## FileMaker Barcode Font Integration Tutorial

for Filemaker Versions 4 - 8.5

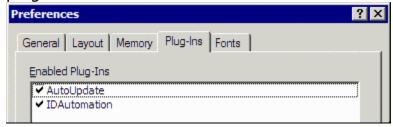
IDAutomation's <u>barcode fonts</u> may be easily integrated into FileMaker as dynamic calculated fields without the use of scripts. The barcode fonts and encoder tools used in this tutorial are compatible with FileMaker versions 4 and up.

- 1. Determine which barcode font to use:
  - To encode numbers, consider Codabar.
  - o To encode numbers and uppercase letters, consider <a>Code</a> <a>39</a>.
  - To encode numbers, punctuation, uppercase and lowercase characters in the USA, <u>Code 128</u> is suggested.
  - The <u>Universal Barcode Font</u> creates multiple barcode types from a single font and is the preferred font when using Code 128 or Interleaved 2 of 5 outside of the USA to avoid language and locale incompatibilities.
  - When creating complex barcodes for UCC/EAN 128 or encoding functions such as Return or Tab, the Universal Barcode Font should be used with the <u>IDAu Uni C128</u> function of the plug-in extension.
- 2. Install the selected barcode font and restart FileMaker to verify that the fonts are available by viewing them in an application such as Word or Excel that allows font selection. If it is not visible, restart the computer and try again. If the fonts still do not appear, refer to IDAutomation's barcode font problems and solutions.
- 3. <u>Download the FileMaker Barcode Font Plug-In</u> if using barcode fonts other than Codabar or Code 39, as these do not require font encoder tools in FileMaker.
  - Windows FileMaker Versions 7 and Up: Open the downloaded <u>IDAutomationFMplug-in.zip</u> file and copy IDAutomation.fmx from the "Version 7-up" folder to the Extensions sub folder of the FileMaker folder. Example: "C:\Program Files\Filemaker\FileMaker Pro 8.5\Extensions".
    - Intel Macintosh and functions for the <u>Universal Barcode</u>
       <u>Font</u>, <u>UPC-E</u> and <u>OneCode</u> barcodes are only supported in this version.
  - Windows FileMaker Versions 4 to 6: Open the <u>IDAutomationFMplug-in.zip</u> file and copy IDAutomation.fmx from the "Version 4-6" folder to the System sub folder of the FileMaker folder. Example: "<u>C:\Program</u> Files\FileMaker\FileMaker 5.5\System".

- Macintosh OS X FileMaker 7 and Up:
   Decompress the <u>IDAutomationFMplug-in.zip</u> file with Stuffit Expander; decompress the IDAutomation.zip file from the "version 7-up" folder to access the plug-in. Move or copy the
- Macintosh Classic and OS X FileMaker Versions 4 to 6: Decompress the <u>IDAutomationFMplug-in.zip</u> file with Stuffit Expander; decompress <u>IDAutomation.bin</u> file from the "version 4-6" folder to get IDAutomation.sit; decompress <u>IDAutomationBarcode.sit</u> to get the <u>IDAutomation plug-ins</u>. Move or copy the plug-in file to the <u>Extensions</u> folder inside the <u>FileMaker folder</u>.

plug-in file to the 'Extensions' folder inside the FileMaker folder.

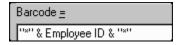
4. If FileMaker is running, restart the application. Select *Edit* - *Preferences* - *Plug-in* (versions 4-6, choose *Edit* - Preferences - Application). Choose the *Plug-Ins* tab to ensure that the IDAutomation plug-in is enabled.



5. Choose *File - Define Database* (versions 4-6, select *File - Define Fields.*) For the field name, enter *Barcode* or another descriptive name. For the field type, select *Calculation*, and then *Create*.



