1.   Object Labels

To quickly add labels to the Label Tag Library, follow one of these three methods:
Method 1: From the Object's Property Settings

1. Open the object's property settings and navigate to the Label tab.
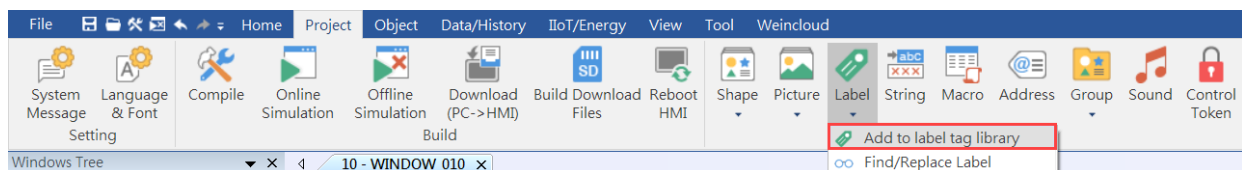*2.* Click the [Add to label tag library] button.

Method 2: From the Project Editing Window

1. In the project editing window, select one or multiple objects.

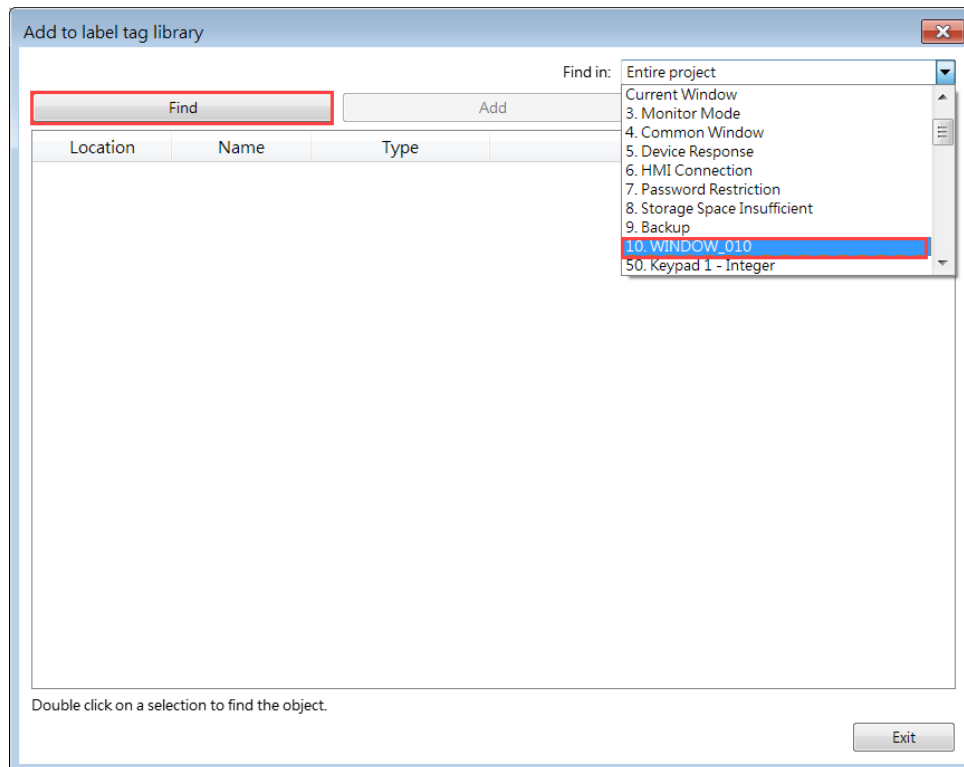2. Right-click and select [Add to label tag library] from the menu.

Method 3: From the Toolbar

1. From the toolbar, click [Project] » [Label] » [Add to label tag library].

2. In the [Find in] drop-down menu, select the window containing the objects and click [Find].

   For example, to add object labels in window no.10 to the Label Tag Library, select "WINDOW_010" and click [Find].

3. The options in this window that are not yet added to the Label Tag Library will be displayed in a list. Proceed to add individual items or all.
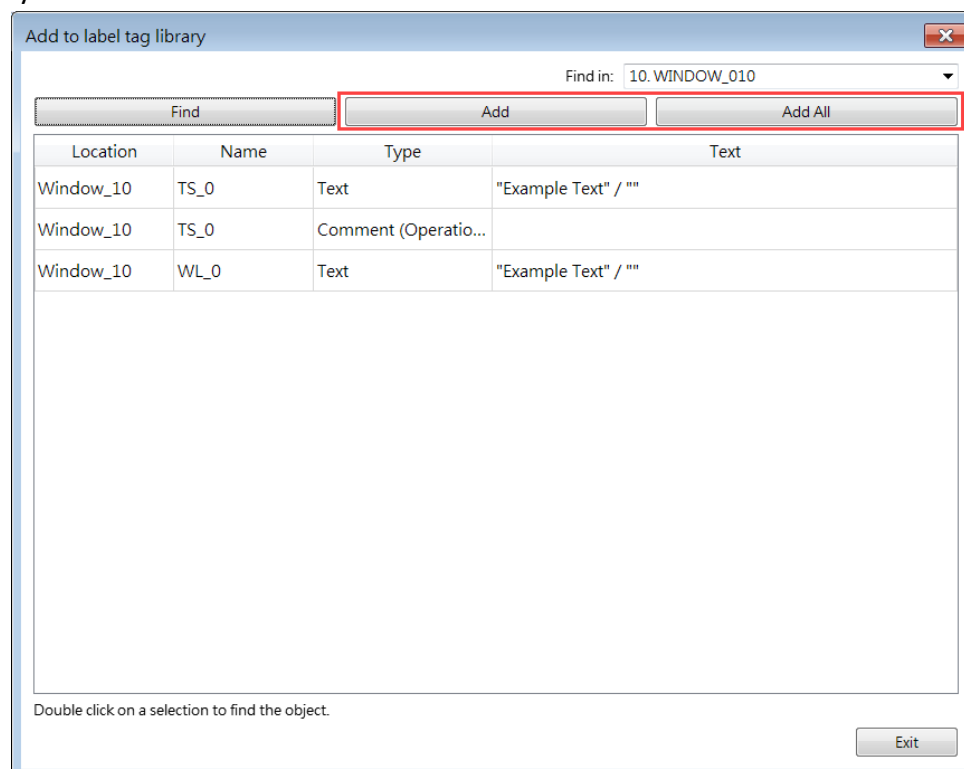
15.7.2. Non-object Label Texts

