

Overview

FileMaker 7 introduces a new relational model for the FileMaker database. Introduction of this new relational model has required changes to the AppleScript support within FileMaker 7.

This reference document provides a quick reference guide for commonly used FileMaker 6 and FileMaker 7 AppleScript code snippets. Each code example includes a description, FileMaker 6 (and below) AppleScript example code, and FileMaker 7 example code. In some cases these AppleScript code examples return a tab delimited formatted string of text, which makes it easier to process the results with other programs.

Updated versions of this document may be downloaded from: www.fmpromigrator.com.

AppleScript Tips:

In the following code examples, when you see references to set myDBNum to 1 or set myTblNum to 1, you can loop thru the number of open databases or tables in order to obtain info for all databases/tables.

When dealing with multiple versions of FileMaker running on the same computer, you may want to change the name of the FileMaker executable with the Finder in order to address a specific version of the application.

Description	FileMaker 6 AppleScript Code	FileMaker 7 AppleScript Code
list of database/table names	<pre>tell application "FileMaker Pro" set myDbList to {} copy number of databases to mydbcount if mydbcount = 0 then display dialog "There are no FileMaker databases open!" buttons "Ok" with icon stop giving up after 5 else repeat with dbLoop from 1 to mydbcount --get name of each database copy name of database dbLoop to end of myDbList end repeat end if myDbList end tell</pre>	<pre>tell application "FileMaker Pro" set myTableList to {} copy number of tables to mytblcount if mytblcount = 0 then display dialog "There are no FileMaker 7 databases open!" buttons "Ok" with icon stop giving up after 5 else repeat with tblLoop from 1 to mytblcount --get name of each table copy name of table tblLoop to end of myTableList end repeat end if myTableList end tell</pre>
FileMaker version	<pre>tell application "FileMaker Pro" version end tell</pre>	<pre>tell application "FileMaker Pro" version end tell</pre>
count of tables	N/A	<pre>tell application "FileMaker Pro" set myDBNum to 1 set myTableCount to the count of every table of database myDBNum end tell</pre>

FileMaker 7 AppleScript Reference

Description	FileMaker 6 AppleScript Code	FileMaker 7 AppleScript Code																				
list of field names	<pre>tell application "FileMaker Pro" set myDbNum to 1 set myFieldList to "" set myFieldIdList to the ID of every field of layout 0 of database myDbNum set myFieldCount to the count of every field of layout 0 of database myDbNum if myFieldCount > 1 then set i to 1 repeat with i from 1 to the count of myFieldIdList set myFieldItem to the name of field ID (item i of myFieldIdList) of layout 0 of database myDbNum set myFieldList to myFieldList & myFieldItem & tab set i to i + 1 end repeat myFieldList else set myFieldList to the name of field 1 of layout 0 of database myDbNum myFieldList end if end tell</pre>	<pre>tell application "FileMaker Pro" set myTblNum to 1 set myDBNum to 1 set myFieldList to "" set myFieldIdList to the ID of every field of table myTblNum of database myDBNum set myFieldCount to the count of every field of table myTblNum of database myDBNum if myFieldCount > 1 then set i to 1 repeat with i from 1 to the count of myFieldIdList set myFieldItem to the name of field ID (item i of myFieldIdList) of table myTblNum of database myDBNum set myFieldList to myFieldList & myFieldItem & tab set i to i + 1 end repeat myFieldList else set myFieldList to the name of field 1 of table myTblNum of database myDBNum myFieldList end if end tell</pre>																				
database field IDs	<pre>tell application "FileMaker Pro" set myDbNum to 1 get id of every field of layout 0 of database myDbNum end tell</pre>	<pre>tell application "FileMaker Pro" set myTblNum to 1 set myDBNum to 1 get the id of every field of table myTblNum of database myDBNum end tell</pre>																				
field types	<pre>tell application "FileMaker Pro" set myDbNum to 1 get default type of every field of layout 0 of database myDbNum end tell</pre> <table border="1" data-bbox="430 1329 938 1549"> <thead> <tr> <th colspan="2">Returned Values</th> </tr> </thead> <tbody> <tr> <td>Numeric Fields</td> <td>doub</td> </tr> <tr> <td>Text Fields</td> <td>TEXT</td> </tr> <tr> <td>Date/Time Fields</td> <td>ldt</td> </tr> <tr> <td>Container Fields</td> <td>PICT</td> </tr> </tbody> </table>	Returned Values		Numeric Fields	doub	Text Fields	TEXT	Date/Time Fields	ldt	Container Fields	PICT	<pre>tell application "FileMaker Pro" set myTblNum to 1 set myDBNum to 1 get default type of every field of table myTblNum of database myDBNum end tell</pre> <table border="1" data-bbox="959 1329 1468 1549"> <thead> <tr> <th colspan="2">Returned Values</th> </tr> </thead> <tbody> <tr> <td>Numeric Fields</td> <td>real</td> </tr> <tr> <td>Text Fields</td> <td>string</td> </tr> <tr> <td>Date/Time Fields</td> <td>date</td> </tr> <tr> <td>Container Fields</td> <td>PICTURE</td> </tr> </tbody> </table>	Returned Values		Numeric Fields	real	Text Fields	string	Date/Time Fields	date	Container Fields	PICTURE
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Numeric Fields	real																					
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Date/Time Fields	date																					
Container Fields	PICTURE																					
field NULLSOK attributes	<pre>tell application "FileMaker Pro" set myDbNum to 1 get nulls OK of every field of layout 0 of database myDbNum end tell</pre>	<pre>tell application "FileMaker Pro" set myTblNum to 1 set myDBNum to 1 get nulls OK of every field of table myTblNum of database myDBNum end tell</pre>																				