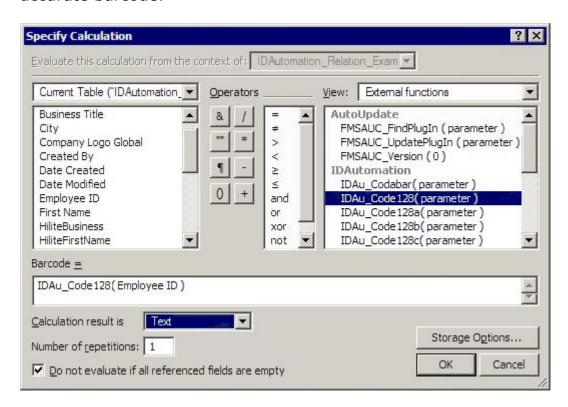
- 6. Click the *Create* button to generate the calculation, then choose *TEXT* as the calculation result. The calculation that is entered depends on the font used.
  - Code 39 and Codabar Barcode Fonts In the Specify Calculation field, enter "\*" & Field & "\*" for Code 39 or "A" & Field & "B" for Codabar so that the start/stop characters are appended to the beginning and ending of the field will be encoded.



## Code 128 and Other Barcode Fonts

Choose *External Functions* from the view of functions and select the *IDAu* function that formats the data for barcode font chosen. Double-click the function so the formula appears in the formula box.

- Replace the parameter word with the field to be encoded in the barcode.
- Select TEXT as the Calculation Result and choose OK. If database size is a concern, select Storage Options and choose not to store the result in the database.
- Select *Done* to create the new field. When this field is combined with the intended barcode font in FileMaker, it will create an accurate barcode.



Functions in FileMaker versions 4-6 are slightly different. For example, the above formula in versions 4-6 would be *External("IDAu-Code128", Employee ID)*.

7. With the database form or report open, choose *View - Layout Mode*. Choose *Insert - Field* and select the field named *Barcode* from the list of fields and choose *OK*. After the barcode field appears on the form, size the edges appropriately, if necessary, so the barcode can fit on it. If this field is not large enough, the barcode will display a rectangle instead of a barcode or a corrupted barcode may be created that will

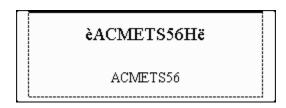
not scan.

Employee ID Employee ID	
Barcode	

8. IDAutomation's Code 39, Codabar, UPC, EAN, MSI and Interleaved 2 of 5 barcode fonts all have an equivalent Human Readable version that may be used to display the text interpretation of the encoded data. If Human Readable fonts are not being used but there is still a need to have the text interpretation appear underneath the barcode, select *Insert - Field* to add a special field that consists of the data that will be encoded.

	< <first name="">&gt; &lt;<last name="">&gt; Business Name</last></first>
Body	Barcode128
	Employee ID

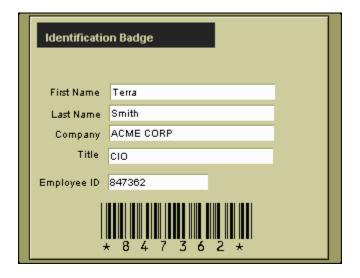
9. With the barcode fields now in the FileMaker report, choose *View* - *Browse Mode* to confirm that the data is being pulled dynamically from the fields and properly formatted to the barcode font. Make sure that the data changes after moving to the next record. When using the FileMaker Barcode Font Encoder Plug-in, strange characters may appear in the field data. This is normal for the intended font. When using the Universal Barcode Font, a large amount of letters will appear and this is normal as well.



10. With the *Barcode* field selected, choose *Format - Fonts* and select the appropriate barcode font. Choose *Align Center* to move the barcode to the middle of the field, and then select the 12-point font size or other size of choice.



11. Choose *View - Browse* to verify that a barcode displays in the FileMaker form or report. After printing, the barcode may be accurately scanned with an <u>affordable barcode scanner</u>.



12. If the FileMaker application that is being created is also going to be distributed, the FileMaker Barcode Font Encoder Plug-in and appropriate <a href="mailto:barcode font">barcode font</a> must also be distributed along with the database.