

Application Note

C013 Language Files

HA502487C013

AC30 Vx.18.x onwards

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C01 3 LANGUAGE FILES

Abstract

This application note explains how to create user language files on an AC30 drive.

Introduction

The AC30CustomLanguageManager utility, (Language Manager), allows the user to create alternative text for all the text held in the drive, (predominantly the parameter & menu names). The Language Manager also allows the user to create translations for new parameters created as part of the application. When loaded into the drive the alternative text is used on the Graphical Key Pad, (GKP), and the drive's web page.

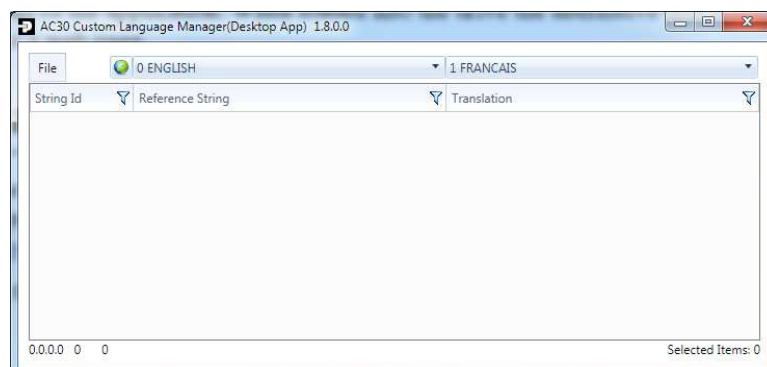
Creating the Language Files

Obtaining the AC30CustomLanguageManager utility

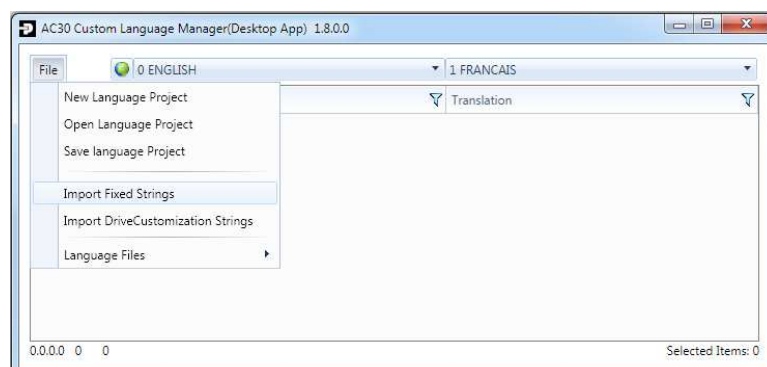
The AC30CustomLanguageManager utility is available from the software downloads page on the parker.com web page. Currently this is available at http://divapps.parker.com/divapps/eme/EME/downloads/EME_Software.htm.

Loading text for the standard parameters and menus

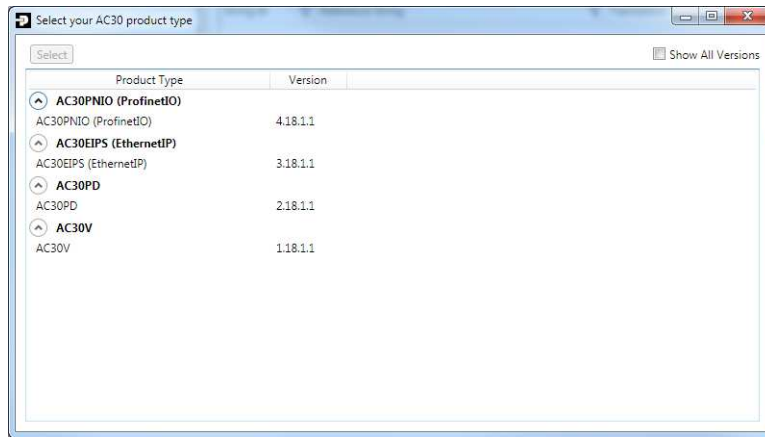
On opening the Language Manager for the first time it shows a mostly blank page as shown.



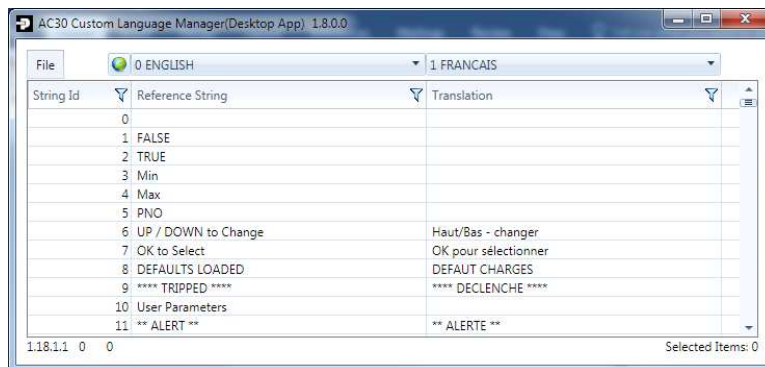
Under the “File” menu, select “Import Fixed Strings”. (To load the text from the drive it is necessary to have PDQ or PDD installed on the PC.)