Description	FileMaker 6 AppleScript Code	FileMaker 7 AppleScript Code
field formulas	<pre>tell application "FileMaker Pro" set myDbNum to 1 set myFormulaList to "" set myFieldIdList to the ID of every field of layout 0 of database myDbNum set myFieldCount to the count of every field of layout 0 of database myDbNum if myFieldCount > 1 then set i to 1 repeat with i from 1 to the count of myFieldIdList set myFieldItem to the formula of field ID (item i of myFieldIdList) of layout 0 of database myDbNum set myFormulaList to myFormulaList & myFieldItem & tab set i to i + 1 end repeat myFormulaList else set myFormulaList to the formula of field 1 of layout 0 of database myDbNum myFormulaList end if end tell</pre>	<pre>tell application "FileMaker Pro" set myTblNum to 1 set myDBNum to 1 set myFormulaList to "" set myFormulaList2 to "" set myFormulaList to the formula of every field of table myTblNum of database myDBNum set myFieldCount to the count of every item of myFormulaList if myFieldCount > 1 then set i to 1 repeat with i from 1 to myFieldCount set myFieldItem to "" set myFieldItem to item i of myFormulaList set myFormulaList2 to myFormulaList2 & myFieldItem & tab set i to i + 1 end repeat end if myFormulaList2 end tell</pre> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Note: With FileMaker 7 the text "FileMaker" is now returned for every field which does not contain a calculation formula.</p> </div>
field repeat sizes	<pre>tell application "FileMaker Pro" set myDbNum to 1 get repeat size of every field of layout 1 of database myDbNum end tell</pre>	<pre>tell application "FileMaker Pro" set myTblNum to 1 set myDBNum to 1 get repeat size of every field of table myTblNum of database myDBNum end tell</pre>
field unique value attributes	<pre>tell application "FileMaker Pro" set myDbNum to 1 get unique value of every field of layout 0 of database myDbNum end tell</pre>	<pre>tell application "FileMaker Pro" set myTblNum to 1 set myDBNum to 1 get unique value of every field of table myTblNum of database myDBNum end tell</pre>
field globalValue attributes	<pre>tell application "FileMaker Pro" set myDbNum to 1 get globalValue of every field of layout 0 of database myDbNum end tell</pre>	<pre>tell application "FileMaker Pro" set myTblNum to 1 set myDBNum to 1 get globalValue of every field of table myTblNum of database myDBNum end tell</pre>
field protection attribute	<pre>tell application "FileMaker Pro" set myDbNum to 1 get protection of every field of layout 0 of database myDbNum end tell</pre>	<pre>tell application "FileMaker Pro" set myTblNum to 1 set myDBNum to 1 get protection of every field of table myTblNum of database myDBNum end tell</pre>
field access attribute	<pre>tell application "FileMaker Pro" set myDbNum to 1 get access of every field of layout 0 of database myDbNum end tell</pre>	<pre>tell application "FileMaker Pro" set myTblNum to 1 set myDBNum to 1 get access of every field of table myTblNum of database myDBNum end tell</pre>

