

## How to Localize FlexStand to Chinese (Simplified) Language

<b>Subject:</b>	
<b>Application:</b>	
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## Introduction

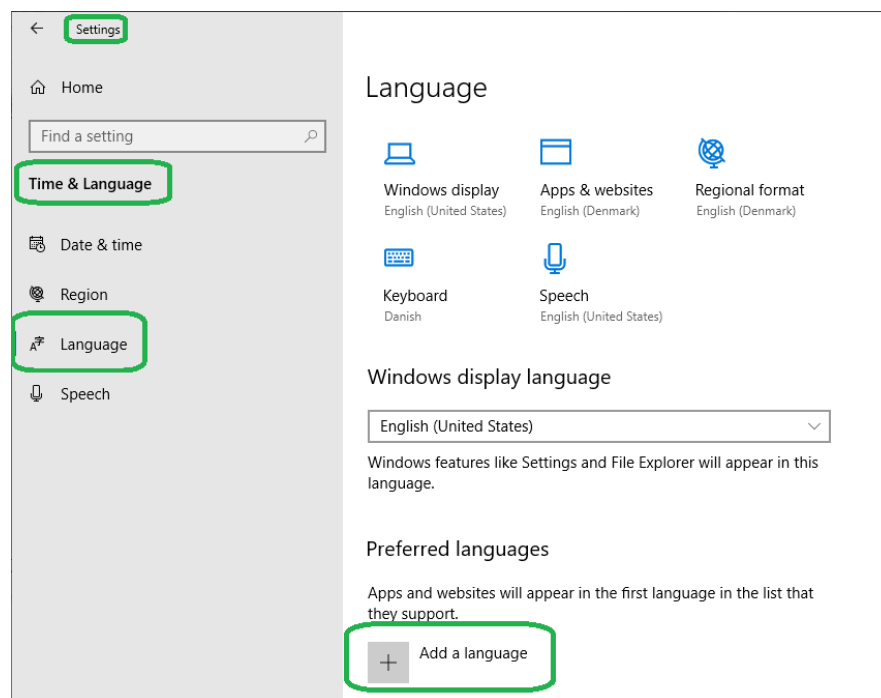
This whitepaper describes step-by-step how to get **FlexStand** to display menus, menu items, controls as well as LabVIEW user dialog boxes localized to Chinese (simplified), without the need for running native Chinese Windows.

## Changes to the Windows Environment

To prepare your PC for this task the following steps are needed

### Installing the Chinese language option

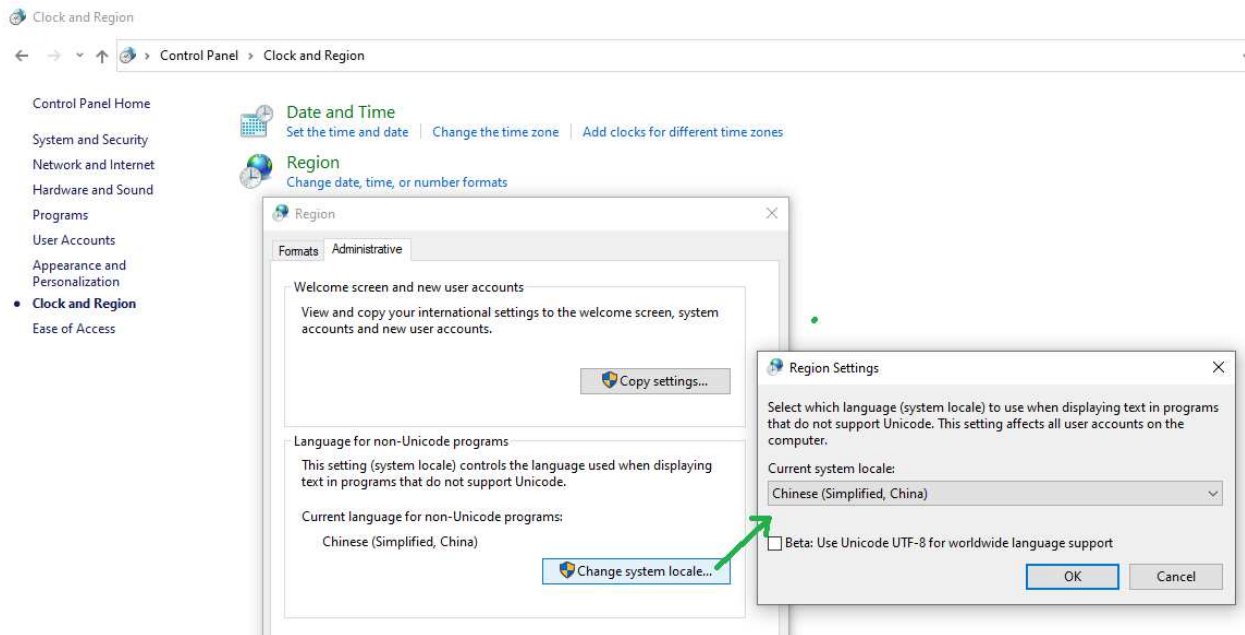
- From the Start menu, go to **Settings>>Time and Language>> Language** and click the *Add a language* button