This will bring up the following dialog box. Click on the product corresponding to your AC30 drive then click on “Select”. If the version required is not shown, click on “Show All Versions”.

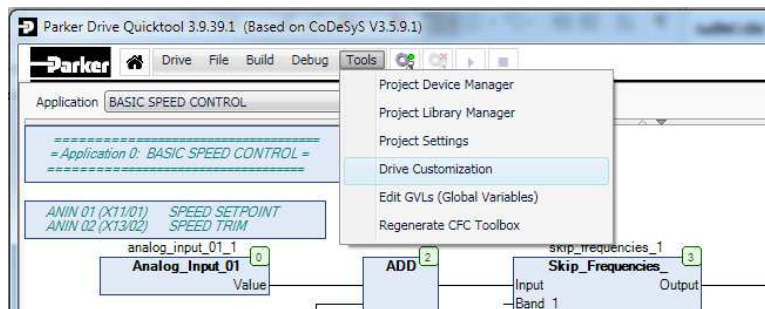


The Language Manager is now populated with all the text built into the drive firmware.

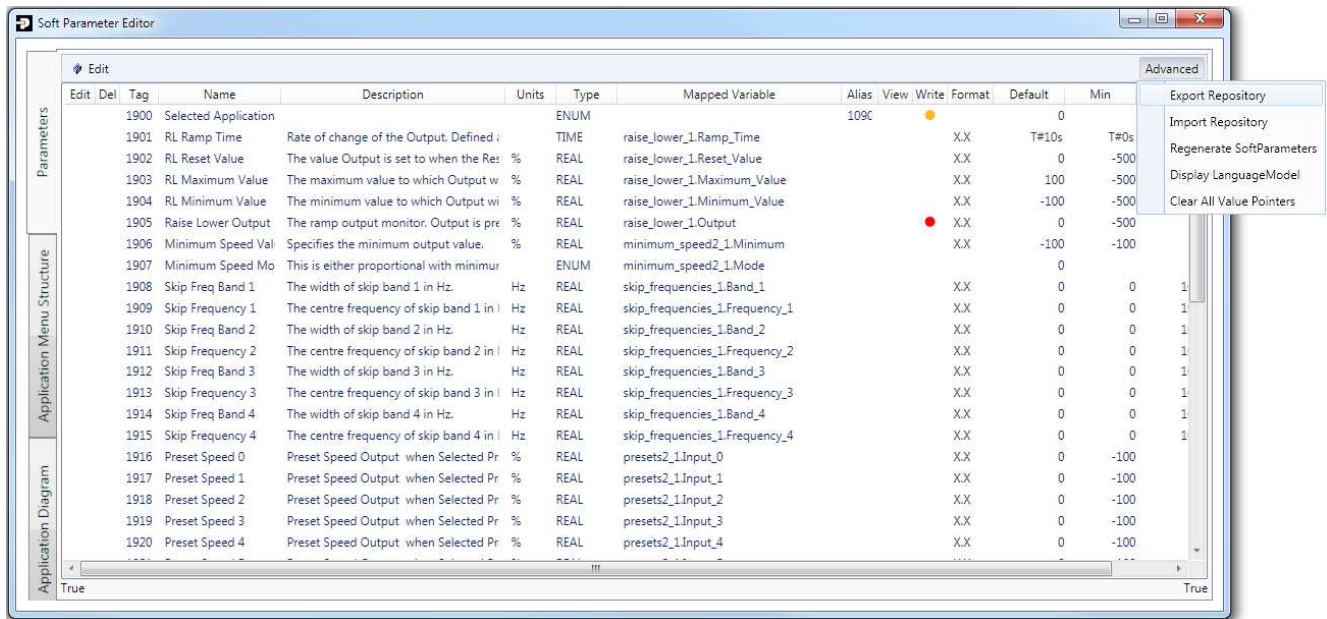


Loading text from the configuration

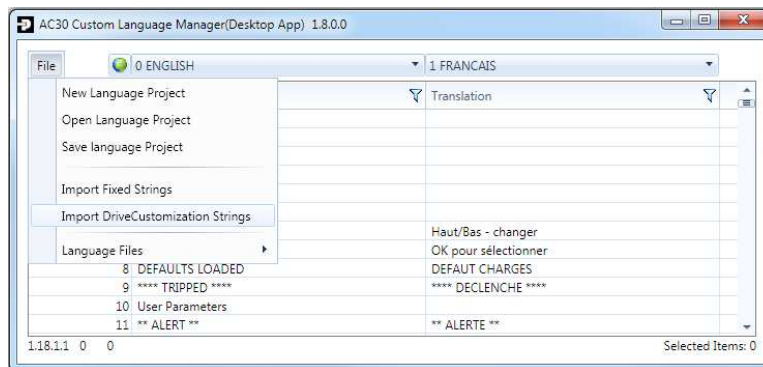
Use the PDQ or PDD configuration tool to transfer the text from the configuration to the Language Manager. Open the configuration in PDQ, then select “Drive Customization” from the “Tools” menu. Drive Customization is also available in PDD.



