LIBFREDO6

Ruby Shared Library for Sketchup Plugins

VERSION 4.0 – 15 AUG 2011

1. Overview

LibFredo6 is a shared library used by most of my plugins. The idea is to provide all scripts with common features, such as menu and toolbar management, language translation, default parameters and other utilities.

LibFredo6 is NOT a usable plugin by itself however.

As a user, you should not care too much about LibFredo6, except for a few things that are worth knowing when using my plugins. This is the purpose of this manual. However, you can perfectly ignore all that, **as long as you install the right version of LibFredo6 required by my plugins**, or the latest version (recommended).

Very often, when users signal that my scripts (like FredoScale or RoundCorner) do not show up in Sketchup or do not work, it is because they did not install LibFredo6, as specified.

For getting up to date details on LibFredo6, please consult:
> http://forums.sketchucation.com/viewtopic.php?f=323&t=17947#p144178

1) What LibFredo6 brings

For users, the main features are about Plugin configuration and management:
- Launch of the plugins, with protections against errors
- Some default parameters, common to all plugins, for instance, inference colors,
- Language translation (see section 4 if you are interested in contributing),
- Information on plugins, links to documentation, videos and support web site,
- Live check-for-update.
- Trace log files
- Tracking of time to load plugins

2) Versioning

LibFredo6 is versioned. The first version ever published of LibFredo6 is **3.0** (previous versions were actually just a single file ruby file called *LibTraductor.rb*).

For convenience, the version is expressed as a decimal integer. So 3.0 is actually referred to as '30' (and 4.0 is therefore '40').

I maintain **backward compatibility** so that if you install the latest version of LibFredo6, it should work fine with any of the scripts using it, even if they were published along with earlier versions of LibFredo6.

2. Installation

LibFredo6 supports **Sketchup versions 5** (>= 5.160)**, 6 and above** (Free and Pro).

To install it, you should unzip the file you downloaded (***LibFredo6_xx.zip*** in principle) into the Sketchup Plugins folder. This operation should do the following:

- **Copy one script file *LibFredo6.rb* to the Sketchup Plugins folder**:
- **Create a sub-folder LIBFREDO6_Dir_xx**, containing the library files, the icons and cursor files, language files, as well as the documentation in PDF format.

```
□ c:\program files (x86)\google\google sketchup 8\Plugins\
   ⊞ 📁 LIBFREDO6_Dir_40
   ┈ 📄 LibFredo6.rb
```
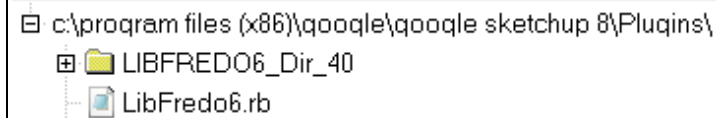
In Winzip, make sure you do a **Select All**, and then an **Extract** into the Plugins folder, answering **YES to all prompts for file overwriting**, so that you create or properly copy the <u>folder hierarchy</u>.

If you are unsure of the unzip operation, do it in a neutral folder, and, once you have checked that you have reconstructed the footprint as shown above, copy the file LibFredo6.rb and folder LIBFREDO6_Dir_xx to the SU Plugins directory.

The standard SU Plugins directory is normally (here for SU8):

On Windows:

C:\Program Files\Google\Google SketchUp 8\Plugins

On Mac:

Macintosh HD/Library/Application Support/Google SketchUp 8/SketchUp/plugins

NOTE:

- You may want to install LibFredo6 in another directory than the standard Sketchup Plugins directory (as indicated above). If so, you can use the standalone plugin **000_AdditionalPluginFolders.rb**[1] to define an additional Plugin directory and put LibFredo6 and my plugins in this directory.

IMPORTANT:

- <u>From LibFredo6 4.0 on</u>, **the files ZLoader__xxx.rb are NO LONGER used**. You can safely delete the old ones if you still have them.

- <u>LibFredo6, and more generally all scripts developed above LibFredo6 are independent of the SU plugins directory and can run in any other directory</u>. This is worth knowing if you use the **000RedirectPlugins.rb** to add custom plugin directory.