FileMaker 7 AppleScript Reference

Description	FileMaker 6 AppleScript Code	FileMaker 7 AppleScript Code
script IDs	<pre>tell application "FileMaker Pro" set myDbNum to 1 get ID of every FileMaker script of database myDbNum end tell</pre>	<pre>tell application "FileMaker Pro" -- scripts are now global to the -- entire FileMaker 7 database set myScriptCount to the count of every FileMaker script set myScriptIdList to {} if myScriptCount > 0 then set myScriptIdList to the ID of every FileMaker script end if myScriptIdList end tell</pre>
script names	<pre>tell application "FileMaker Pro" set myDbNum to 1 set myScriptList to "" set myScriptIdList to {} set myScriptCount to 0 set myScriptIdList to the ID of every FileMaker script of database myDbNum set myScriptCount to the count of FileMaker scripts of database myDbNum if myScriptCount > 1 then repeat with i from 1 to the count of myScriptIdList set myScriptItem to the name of FileMaker script ID (item i of myScriptIdList) of database myDbNum set myScriptList to myScriptList & myScriptItem & tab set i to i + 1 end repeat myScriptList else if myScriptCount = 1 then set myScriptName to the name of FileMaker script 1 of database myDbNum else set myScriptName to "" end if myScriptName end if end tell</pre>	<pre>tell application "FileMaker Pro" set myTblNum to 1 set myDBNum to 1 set myScriptList to {} set myScriptIdList to {} set myScriptCount to the count of every FileMaker script if myScriptCount > 1 then set myScriptIdList to the ID of every FileMaker script repeat with i from 1 to the count of myScriptIdList set myScriptItem to the name of FileMaker script ID (item i of myScriptIdList) of database myDBNum set myScriptList to myScriptList & myScriptItem & tab set i to i + 1 end repeat myScriptList else if myScriptCount = 1 then set myScriptName to the name of FileMaker script 1 of database myDBNum else set myScriptName to "" end if myScriptName end if end tell</pre>
layout IDs	<pre>tell application "FileMaker Pro" set myDbNum to 1 get ID of every layout of database myDbNum end tell</pre>	<pre>tell application "FileMaker Pro" set myDbNum to 1 get the ID of every layout of database myDbNum end tell</pre>

FileMaker 7 AppleScript Reference

Description	FileMaker 6 AppleScript Code	FileMaker 7 AppleScript Code
layout names	<pre>tell application "FileMaker Pro" set myDbNum to 1 set myLayoutList to "" set myLayoutIdList to the ID of every layout of database myDbNum set myLayoutCount to the count of every layout of database myDbNum if myLayoutCount > 1 then set i to 1 repeat with i from 1 to the count of myLayoutIdList set myLayoutItem to the name of layout ID (item i of myLayoutIdList) of database myDbNum set myLayoutList to myLayoutList & myLayoutItem & tab set i to i + 1 end repeat myLayoutList else set myLayoutList to the name of layout 1 of database myDbNum myLayoutList end if end tell</pre>	<pre>tell application "FileMaker Pro" set myDBNum to 1 set myLayoutList to "" set myLayoutIdList to the ID of every layout of database myDBNum set myLayoutCount to the count of every layout of database myDBNum if myLayoutCount > 1 then set i to 1 repeat with i from 1 to the count of myLayoutIdList set myLayoutItem to the name of layout ID (item i of myLayoutIdList) of database myDBNum set myLayoutList to myLayoutList & myLayoutItem & tab set i to i + 1 end repeat myLayoutList else set myLayoutList to the name of layout 1 of database myDBNum myLayoutList end if end tell</pre>
layout protection attribute	<pre>tell application "FileMaker Pro" set myDbNum to 1 get protection of every layout of database myDbNum end tell</pre>	<pre>tell application "FileMaker Pro" set myDocNum to 1 get protection of every layout of document myDocNum end tell</pre>
layout access attribute	<pre>tell application "FileMaker Pro" set myDbNum to 1 get access of every layout of database myDbNum end tell</pre>	<pre>tell application "FileMaker Pro" set myDbNum to 1 get access of every layout of database myDbNum end tell</pre>
layout lock attribute	<pre>tell application "FileMaker Pro" set myDbNum to 1 get count of layouts of database myDbNum copy (count of layouts of database myDbNum) to myLayoutCount set myLayoutFields to {} set i to 1 repeat until i > myLayoutCount get lock of layout i of database myDbNum copy the result to end of myLayoutFields set i to i + 1 end repeat myLayoutFields end tell</pre>	<pre>tell application "FileMaker Pro" set myDocNum to 1 get count of layouts of document myDocNum copy (count of layouts of document myDocNum) to myLayoutCount set myLayoutFields to {} set i to 1 repeat until i > myLayoutCount get lock of layout i of document myDocNum copy the result to end of myLayoutFields set i to i + 1 end repeat myLayoutFields end tell</pre>