This opens the “Soft Parameter Editor”. In this editor, select “Advanced” then “Export Repository”.



The configuration text is exported as an xml file. Save this file in a suitable folder, then in the Language Manager select “Import Drive Customization Strings” from the “File” menu.



Navigate to the file “Repository.xml” created in the previous step and open this file.

Project Files

At this point it is advisable to create a language file Project by selecting “Save language Project” from the “File” menu. The Project file saves all the text imported into the Language Manager and can be used to back up your work.


Modifying an Existing Language



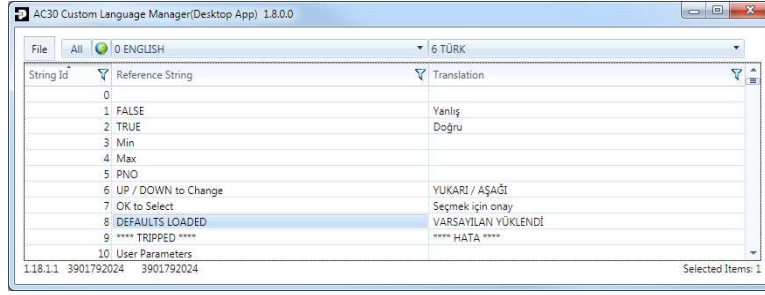
The Language Manager shows three columns, “String ID”, “Reference String” and “Translation”. To modify an existing Language, select the required language using the drop-down list above the Translation column. To help find a string the rows can be sorted by any of the three columns. When sorting by “String Id” it is helpful to know that text contained in the configuration is given an ID in the range 5000 and above. Text that is always in the drive has an ID less than 5000.

Enter the modified text in the Translation column in the appropriate row. If a row is left empty, then the text used will be that from the English column.

Creating a new Language

To create a new Language, it is first necessary to give that language a name. Click on the  icon. This shows the text shown for each language. For example, to create text for Turkish change “L 6” to “TÜRK”

Having created the language, select this as the Translation column and start entering the required translations.



Notes

- There are close to 2000 text strings in the drive. It is usually not necessary to translate all of these. Often it is only necessary to provide translations for the top level menus and the parameters defined in the application, (with String IDs in the 5000 range).
- It is possible to “copy and paste” between the Language Manager and other applications such as Excel.
- The GKP can only show 21 characters in each line. If a string is longer than 21 characters it will be truncated on the GKP. While the web page can show longer lines of text it should be noted that having just a few longer lines can dramatically increase the size of a language file. This is due to the simple file format chosen to save the text in the drive.
- Save the Language Manager project regularly when adding or modifying text to avoid losing work in the case of a problem. It can be a good practice to backup the Project file to a different folder or PC

Creating Language Files

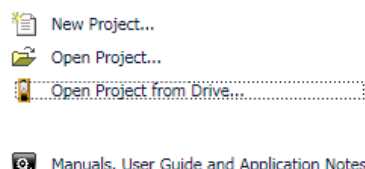
To create the language files, select “Language Files” from the “File” menu. Choose whether to create all languages or just the currently selected translation. The language files are named “language0.lang” to “language9.lang”. The files names must be unchanged for the drive to recognise the translation.

Loading the Language files to the AC30

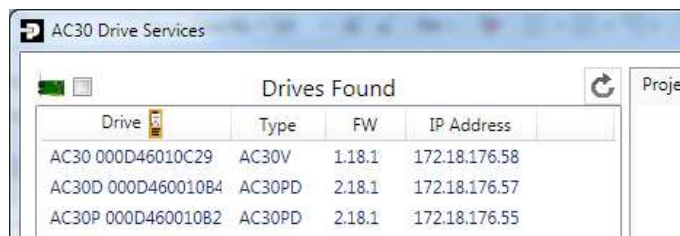
On the AC30V, language files must be saved on the SD card in a folder called “langfiles”. Only the “.lang” files need be copied to the SD card, although it is possible to also save the project and repository files on the SD card for future reference.

On the AC30P, AC30D & AC30A, the language files can be saved as above on an SD card. In addition, the language files can be saved to the internal file store. If the files are saved to both locations the SD card takes precedence. To save the files to the internal file use the AC30 file browser. This is built into PDQ and can be accessed from the PDQ start page under Basic Operations, Open Project from Drive.