CLEANUP OF OLD VERSIONS: Once you have installed a new version, you can safely remove the previous ones. Say, if you install LibFredo 3.7, you can remove the folder LIBFREDO6_Dir_36 from the SU Plugin directory. As of LibFredo6 4.0, there is a utility ***"Purge Obsolete Files"*** that will help you to clean up the old files for LibFredo6 and plugins built on top of LibFredo6.

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[1]   See documentation at http://forums.sketchucation.com/viewtopic.php?f=323&t=39073

3. LibFredo6 utilities

LibFredo6 creates a menu entry *“LibFredo6 Settings….”* in the Sketchup *‘Windows’* menu. It provides some configuration commands common to all plugins, as well as information on LibFredo6 itself.
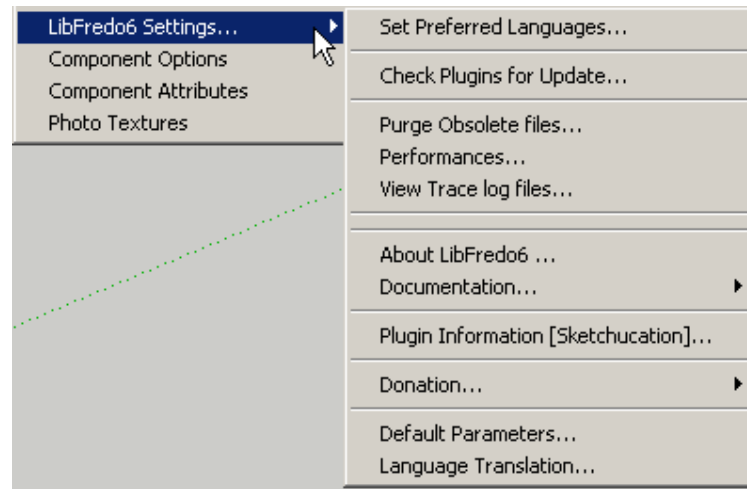
The menu entries after the double separator are pertaining to LibFredo6 itself. The menu entries at the top are more general and apply to all plugins or plugins built on LibFredo6.

The main utilities are:

- **Set Preferred Languages**: to specify a sequence of languages for all plugins.

- **Check Plugins for Update**: to check the current status of the installed plugins that subscribe to this service.

- **Purge Obsolete Files**: list all files which are no more necessary and could be safely deleted.

- **Performances**: summarize the load time at SU startup of the plugins build on LibFredo6

- **View Trace log files**: visualize the traces of the current, but also previous sessions. This allows checking for errors at Sketchup startup time.

1) Setting the language preferences

The dialog box allows setting up one or several language preferences. This setting is persistent across Sketchup sessions.

By default, it will set up the language of your operating system, if recognized.

Note that language preferences are used in cascade. If you choose [HU, DE, FR], it means that for each string it will take the first translation found in Hungarian, then in German, then in French and then in the default language (which happens to be English).

2) Check Plugins for Update

As of v3.7, LibFredo6 can check the status of the plugins versions online. This concerns my own plugins, but it is open to other script authors.

Access to the Check For Update dialog box is done via the menu

Windows > LibFredo6 Settings > Check Plugins for Update…

The dialog box displays the status of the registered plugins at last check (date is indicated on the top right of the window).

