Fenestratio Bilingualization

Fenestratio supports a company having a primary language of their own choosing, which is used for all internal processes by all internal users. Secondly, a Fenestratio company can be configured to support a second language for documents generated to provide to customers. Following is a description of the steps to be taken to make use of these facilities.

For the purposes of this document we will describe steps tailored to a Montréal user company wishing to operate in French with the option to produce documents in English for selected customers and/or on selected jobs.

Company Settings

Hidden from the user interface, and set on request by the development team, are three language control settings on the company record: UseLang2, Lang1 and Lang2:

- UseLang2 is a yes/no indicator of whether the company will use both languages – setting this value controls whether product descriptions show second-language names, and whether Administration->Strings shows two values for each key.
- Lang1 is the name of the company's operating language IN the company's primary language, so for our example Lang1 will be set to Français
- Lang2 is the name of the company's alternate language in the company's primary language, so for our example Lang2 will be set to Anglais

Bilingual Data Records

Bilingualization of Fenestratio data is performed on several pages under the maintenance menu for Families, Features, Products, Options, Sizes, Views and Types. These are the data elements that are shown on documents that might be sent to a customer. When bilingual support is activated, each of these pages shows a second Name/Description box labelled with the company's secondary language.

Bilingual Static Text

The second part of Fenestratio bilingualization is conducted on the page reached by choosing the Administration->Strings menu option. Every word or phrase of static text not coming from data records and emitted by Fenestratio on web pages or documents is passed through a translation engine.

Bilingualization of the static-text translations is best done on the software itself so that words and phrases can be double-checked in context. The best approach is:

- log into Fenestratio with two different internet browsers (like FireFox, Chrome, Internet Explorer, Safari...) at once
  - note opening two windows for the same browser WILL NOT WORK
- devote one browser to navigating around the main operational pages of Fenestratio (we'll call this the navigator) and the other browser to the Administration->Strings page (we'll call this the translator)
- when you see a value in the navigator that should be translated, find it in the translator, click on the related key and update the String detail record as required

Administration->Strings

The strings table has four main values – the key, the primary language value, the secondary language

value, and an indicator for whether the value should be the same in both languages. In most cases the key is the same as the English text and can be found by a key search using the text visible on the page or report. Otherwise, we provide search by value capabilities as well.

An example of cases where the key is not the same as the default English value is when we make appearance of the text conditional on whether it is overridden, such as:
 – QuoteBottomNoteInstall
 – QuoteTerms

Same in Both
At far right of the strings list is a column headed "Same", which will show a checkmark or nothing, which maps to a checkbox on the string detail page labelled "Same in Both", which is meant for values like n/a or words like action which are usually understood as the same in both English and French.

Values same but unmarked
The bottom-most filter on the strings list provides choices to control which entries show on the list. The most useful of these to a translator is probably that labelled "Values same but unmarked". This could be used as the main to-do list for the translator as it will include all entries where the value for Français and Anglais are equal, but the Same in Both checkbox is not ticked.

Substitution Variables
Some entries in the strings table include substitution variable placeholders like {0} or {1}. These curly-brace-number type variables like {0} must be retained in any translations.

HTML and Entities
Some strings may contain entities like   or   or arrows like → or HTML markup tags starting and ending with angle brackets like < and >. These are best left in the translated text where possible although the best position for them may need to be determined by experimentation. Feel free to call the development team for guidance on a case-by-case basis at 888-853-0011.

Developer Omissions
Passing every piece of text shown to the user through the translation mechanism is a feat requiring severe discipline for the developers of Fenestratio. It's likely that we have missed places where words or phrases are emitted without translation. If you don't find the value displayed on Administration->Strings, Please inform us using the blue @ symbol at the top right of all Fenestratio pages for Fenestratio feedback, and we will make corrections as soon as possible.

Accented Characters
Fenestratio and its database store text in the UTF-8 encoding format, so accented characters should be handled correctly, still it's possible we could mangle characters in certain situations. Please let us know of these errors through the feedback mechanism.

On pages where we provide search facilities, search arguments and article text are de-accented, so that searches containing e match é and vice versa. Below is a code excerpt showing the accented characters

we've accounted for (left of the colon :) and the characters we substitute for them (right of the colon :) during a search. Please inform the development team if there are any omissions.

```
'à': 'a', 'á': 'a', 'â': 'a', 'ã': 'a', 'ä': 'a', 'å': 'a',
'ç': 'c',
'è': 'e', 'é': 'e', 'ê': 'e', 'ë': 'e',
'ì': 'i', 'í': 'i', 'î': 'i', 'ï': 'i',
'ñ': 'n',
'ò': 'o', 'ó': 'o', 'ô': 'o', 'õ': 'o', 'ö': 'o', 'ø': 'o',
'ß': 's',
'ù': 'u', 'ú': 'u', 'û': 'u', 'ü': 'u',
'ÿ': 'y',
'À':'A','Â':'A','Ä':'A',
'È':'E','É':'E','Ê':'E','Ë':'E',
'Î':'I','Ï':'I',
'Ô':'O','Œ':'O',
'Ù':'U','Û':'U','Ü':'U',
'Ÿ':'Y',
```

Quote Escaping
Apostrophes and quotes are used on web pages for things like text-box values and tool tips and in dynamic interface code, so considerable developer discipline must be exercised to ensure that we never wrap text coming from the database in single or double quotes if that text contains single or double quotes without properly modifying the data through an "escaping" mechanism. Apostrophes are commonly used in French words and phrases, while their appearance is relatively rare in English text. An improperly-escaped word or phrase could at worst cause a Fenestratio page to stop functioning entirely, or at best make the page look odd. Please report any instances of failure to escape text through the feedback mechanism.

One fairly advanced way to detect a quote escaping error is to use the browser's debug console to display error messages. On Internet Explorer, Firefox and Chrome the debug console can be activated by pressing [F12], while on some versions of Safari one would need to pull down the Develop menu and choose "Show Error Console"

Secondary-Language Customers
Customers are listed at Maintenance->Customers. On each customer record is a "Document Language" selection which will default from the company's primary language, and provide default selection to any jobs created for that customer.

Secondary-Language Quotes
On the quote detail page is a setting for the "Document Language" to be used for external documents created for this quote. This value will default from the related customer record at quote creation time, but can be overridden here for this specific quote. If our Montréal company selects Anglais on an quote header page and previews an external document, the static text and product descriptions should show the value from the Anglais boxes, and any failure to do so is a bug that can be reported through the feedback mechanism.