- Select Chinese (Simplified, China) and click **Next** followed by **Install**. It may take a few minutes to complete the installation

### Region Settings

- From the Start menu, go to **Control Panel>> Clock and Region>>Region** and select the **Administrative** tab then click *Change system locale...*
- In the **Current system locale:** list, select *Chinese (Simplified, China)*
- Let the **Beta: Use Unicode UTF-8 for worldwide language support** checkbox unchecked



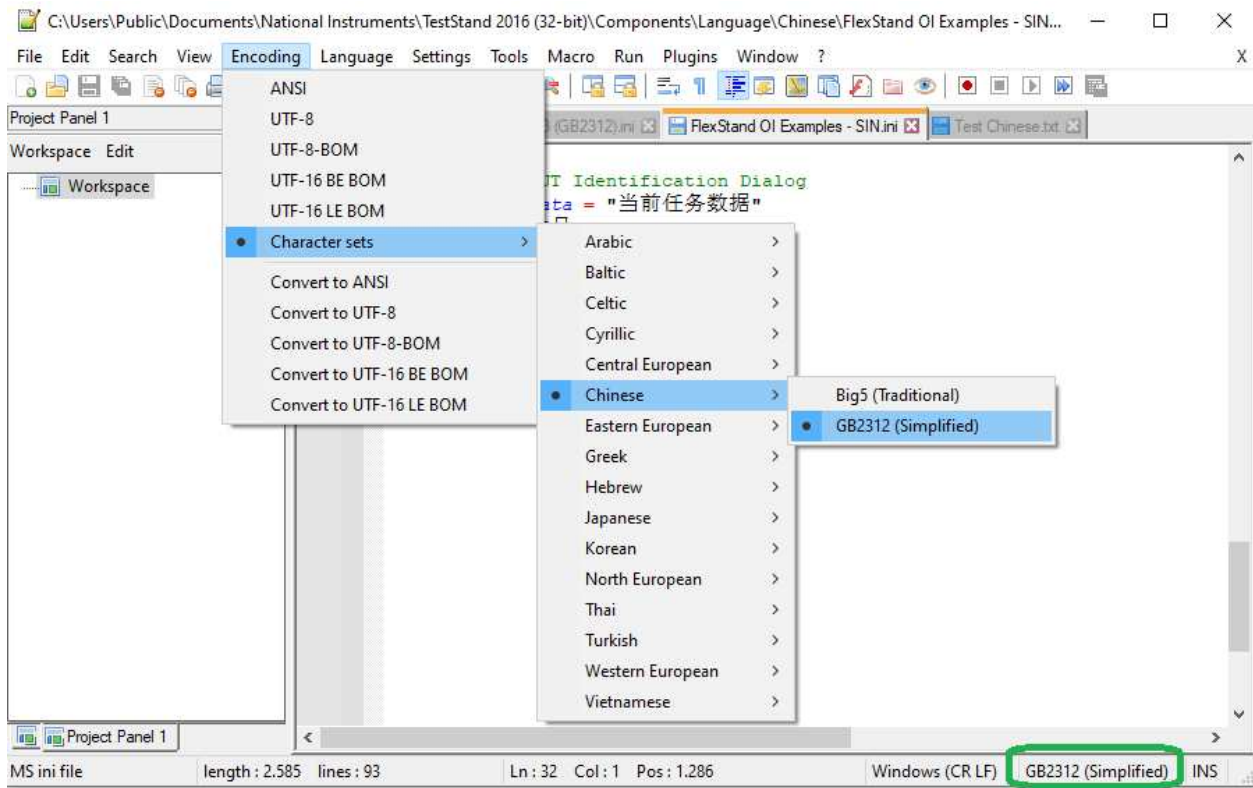
## Using Notepad++ with Correct Characters Encoding