Just click on the button *Check Plugins for Update* to get the new status. Indeed, you need a working connection to Internet. Here is an example, for illustration:
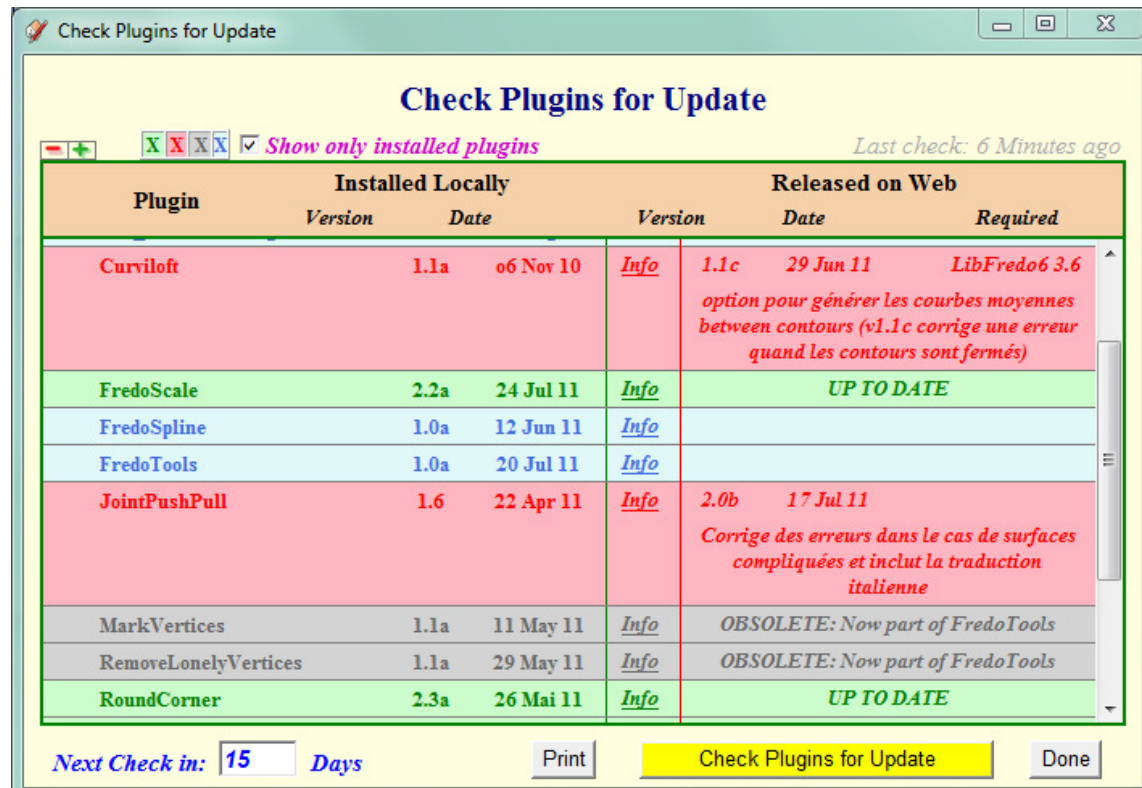

Filtering the list of plugins

There may be 4 cases (each with a defined color) for the plugin status:

1) Plugins installed locally and up to date
2) Plugins installed locally that requires an upgrade
3) Plugins obsolete or to be replaced by another one
4) Plugins installed locally where no information is available on the web
5) Plugins not installed locally but for which information is available on the web

You can filter the list based on each of these 5 cases by using the checkboxes at the top of the window:
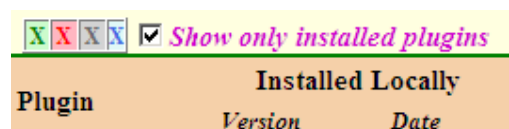
## *Accessing Plugin information on line*

The link Info (if present) allows you navigating to the web page where the plugin was published. Just click on it and it will open a browser window pointing to the right page.


Reminder for Checking Updates

In LibFredo6 v4.0, the reminder mechanism is passive. It is just a way to warn the user about checking plugins for update at certain defined times. There is no underlying real check online (I will probably introduce it in a next version).

You can set the next date for being reminded to do a check for update. This will take the form of a small window with a Ruby icon which will popup a few seconds after you start Sketchup.
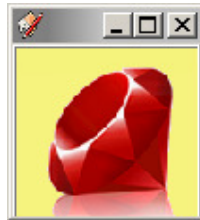
If you click on the Ruby, it will open the dialog box. If you close it, then you will be reminded the next day, when you start Sketchup.