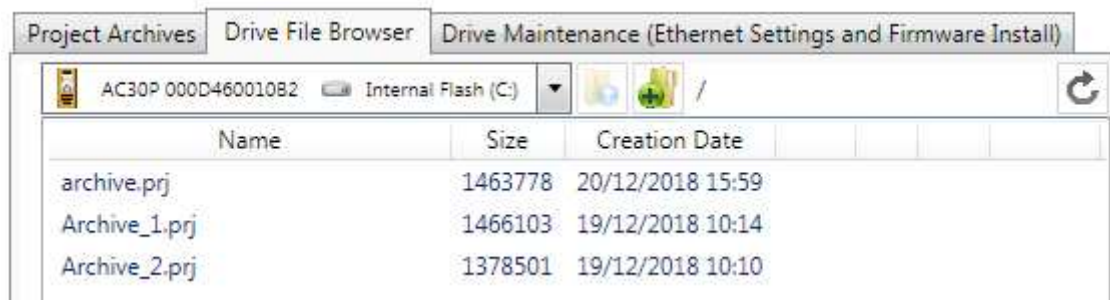
Basic Operations




In the left hand pane of the file browser select the required drive



In the right hand pane, select the “Drive File Browser” tab and ensure the “Internal Flash (C:)” volume is selected. (The SD card is shown as volume A:).



If a langfiles folder does not already exist, create this by clicking on the  icon. The folder must be called “langfiles”. Enter the langfiles folder and click on “Browse” to transfer the language files to the drive. Space in the internal file store is limited so it is not recommended to save the language Project file here.

Text in the AC30 and GKP

The Graphical Keypad, (GKP), is programmed with text corresponding to the parameters and menus that are always present in the drive. The GKP contains this text in English, French, German, Spanish and Italian. To improve the responsiveness of the display the GKP uses its local copy of the text when this available; however, the copy of the text in the GKP is typically for an older version of firmware and may not contain text for newer or updated parameters. For these parameters the GKP obtains the text from the drive firmware.

When the custom language is loaded into the drive the GKP is told to ignore its own copy and to use the text from the drive for all parameters and menus. This check is only performed when the GKP is reset, so it may be necessary to unplug and re-connect the GKP after updating a language file.

Trouble Shooting

Problem	Possible reason
No translations showing	<ul style="list-style-type: none"> Check the selected language Check the language files are in a folder called langfiles. Check the language files are named language0.lang to language9.lang. If using an SD card, check the value of Parameters->Device Manager->SD Card->Card State. The CoDeSys compiler needs to be version 3.5.7.80 or above.
Web page only shows text in English, the GKP shows text in the selected language.	On the AC30V only English text is held in the drive. It is likely that the custom language files have not been detected by the drive and the GKP is using a local copy of the selected language text. Check the SD card and language files as above.
New language shown as “L 6” to “L 9”.	<ul style="list-style-type: none"> Enter the text for the new language in the currently selected language. Force a reset of the GKP by unplugging it.
Some translations will not show on the GKP, (they show correctly on the web page)	Some characters cannot be displayed on the GKP. If a text string contains an unknown character, then it will not be shown on the GKP. This character restriction does not apply to the web page.

Special Characters Supported by the GKP

Character	Description
à	a grave
è	e grave
ì	i grave
ò	o grave
ù	u grave
á	a acute
é	e acute
í	i acute
ó	o acute
ú	u acute
ý	y acute
â	a circumflex
ê	e circumflex
î	i circumflex
ô	o circumflex
û	u circumflex
ã	a tilde
ñ	n tilde
õ	o tilde
ä	a umlaut
ë	e umlaut
ï	i umlaut
ö	o umlaut
ü	u umlaut
ÿ	y umlaut

Character	Description
ç	c cedille
ß	S sharpe
å	a Nordic
š	s Czech
ž	z Czech
À	A grave
È	E grave
Ì	I grave
Ò	O grave
Ù	U grave
Á	A acute
É	E acute
Í	I acute
Ó	O acute
Ú	U acute
Ý	Y acute
Â	A circumflex
Ê	E circumflex
Î	I circumflex
Ô	O circumflex
Û	U circumflex
Ä	A tilde
Ñ	N tilde
Õ	O tilde
Ä	A umlaut

Character	Description
Ë	E umlaut
Ï	I umlaut
Ö	O umlaut
Ü	U umlaut
Ÿ	Y umlaut
Ç	C cedille
Å	A nordic
Š	S czech
Ž	Z czech
¢	Cent
£	Pound currency
¥	Yen
°	Degrees
±	Plus / Minus
μ	Micro
¿	? inverted
¡	! inverted
²	2 superscript
³	3 superscript
«	Double chevron left
»	Double chevron right