Use **Notepad++** to create and/or edit any \*.ini file necessary to translate any FlexStand item to Chinese. **Notepad++** is a free software package (GNU) that can be downloaded from: <https://notepad-plus-plus.org/downloads/>

Install the latest version.

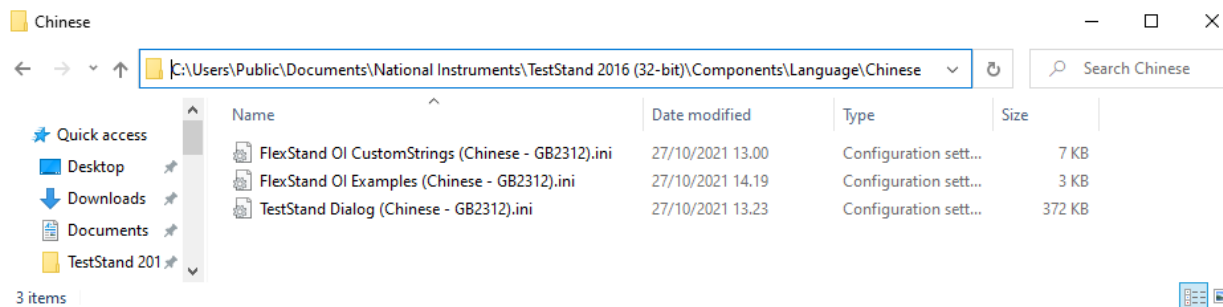
When creating or editing a language \*.ini file you must first select the correct encoding format.

- In the Notepad++ menu go to **Encoding>>Character sets>>Chinese** and select *GB2312 (Simplified)*
  - You can verify the selected encoding format at any time in the Notepad++ status bar (lower right corner)