In order to set the next date for checking, set the number of days in the appropriate field at the bottom left of the dialog box. Note that the exact date is shown in the tooltip.
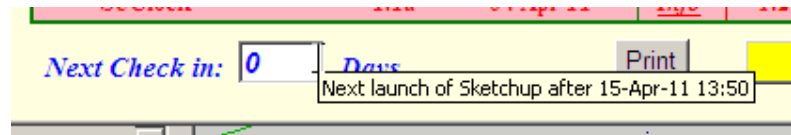
The default value is 15 days. This parameter is saved across SU sessions, but is specific to each version of the Sketchup applications.

- If you enter 0 Day, then it means that the reminder will appear every time you start Sketchup

- If you enter 999 Days, then you will never be reminded

3) Purge Obsolete Files

As of v4.0, LibFredo6 provides a way to check and get rid of the obsolete files and folders coming from previous versions of the plugins (for instance, ZLoader_xxx.rb files are no longer useful as of v4.0). This will help you to maintain your Plugins folder cleaner and also to avoid compatibility problems.

Access to the Purge Obsolete Files dialog box is done via the menu

Windows > LibFredo6 Settings > Purge Obsolete Files…

The dialog box displays the list of obsolete files and folder by plugins.
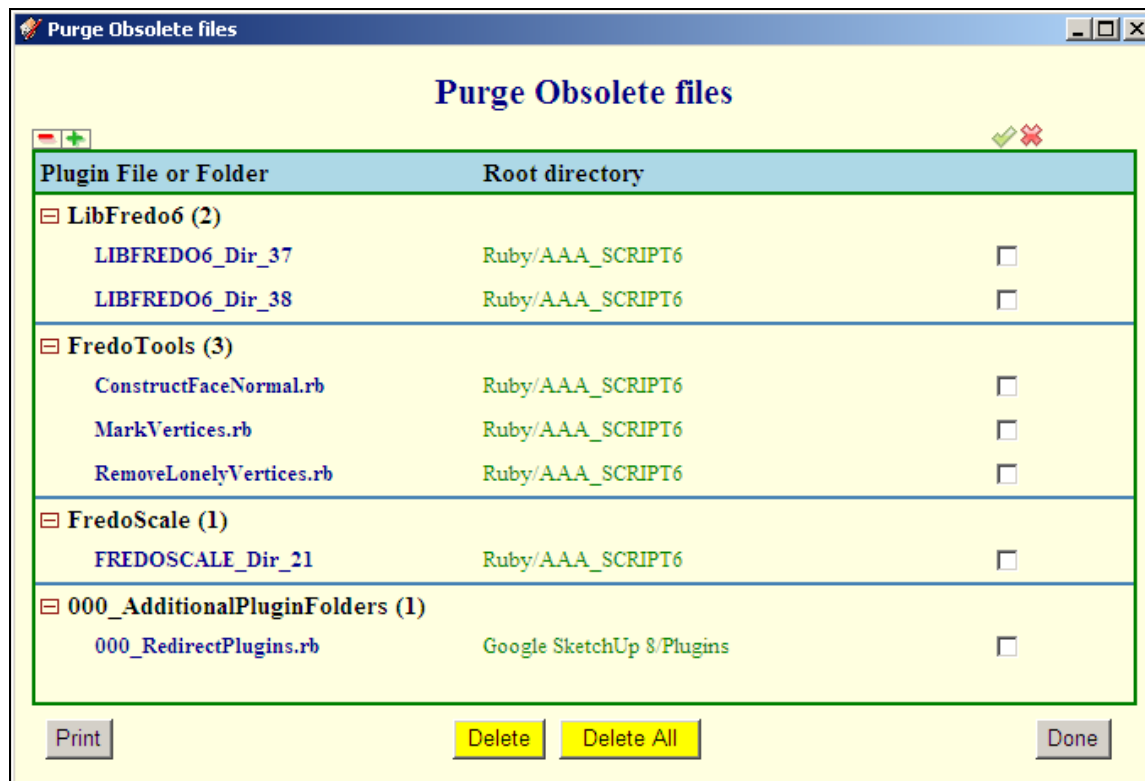
You just have to select the ones you wish to delete and click on the *Delete* button.