FileMaker 7 AppleScript Reference

Description	FileMaker 6 AppleScript Code	FileMaker 7 AppleScript Code
field names by layout	<pre> tell application "FileMaker Pro" set myDbNum to 1 set myLayoutCount to the count of every layout of database myDbNum set myLayoutIdList to the ID of every layout of database myDbNum set myLayoutFields to "" if myLayoutCount > 1 then repeat with i from 1 to myLayoutCount set myLayoutIDNumber to item i of myLayoutIdList copy (count of fields of layout ID myLayoutIDNumber of database myDbNum) to myFieldCount set myLayoutFields to myLayoutFields & myFieldCount & tab repeat with j from 1 to myFieldCount copy the name of field j of layout ID myLayoutIDNumber of database myDbNum to myFieldName set myLayoutFields to myLayoutFields & myFieldName & tab set j to j + 1 end repeat set i to i + 1 end repeat else myLayoutFields else -- only 1 layout in database -- return value is not a list so -- process it differently set myLayoutIDNumber to myLayoutIdList myLayoutIdList copy (count of fields of layout ID myLayoutIDNumber of database myDbNum) to myFieldCount set myLayoutFields to myLayoutFields & myFieldCount & tab repeat with j from 1 to myFieldCount copy the name of field j of layout ID myLayoutIDNumber of database myDbNum to myFieldName set myLayoutFields to myLayoutFields & myFieldName & tab set j to j + 1 end repeat else myLayoutFields end if end tell </pre>	<pre> tell application "FileMaker Pro" set myTblNum to 1 set myDocNum to 1 set myLayoutCount to the count of every layout set myLayoutIdList to the ID of every layout of document myDocNum set myLayoutFields to "" if myLayoutCount > 1 then repeat with i from 1 to myLayoutCount set myLayoutIDNumber to item i of myLayoutIdList copy (count of fields of layout ID myLayoutIDNumber of document 1) to myFieldCount set myLayoutFields to myLayoutFields & myFieldCount & tab repeat with j from 1 to myFieldCount copy the name of field j of layout ID myLayoutIDNumber of document myDocNum to myFieldName set myLayoutFields to myLayoutFields & myFieldName & tab set j to j + 1 end repeat set i to i + 1 end repeat else myLayoutFields else -- only 1 layout in database -- return value is not a list so -- process it differently set myLayoutIDNumber to myLayoutIdList myLayoutIdList copy (count of fields of layout ID myLayoutIDNumber of document myDocNum) to myFieldCount set myLayoutFields to myLayoutFields & myFieldCount & tab repeat with j from 1 to myFieldCount copy the name of field j of layout ID myLayoutIDNumber of document myDocNum to myFieldName set myLayoutFields to myLayoutFields & myFieldName & tab set j to j + 1 end repeat else myLayoutFields end if end tell </pre>

FileMaker 7 AppleScript Reference

Description	FileMaker 6 AppleScript Code	FileMaker 7 AppleScript Code
value lists by layout field	<pre>tell application "FileMaker Pro" set myDbNum to 1 get count of layouts of database myDbNum copy (count of layouts of database myDbNum) to myLayoutCount set myValueLists to {} set i to 1 repeat until i > myLayoutCount copy (count of fields of layout i of database myDbNum) & tab to end of myValueLists get choices of every field of layout i of database myDbNum copy the result to end of myValueLists set i to i + 1 end repeat myValueLists end tell</pre>	<pre>tell application "FileMaker Pro" set myDocNum to 1 set myValueLists to {} get choices of every field of document myDocNum copy the result to end of myValueLists myValueLists end tell</pre>
layout visible attribute	<pre>tell application "FileMaker Pro" set myDbNum to 1 get count of layouts of database myDbNum copy (count of layouts of database myDbNum) to myLayoutCount set myLayoutFields to {} set i to 1 repeat until i > myLayoutCount get visible of layout i copy the result to end of myLayoutFields set i to i + 1 end repeat myLayoutFields end tell</pre>	<pre>tell application "FileMaker Pro" set myDocNum to 1 get count of layouts of document myDocNum copy (count of layouts of document myDocNum) to myLayoutCount set myLayoutFields to {} set i to 1 repeat until i > myLayoutCount get visible of layout i copy the result to end of myLayoutFields set i to i + 1 end repeat myLayoutFields end tell</pre>