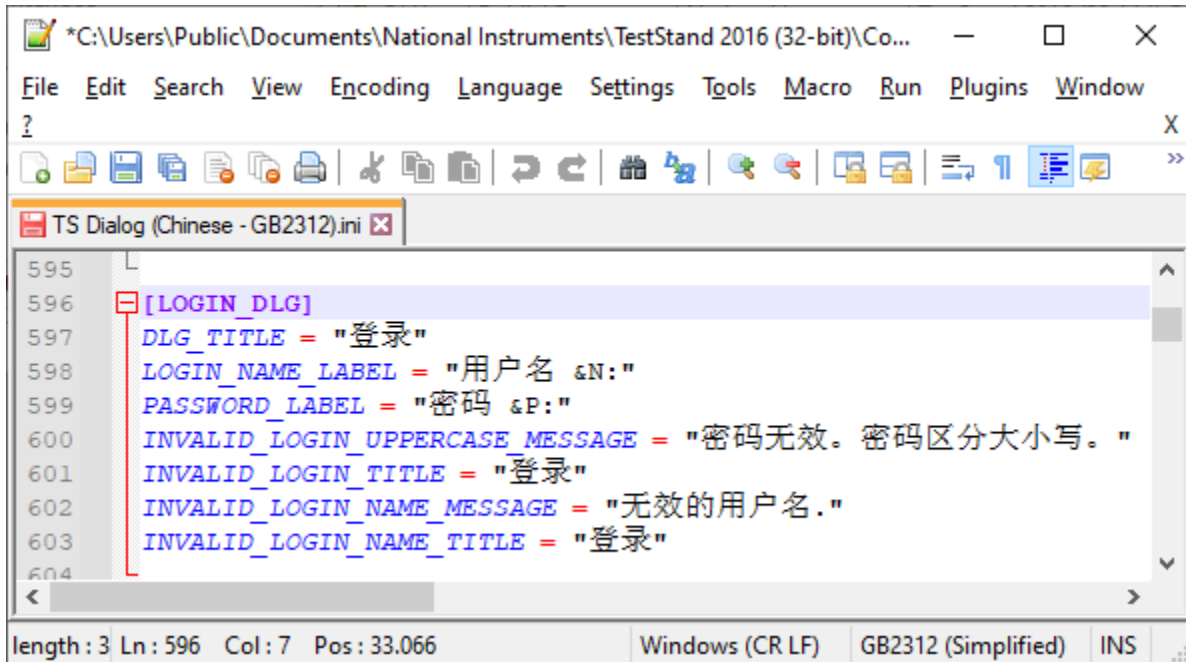
## Creating or Editing INI Files

Custom localization files are to be located in an appropriate folder name (for example **Chinese**) under: C:\Users\Public\Documents\National Instruments\TestStand 2016 (32-bit)\Components\Language\



### Native TestStand Dialog Boxes

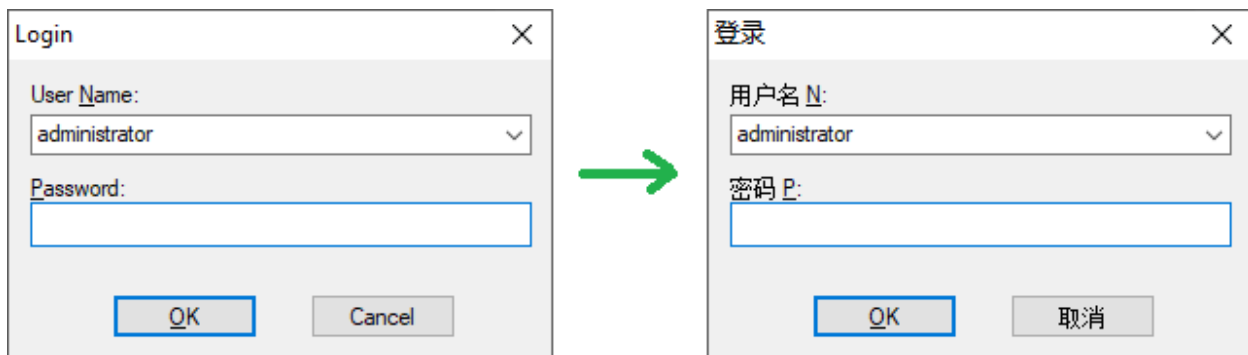
Translate the dialog tags in the appropriate TestStand INI file and category. For example, the login dialog tags can be added as follow:



```
595  
596 [LOGIN_DLG]  
597 DLG_TITLE = "登录"  
598 LOGIN_NAME_LABEL = "用户名 &N:"  
599 PASSWORD_LABEL = "密码 &P:"  
600 INVALID_LOGIN_UPPERCASE_MESSAGE = "密码无效。密码区分大小写。"  
601 INVALID_LOGIN_TITLE = "登录"  
602 INVALID_LOGIN_NAME_MESSAGE = "无效的用户名。"  
603 INVALID_LOGIN_NAME_TITLE = "登录"  
604
```