You can also delete ALL obsolete files and folders by clicking on the *Delete All* button, regardless of the selection.

The full path of files and folder is indicated in the tooltip of the fields.

There will be two level confirmation before proceeding to deletion of files or folders (with indication of the full path):

  − General confirmation
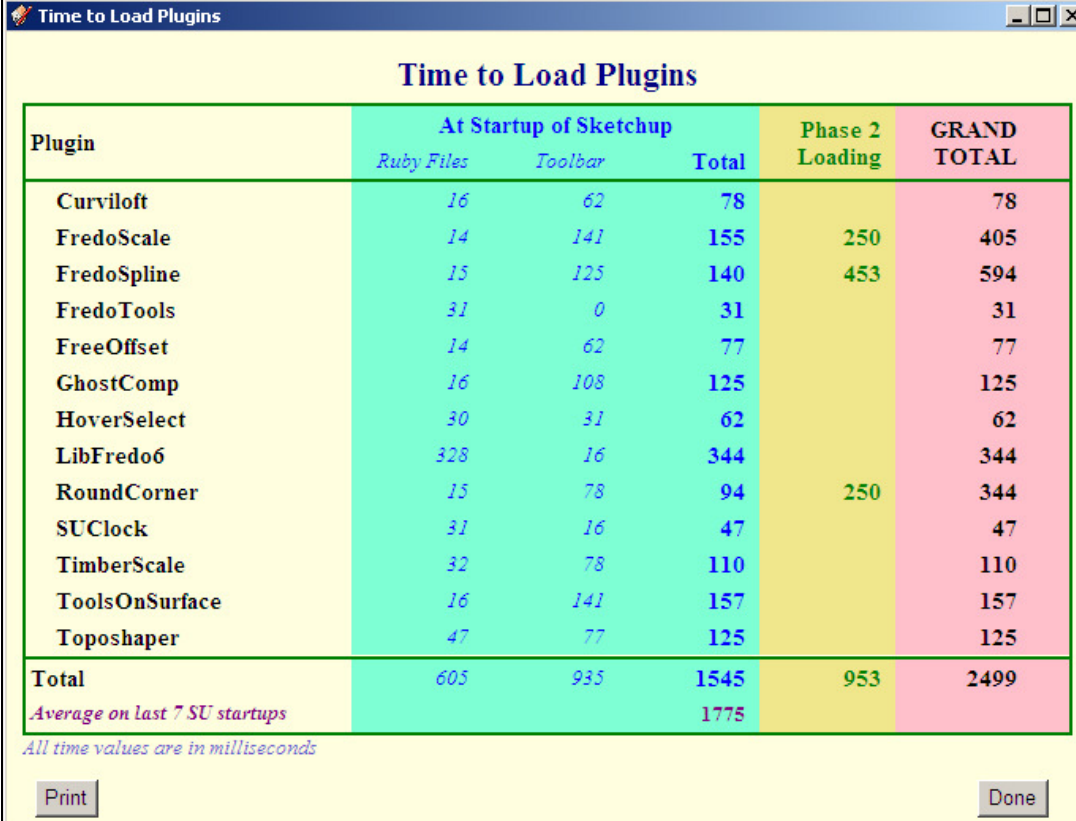 − Confirmation for each folder deleted.

4) Performances and Plugin Load Time

As of v4.0, LibFredo6 provides a synthetic view of the time to load plugins built on top of LibFredo6.

Access to the Plugin Load time Information dialog box is done via the menu

Windows > LibFredo6 Settings > Performances….

The dialog box displays the times related to the loading of plugins (including LibFredo6 itself). All times are *in milliseconds*.