To quickly add texts other than object labels to the Label Tag Library, follow these steps:

1. From the toolbar, click [Project] » [Label] » [Add to label tag library].

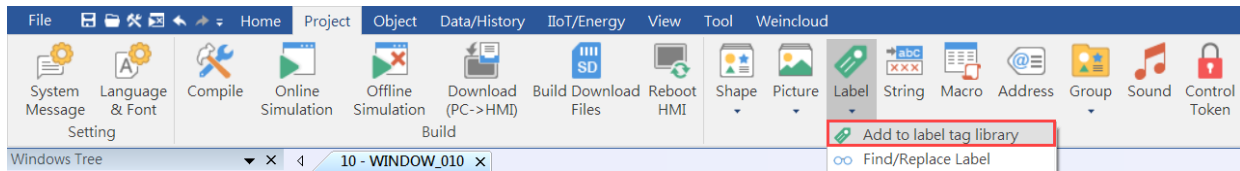**2.** In the [Find in] drop-down menu, select [Global settings] and click [Find].
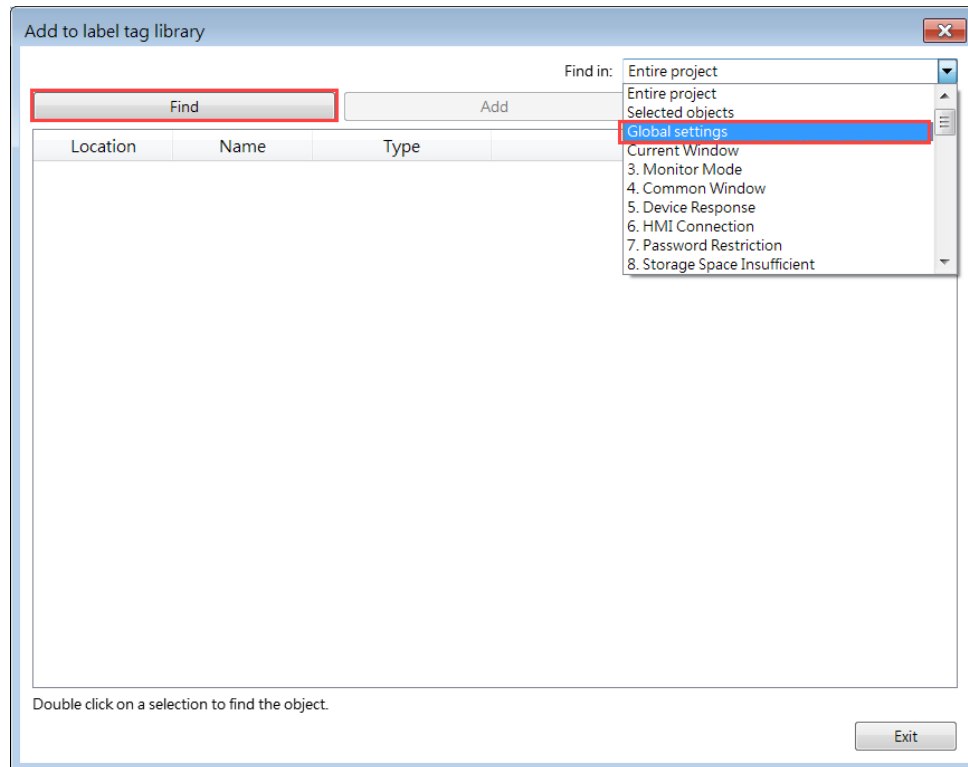
3. The available texts for addition from the global settings will be shown in a list.

Currently available categories include:

● Operation Log Comment

● Event Log Message

● Event Log Category (Subcategory) Customize Name

● Event Log Category (Subcategory) Name

Proceed to add individual items or all as required.

Location	Name	Type	Text
Event (Alarm) ...	Event 0 (index_...	Text	Event 0
Event (Alarm) ...	Category	Name	Category 0
Event (Alarm) ...	Category	Name	Category 1
Event (Alarm) ...	Category	Name	Category 2
Event (Alarm) ...	Category	Name	Category 3
Event (Alarm) ...	Category	Name	Category 4
Event (Alarm) ...	Category	Name	Category 5
Event (Alarm) ...	Category	Name	Category 6
Event (Alarm) ...	Category	Name	Category 7
Event (Alarm) ...	Category	Name	Category 8
Event (Alarm) ...	Category	Name	Category 9
Event (Alarm) ...	Category	Name	Category 10
Event (Alarm) ...	Category	Name	Category 11

Double click on a selection to find the object.