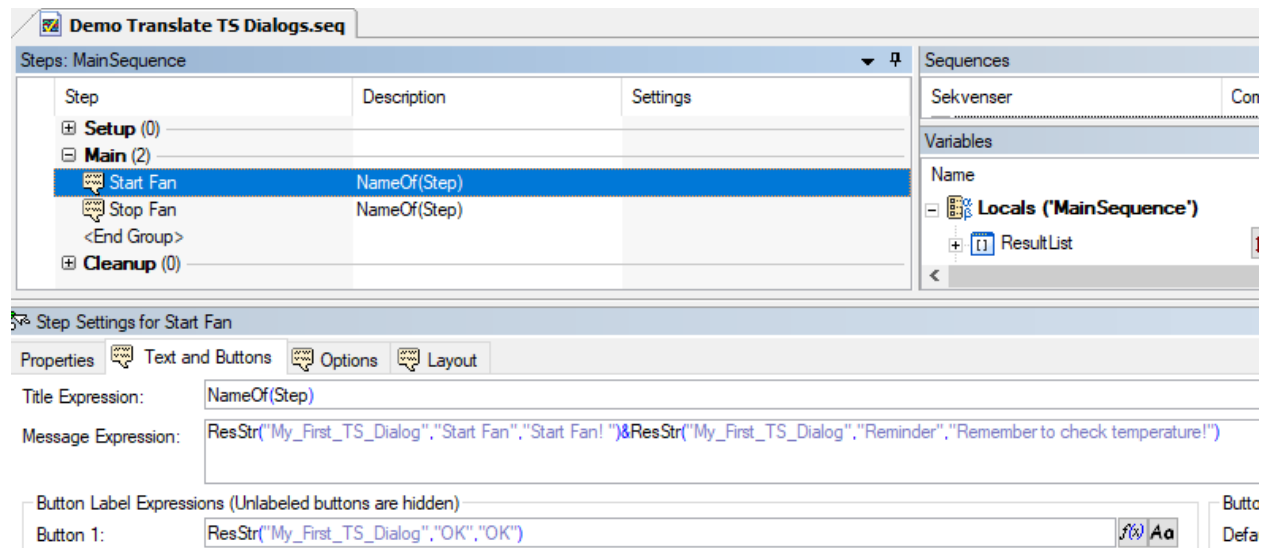
length : 3 Ln : 596 Col : 7 Pos : 33.066 Windows (CR LF) GB2312 (Simplified) INS

Resulting in the translation of the English dialog box to Chinese

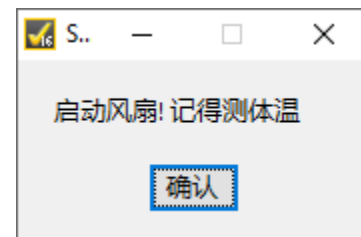
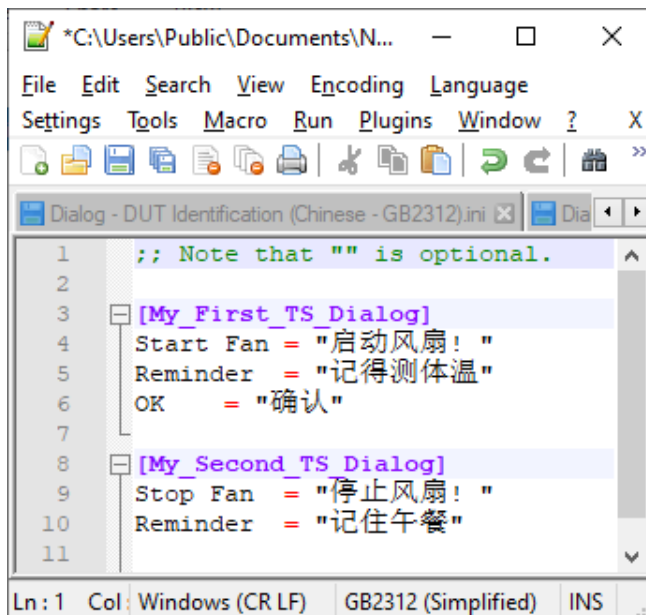


### Custom TestStand Dialog (Message PopUp)

Message pop-ups in TestStand can be translated directly by letting the step expression find the tag and message in the \*.ini files. The following shows an example of pop-up message translated to Chinese.

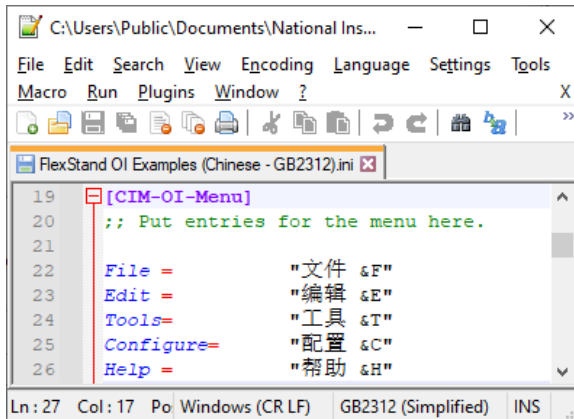


The Message Expression searches for the **My\_First\_TS\_Dialog** category and **Start Fan** and **Reminder** tags in all \*.ini files and displays the corresponding Chinese message. Likewise for the **OK** (Button 1) button.