Time to Load Plugins

Plugin	At Startup of Sketchup			Phase 2 Loading	GRAND TOTAL
	Ruby Files	*Toolbar*	**Total**		
Curviloft	*16*	*62*	**78**		78
FredoScale	*14*	*141*	**155**	250	405
FredoSpline	*15*	*125*	**140**	453	594
FredoTools	*31*	*0*	**31**		31
FreeOffset	*14*	*62*	**77**		77
GhostComp	*16*	*108*	**125**		125
HoverSelect	*30*	*31*	**62**		62
LibFredo6	*328*	*16*	**344**		344
RoundCorner	*15*	*78*	**94**	250	344
SUClock	*31*	*16*	**47**		47
TimberScale	*32*	*78*	**110**		110
ToolsOnSurface	*16*	*141*	**157**		157
Toposhaper	*47*	*77*	**125**		125
Total	*605*	*935*	**1545**	953	2499
Average on last 7 SU startups			**1775**		

All time values are in milliseconds

`Print`   `Done`

The report indicates 3 categories of times:

- **At Startup of Sketchup**, the loading of a plugin consist in:
  - Loading the Ruby Files, which is usually quite fast
  - Creating the commands and toolbars, which may take more time, depending on the version of Sketchup and the environment.
- **Phase 2 Loading**: for some plugins, the strategy is to load the minimum of files (usually one file) to create the menu and toolbar. Then the rest of the files will be loaded at the first call of a function of the plugins. For instance FredoScale or RoundCorner use this *two-phase loading* mechanism, whose purpose is to slightly speed up the startup of Sketchup.

So the total impact of LibFredo6 plugins on the duration of the SU Startup is the total of the 3rd column (1,545 ms in the screenshot above).

For convenience, the dialog box gives the average total load time for the last 10 SU startups.

5) Trace Log files

As of v4.0, LibFredo6 traces the status and errors when loading and executing plugins.

Access to the Log viewer dialog box is done via the menu

Windows > LibFredo6 Settings > View Trace log Files….

The dialog box shows the log of main steps in the loading and execution of plugins. Errors are highlighted in red.

By default, the viewer shows the log file for the current session, but you can consult the log files of previous sessions, which can be useful in case you have just got a bugsplat.

Additionally, you can **export the log file** as a text file (.txt). This may help the author of the plugin to troubleshoot the problem.

Note: Full path names are masked in the log files and exported files.

If you use 000_AdditionalPluginFolders, then the loading cycle of all other plugins is also traced and visible in the log file.

6) Default Parameters

LibFredo6 maintains a few parameters which are common to all plugins, such as the Inference colors. You can modify them via the dialog box *"Default Parameters…"*.
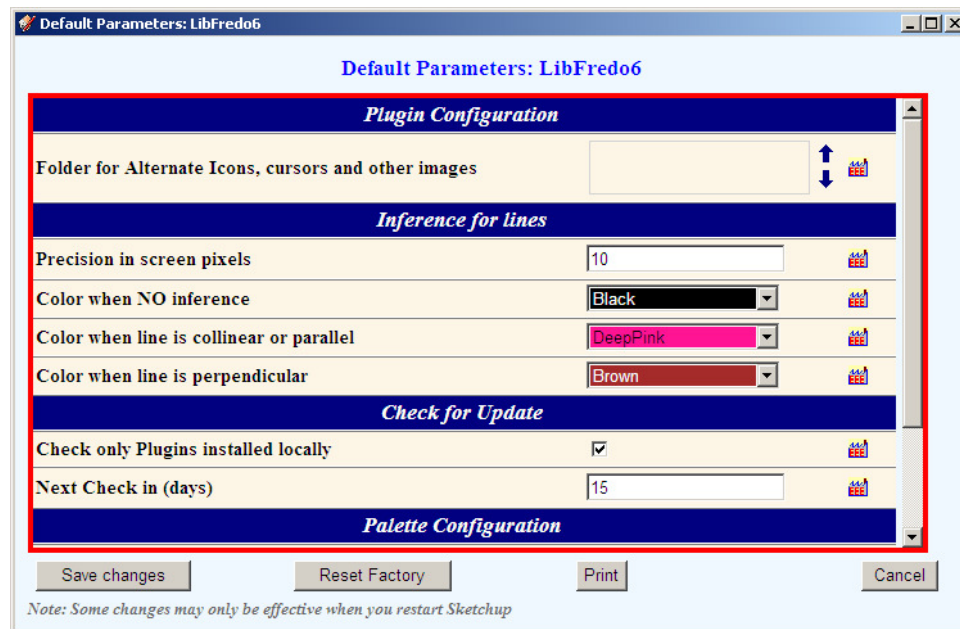
4. Contributing to Language Translation

[This section is only for those who wish to contribute to translation of LibFredo6 itself and my Plugins]

All strings are packaged in external files that can be translated without changing the source code.

- Languages are designated by their **2-character ISO code**. So FR for French, DE for German, ZH for Chinese, etc….

- There is a concept of **Default Language** (usually English), which is defined in the source code itself (so that there are always valid strings to display). If the translation for a string in a given language is not found, then the plugin will default to this default language.

- The convention for Language File name is *<Plugin_name>_XX.lang*, where XX is the ISO code of the language. The files must be located in the Plugin subfolder. For instance, the Plugin FreeScale includes a file *FreeScale_FR.lang* in the folder FREESCALE_Dir_10.

- ISO and UTF encoding are supported. Normally, it is possible to translate into Russian, Chinese, Japanese, Korean, etc…

- The translation process is safe. You are not forced to translate everything. And, your contribution to the translation will be preserved across upgrades of the plugin.

The principle is to **translate FROM WITHIN the application**, via the dialog box *"Language Translation…"*. You must NOT edit the files manually[2].

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[2] The reason is that the files still keep an ASCII format where all diacritic and double-bytes characters are encoded in a special ASCII format.

1) Using the Translation Dialog Box

Below is the Translation Box for LibFredo6. You normally have one for each plugin that will use LibFredo6.
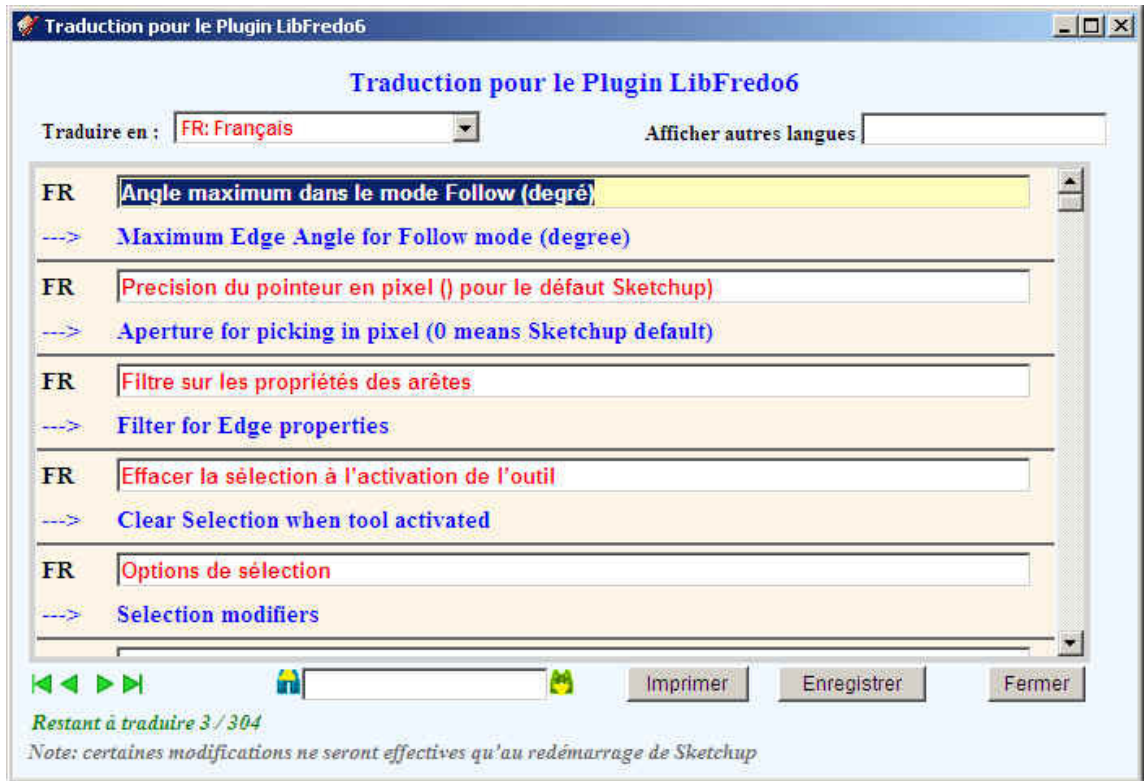
- **First, select the target language** using the Combo box on the top-left of the dialog box. If your language is not predefined, you can create a new one, by selecting "New Language…". This will show another dialog box where you can define the new language: ISO code, native name and English name.
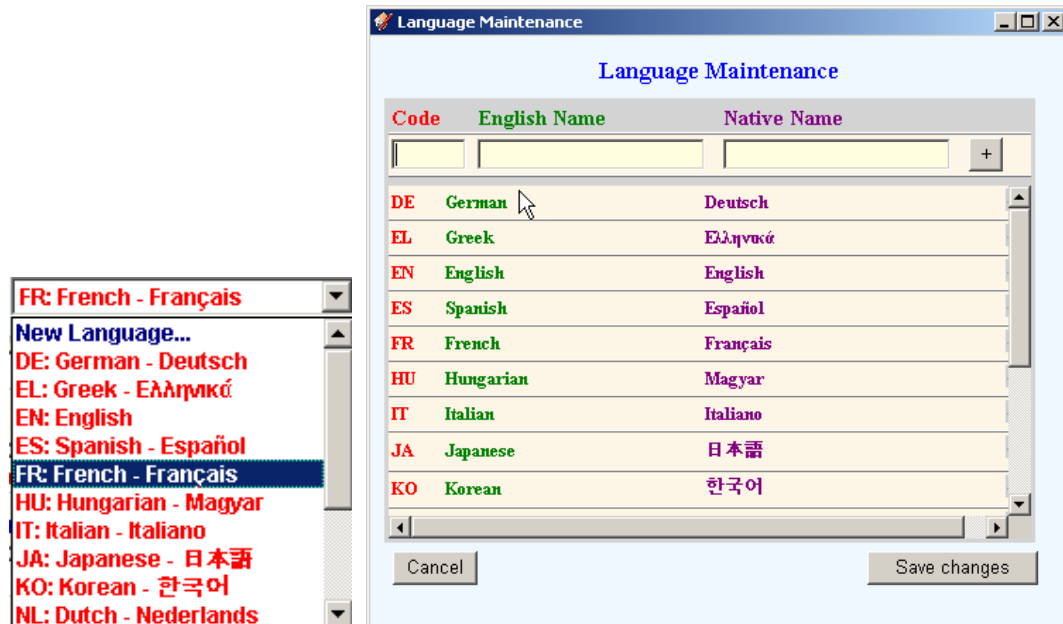
- **The Default Language strings are shown in Blue**, with an arrow. You can however show other languages too, if it helps, by typing their ISO codes separated by space in the field on the top right of the dialog box.

- **Then, you just need to type the translation in the fields**.
  - You do NOT need to put back-slash in front of diacritic characters (accentuated). Just type the string *naturally* in your language.
  - You can use single quote (').
  - Be careful with angular brace (< and >), because it may interfere with HTML. I would recommend not to use them for the time being.
  - Strings not translated yet are highlighted in Green cells
  - Strings just modified and not saved yet are highlighted in yellow
  - The button *"Save changes"* just do a saving, but doe not exit the window. Use the button *"Close"* to exit.

Once you have translated strings (some or all), you can already see some of this translation active in the Plugin. Note however that the full integration of new translation may only take place when you restart Sketchup (in particular for all menu strings and toolbar tooltips).

2) Publishing the Language file

Your effort to translate is valued as a contribution to the Sketchup community. So, what I suggest is to:

- **post the language file** *.lang* **on the Sketchucation forum** (Plugin section or language-specific sections) for others to share

- **inform me by PM or on the forum**, so that I can integrate the language in the standard distribution.