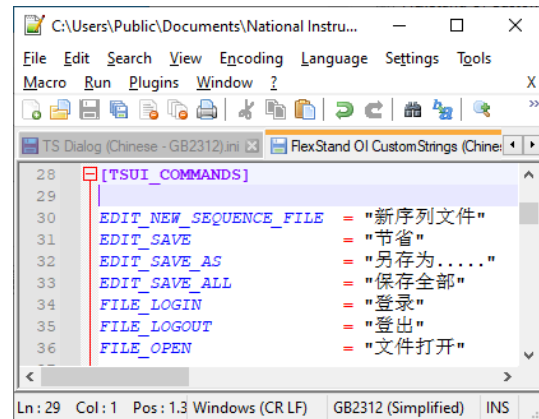


### FlexStand Menus and Menu Items

Likewise tags in appropriate initialization file categories are used to translate menu names and menu items.



```
19 [CIM-OI-Menu]
20 ;; Put entries for the menu here.
21
22 File = "文件 &F"
23 Edit = "编辑 &E"
24 Tools = "工具 &T"
25 Configure = "配置 &C"
26 Help = "帮助 &H"
```



```
28 [TSUI_COMMANDS]
29
30 EDIT_NEW_SEQUENCE_FILE = "新序列文件"
31 EDIT_SAVE = "节省"
32 EDIT_SAVE_AS = "另存为....."
33 EDIT_SAVE_ALL = "保存全部"
34 FILE_LOGIN = "登录"
35 FILE_LOGOUT = "登出"
36 FILE_OPEN = "文件打开"
```

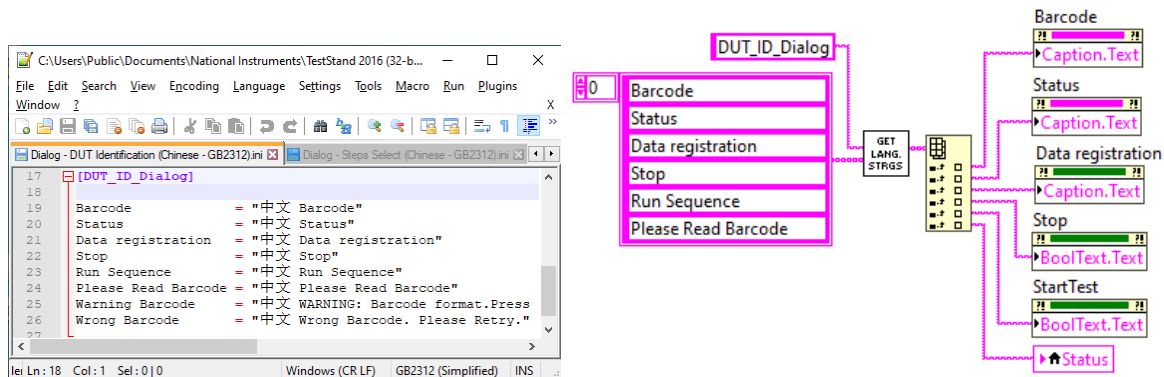
**Note:** As shown in the **CIM-OI-Menu** category above if you add for example ‘&F’ after the translated string for ‘File’ the classic shortcut Alt-F used to access the file menu will still work.

This leads to the following FLEXSTAND Operator Interface layout:



### Localizing LabVIEW Dialogs

You can use the **TestStand – Get Resource String** VI in the **TestStand>>Localization** LabVIEW palette to extract the localized string from the INI files and pass it to the respective controls caption or value property nodes. The following example shows the process for multiple strings when using the wrapper VI **Get Language Strings** available in the Common Support packed library.



Note: For this example, the localized ‘Chinese string’ only consists of two Chinese characters meaning ‘Chinese language’ followed by the defaults English string. Part of the corresponding dialog appears as follows:

