LCFM Native Ben Lui (Beta 1). April 19th 2021

Guide to What's Supported in LCFM Native

This version of LCFM covers approximately *88% of the total FileMaker feature set*. These have been selected in priority order so the *most used features* are implemented.

That means that most straightforward solutions, and indeed many more complex ones, will now work. Please use this guide to see exactly what is supported and what is not.

Everything that is not implemented in this version will be implemented rapidly in subsequent versions. The only exception are those items listed under "not supported".

If you see a feature you need that isn't present please talk to us about Android Build Service.

This is an extensive document. Unless you really need to know the full detail of what is and isn't supported, we recommend you get a free trial of LCFM Ben Lui here:

https://filemaker.livecode.com/trial/

and produce a fast and free feature report for the app you want to create. This will detail only the features relevant to your app.

Major Capabilities

LCFM can now render most of the FileMaker feature set. Performance is acceptable on mid-range Android devices with a Single Core Geekbench score of 300+ and entry-level iOS devices. A future version will implement further rendering improvements, further broadening the range of Android hardware that can be used and improving graphics performance on all devices.

You now require FileMaker 18 or 19, FileMaker 17 is no longer supported.

This version supports deployment to Android, iOS and Mac. Windows and Linux will be added in a future version.

This version includes support for data sync so your app can work online and offline. There are a number of sync configuration options included. We have added a number of new "Extended" script steps for granular control over your syncing options.

Major feature support includes and is not limited to: layout rendering, portals, card windows, web viewer, JSON, insert from device including camera & barcode scanning, multi file solutions, signatures, local data storage support and much more. Read on for full details.

Additional extended script steps with access to LiveCode capabilities, graphics and the native OS are coming in future versions.

Table of Contents

User Interface Features Implemented – 98% Complete

Button

Button layout objects are implemented.

Button Bar

Button bar layout objects are implemented.

Button Bar Button

Button bar button layout objects are implemented.

Button Bar Popover Button

Button bar popover button layout objects are implemented.

Calendar Field

Calendar field layout objects are implemented. See limitations.

Check Box Field

Check Box field layout objects are implemented. See limitations.

Container Field

Container field layout objects are implemented.

The container field layout object supports GIF, JPEG, PNG and BMP format images.

The container field layout object supports MP3, MP4 and WAV audio and video formats.

The container field layout object supports PDF files, although currently only the first page is shown and they are not pannable.

The container field layout object supports general file content.

Edit Box Field

Edit field layout objects are implemented. See limitations.

Group Button

Group button layout objects are implemented. See limitations.

Image

Image layout objects are implemented.

Layouts

Layouts are implemented. See limitations.

Layout Parts

Layout parts are implemented.

Line

Line layout objects are implemented.

List Field

List field layout objects are implemented. See limitations.

Menu Field

Menu field layout objects are implemented. See limitations.

Oval

Oval layout objects are implemented.

Popover

Popover layout objects are implemented.

Popover Button

Popover button layout objects are implemented.

Portal

Portals are implemented. See limitations

Portal sort has been implemented

Portal Filter has been implemented

Radio Field

Radio field layout objects are implemented. See limitations.

Rectangle

Rectangle layout objects are implemented.

Rounded Rectangle

Rounded rectangle layout objects are implemented.

Slide Control

Slide control layout objects are implemented. See limitations.

Summary Fields

Summary fields are implemented. See limitations.

Tab Control

Tab control layout objects are implemented.

Text

Text layout objects are implemented.

Webviewer

Webviewer layout objects are implemented.

Custom url schemes are supported, and you can specify the schemes which should be handled at runtime when compiling a project. Only solution files compiled into the app can be used. Use either the `$` or `~` form of custom urls, and use the file name of the solution as provided to the compiler.

FileMaker Core Features Implemented – 90% Complete

Files and Multi File Solutions

Files and their basic commands and functions are implemented.

Each file in a compiled lcfm-native app corresponds to one solution file that was included the lcfm-native project.

Files can reference other files, but the name used for the reference must always be the leaf (without extension) name of the solution file included in the app.

Each file can create multiple windows, and database access and script execution works across files.

Find Request Query Operators

Most find request query operators are implemented.

The following operators are available:
- is empty: `=`
- is not empty: `*`
- is less than or equal: `<=<value>` or `,≤<value>`
- is greater than or equal: `>=<value>` or `,≥<value>`
- is less than: `<<value>`
- is greater than: `><value>`
- is equal to: `<value>` or `=<value>` or `==<value>` or `"<value>"` (when the datatype is not text)
- is exactly: `==<value>` (when the datatype is text)
- contains word: `=<value>` (when the datatype is text)
- contains word beginning with: `<value>` (when the datatype is text)
- contains phrase beginning with: `"<value>"` (when the datatype is text)

JSON Implementation Details

JSON functionality is implemented. In order to perform the JSON functions the JSON is decoded and then encoded which results in some interpretation of values when re-encoding:

- Empty objects or arrays will be empty strings in the result.
- String values `"true"` and `"false"` will be evaluated as booleans and therefore will be `true` or `false` in the result. Where they are returned as scalar values they will be the numbers `0` and `1`.
- String value `"null"` will be evaluated as `null` and therefore will be `null` in the result. Where it is returned as a scalar value it will be an

empty string or in the case of `JSONListValues` it will not be included in the list.
– String values that are decimal numbers will be numbers in the result.
– Objects that have sequential integer keys starting from 1 will be arrays in the result. For example `{ "1" : true, "2", false }` will be returned as `[ true, false ]`.

Tables, Fields and Relationships

Tables and fields are implemented. See limitations.

Table occurrences and relationships are implemented. See limitations.

Valuelists

Valuelists are implemented. See limitations.

Functions Implemented – 88.5% Complete

Aggregate

* Average

* Count

* Extend

* Get (Repetition)

* Get (Summary)

* List

* Max

* Min

* StDev

* StDevP

* Sum

* Variance

* VarianceP

Container

* Base64Decode

* Base64Encode

* Base64EncodeRFC

* Get (ApplicationLanguage). Implemented with differences.

* Get (DocumentsPathListing)

* Get (FileMakerPath)

* Get (NetworkProtocol)

* Get (NetworkType) Implemented with differences

* Get (Thumbnail)

* Get (TouchKeyboardState)

* Get (UserCount) Implemented with differences

* Get (HostApplicationVersion) Implemented with differences

* Get (SystemDrive)

* Get (SystemIPAddress)

* Get (SystemNICAddress)

* Get (SystemLanguage)

* HexDecode

* HexEncode

* TextDecode

* TextEncode

Context

* Get (accountType). Implemented as override. Currently the value returned by Get(AccountType) will be that specified by the corresponding override at compile-time, or "FileMaker File" if one isn't set.

* Get (ActiveFieldContents)

* Get (ActiveFieldName)

* Get (ActiveFieldTableName)

* Get (ActiveLayoutObjectName)

* Get (ActiveModifierKeys)

* Get (ActivePortalRowNumber)

* Get (ActiveRecordNumber)

* Get (ActiveRepetitionNumber)

* Get (ActiveSelectionSize)

* Get (ActiveSelectionStart)

* Get (AllowAbortState)

* Get (ApplicationArchitecture)

* Get (CalculationRepetitionNumber)

* Get (ConnectionAttributes) Implemented with differences. Solutions run
  locally and are not hosted so the return value is always empty.

* Get (ConnectionState). Solutions run locally and are not hosted so the return
value is always 0.

* Get (CurrentDate)

* Get (CurrentHostTimestamp)

* Get (CurrentTime)

* Get (CurrentTimestamp)

* Get (CurrentTimeUTCMilliseconds)

* Get (DesktopPath)

* Get (DocumentsPath)

* Get (ErrorCaptureState)

* Get (FileName)

* Get (FilePath)

* Get (FileSize)

* Get (FoundCount)

* Get (HostIPAddress) Implemented with differences. Solutions run locally and
  are not hosted so the return value is always empty.

* Get (LastError)

* Get (LastExternalErrorDetail)

* Get (LastMessageChoice)

* Get (LayoutCount)

* Get (LayoutName)

* Get (LayoutNumber)

* Get (LayoutTableName)

* Get (LayoutViewState)

* Get (MultiUserState) Implemented with differences. Solutions run locally and
  are not hosted so the return value is always 0.

* Get (ModifiedFields)

* Get (PageNumber)

* Get (RecordID)

* Get (RecordModificationCount)

* Get (RecordNumber)

* Get (RecordOpenCount)

* Get (RecordOpenState)

* Get (RequestCount)

* Get (RequestOmitState)

* Get (ScreenHeight)

* Get (ScreenWidth)

* Get (ScriptName)

* Get (ScriptParameter)

* Get (ScriptResult)

* Get (SortState)

* Get(SystemAppearance)

* Get (SystemVersion)

* Get (TemporaryPath)

* Get (TotalRecordCount)

* Get (TriggerCurrentPanel)

* Get (TriggerKeystroke)

* Get (TriggerModifierKeys)

* Get (TriggerTargetPanel)

* Get (UseSystemFormatsState)

* Get (UUID)

* Get(UserName)

* Get (WindowContentHeight)

* Get (WindowContentWidth)

* Get (WindowDesktopHeight)

* Get (WindowDesktopWidth)

* Get (WindowHeight)

* Get (WindowLeft)

* Get (WindowMode)

* Get (WindowName)

* Get (WindowStyle)

* Get (WindowTop)

* Get (WindowVisible)

* Get (WindowWidth)

Datetime

* Date

* Day

* DayName

* DayNameJ

* DayOfWeek

* DayOfYear

* Hour

* Minute

* Month

* MonthName

* MonthNameJ

* Seconds

* Time

* Timestamp

* WeekOfYear

* WeekOfYearFiscal

* Year

* YearName

Design

* DatabaseNames

* FieldBounds

* FieldIDs

* FieldNames

* FieldRepetitions

* FieldStyle

* FieldType

* LayoutIDs

* LayoutNames

* LayoutObjectNames

* RelationInfo

* ScriptIDs

* ScriptNames

* TableIDs

* TableNames

* ValueListIDs

* ValueListItems

* ValueListNames

Logical

* EqualTo

* EvaluationError

* Get (AsBoolean)

* Get (AVPlayerAttribute)

* Get (Field)

* Get (FieldName)

* Get (NthRecord)

* GreaterThan

* GreaterThanOrEqualTo

* IsEmpty

* LessThan

* LessThanOrEqualTo

* Lookup

* Not

* NotEqualTo

* Self

* Xor

Number

* Abs

* Acos

* Add

* Asin

* Atan

* Ceiling

* Cos

* Degrees

* Div

* Divide

* Exp

* Floor

* FV

* Int

* Lg

* Ln

* Log

* Minus

* Mod

* Multiply

* NPV

* Pi

* Plus

* PMT

* Power

* PV

* Radians

* Random

* Round

* Sign

* Sin

* Sqrt

* Subtract

* Tan

* Truncate

Text

* Char

* Code

* Concatenate

* Exact

* Filter

* FilterValues

* Get (AsCSS)

* Get (AsDate)

* Get (AsNumber)

* Get (AsSVG)

* Get (AsText)

* Get (AsTime)

* Get (AsTimestamp)

* Get (AsURLEncoded)

* Get (Value)

* Left

* LeftValues

* LeftWords

* Length

* Lower

* Middle

* MiddleValues

* MiddleWords

* PatternCount

* Position

* Proper

* Quote

* Replace

* RGB

* Right

* RightValues

* RightWords

* SerialIncrement

* SortValues

* Substitute

* TextColor

* TextFont

* TextFontRemove

* TextFormatRemove

* TextSize

* TextSizeRemove

* TextStyleAdd

* TextStyleRemove

* Trim

* TrimAll

* Upper

* ValueCount

* WordCount

* UniqueValues

Container

Get (ContainerAttribute)

Partially Implemented. The following attributes can be used:

 - filename

 - barcodeText

 - barcodeType

CryptAuthCode

Implemented. See limitations.

CryptDigest

Implemented. See limitations.

Design

FieldComment

The `FieldComment` function is now implemented.

Get (NextSerialValue)

The `GetNextSerialValue` function is now implemented.

WindowNames

Implemented with differences. The list of window names for a given
file are in order of most recently opened or brought to the front. If no
file name is specified then the windows are grouped by file in the list.

Logical

Evaluate

Implemented with differences. If the expression string fails to parse then the evaluation error will be set to 1200 (generic calculation error), rather than a more specific code.

ExecuteSQL

Partially implemented. Currently only queries of the following forms are supported:
- `SELECT <column> FROM <table>`
`SELECT <column> FROM <table> WHERE <field-1> = ?`
The column, table and field names must be single words and cannot be quoted.

The `ExecuteSQL` function is now able to perform the following forms of SQL queries:

```
SELECT COUNT(*) FROM <table> WHERE <field-1>=? AND <field-2> IS NULL
SELECT SUM(<column>) FROM <table> WHERE <field-1>=? AND <field-2> IS NULL
SELECT COUNT(*) FROM <table> WHERE <field-1>=? AND <field-2> BETWEEN ? AND ?
SELECT SUM(<column>) FROM <table> WHERE <field-1>=? AND <field-2> BETWEEN ? AND ?
SELECT COUNT(*) FROM <table> WHERE <field-1>=? AND <field-2> BETWEEN '<date>' AND ?
SELECT SUM(<column>) FROM <table> WHERE <field-1>=? AND <field-2> BETWEEN '<date>' AND ?
SELECT COUNT(*) FROM <table> WHERE <field-1>=? AND <field-2> BETWEEN ? AND '<date>'
SELECT SUM(<column>) FROM <table> WHERE <field-1>=? AND <field-2> BETWEEN ? AND '<date>'
SELECT COUNT(*) FROM <table> WHERE <field-1>=? AND <field-2> BETWEEN '<date>' AND '<date>'
SELECT SUM(<column>) FROM <table> WHERE <field-1>=? AND <field-2> BETWEEN '<date>' AND '<date>'
select SUM( <column> ) from <table> where <field-1> = ? and <field-2> = ?
select Count( <column> ) from <table> where <field-1> = ? and <field-2> = ? and <field-3> = ?
```
The ExecuteSQL function will now correctly execute queries that reference tables in other files.

Get (LayoutObjectAttribute)

Partially implemented. The following attributes can be used:

- objectType
- hasFocus
- isFrontPanel
- isFrontTabPanel
- isObjectHidden
- rotation

```
– width
– source
– height
– content
– enclosingObject
– containedObjects
```

IsValid

Partially implemented. The ability to check whether a field's content
matches its data-type is not yet implemented.

IsValidExpression

`is now implemented`

Mobile

`* Get (Sensor) Not fully implemented.`

Location

Partially implemented on mobile platforms only. Allowing users
to cancel the location fetching process when Get(AllowAbortState) is
true is yet to be implemented.

LocationValues

Partially implemented on mobile platforms only. Allowing users
to cancel the location fetching process when Get(AllowAbortState) is
true is yet to be implemented.

Text

JSONDeleteElement

Implemented with differences. See `JSON Implementation Details`

JSONFormatElements

Implemented with differences. See `JSON Implementation Details`

JSONGetElement

Implemented with differences. See `JSON Implementation Details`

JSONListKeys

Implemented with differences. See `JSON Implementation Details`

JSONListValues

Implemented with differences. See `JSON Implementation Details`

JSONSetElement

Implemented with differences. See `JSON Implementation Details`

Script Steps Implemented – 75% Implemented

Account

* Add Account. Implemented with differences. This script step can only be run on the server. See the 'Remote Operations' section for details. The 'User must change password on next sign-in' option is not supported.

* Change Password with dialog. Implemented with differences. The 'with dialog' form is not yet implemented. This script step can only be run on the server. See the 'Remote Operations' section for details.

* Delete Account. Implemented with differences. This script step can only be run on the server. See the 'Remote Operations' section for details.

* Enable Account. Implemented with differences. This script step can only be run on the server. See the 'Remote Operations' section for details.* Re Login. Implemented with differences. The 'with dialog' form is not yet implemented. This script step can only be run on the server. See the 'Remote Operations' section for details.

* Reset Account Password. Implemented with differences. This script step can only be run on the server. See the 'Remote Operations' section for details. The 'User must change password on next sign-in' option is not supported.

Control

* Exit Script

* Halt Script

* Install On Timer Script

* Pause Script

* Pause Script For Duration

* Perform Script

* Resume Script

* Set Variable

Editing

* Copy / Cut / Paste

* Clear

* Select All

* Set Selection

Fields

* Insert Audio Video

* Insert Calculated Result Into Field

* Insert Calculated Result Into Variable

* Insert Current Date Into Field

* Insert Current Date Into Variable

* Insert Current Time Into Field

* Insert Current Time Into Variable

* Insert Current User Name Into Field

* Insert Current User Name Into Variable

* Insert File Into Current Field

* Insert File Into Field

* Insert From Device Camera

* Insert From Device Microphone

* Insert From Device Signature

* Insert From Device Video Camera

* Insert PDF

* Insert Picture

* Insert Text Into Field

* Insert Text Into Variable

* Replace Field Contents With Serial Numbers

* Replace Field Contents with Calculation with dialog. Implemented with differences. The 'with dialog' form is not yet implemented.

* Set Field

* Set Field By Name

* Set Next Serial Value

* Set Web Viewer

Foundsets

* Constrain Found Set

* Extend Found Set

* Find Matching Records By Field

* Modify Last Find

* Omit Record

* Perform Find

* Perform Quick Find

* Show All Records

* Show Omitted Only

* Sort Records By Field

* Unsort Records

Miscellaneous

* Beep

* Clear Local Notification

* Dial Phone

* Dial Phone With Dialog

* Exit Application

* Flush Cache To Disk

* Refresh Object

* Show Custom Dialog

* Speak

Navigation

* Close Popover

* Enter Browse Mode

* Enter Find Mode

* Enter Preview Mode. Partially implemented. See `Printing Implementation Details` section for more details.

* Go To Field

* Go To First Portal Row

* Go To First Record Request Page

* Go To Last Portal Row

* Go To Last Record Request Page

* Go To Next Field

* Go To Next Portal Row

* Go To Next Record Request Page

* Go To Object

* Go To Portal Row Number

* Go To Previous Field

* Go To Previous Portal Row

* Go To Previous Record Request Page

* Perform Script On Server

* Perform Script by Name on Server

Print

* Print. Partially implemented. See `Printing Implementation Details` section for more details.Print Setup

* Print with dialog. Implemented with differences. The 'with dialog' form is not yet implemented.

Records

* Delete Portal Row

* Delete Record Request

* Delete Record Request With Dialog

* Duplicate Record Request: Partially implemented. Duplicating a record in the context of a non master-detail portal is yet to be implemented.

* New Record Request

* Open Record Request

* Save Records As PDF

* Save Records as PDF with dialog

* Truncate Table

* Truncate Table with dialog

* Import Records. Only importing into existing tables without dialog from tab or comma separated values is implemented. Importing from FileMaker files is not supported.

* Export Records. Only exporting without dialog to tab or comma-separated values is implemented. Exporting to FileMaker files is not supported.

Url
* Insert From URL Into Field

* Insert From URL Into Variable

Windows
*Close Window

* Enable Touch Keyboard

* Freeze Window

* Move Resize Window

* Scroll Window

* Select Window

* Set Window Title

Insert From Device Bar Code From Camera
Implemented on mobile platforms only.

Insert From Device Bar Code From Field
Implemented on android platform only.

Insert From Device Music Library

```
Implemented on mobile platforms only.
```

Insert From Device Photo Library

```
Implemented on mobile platforms only.
```

Set Error Capture

```
Implemented with differences. The ErrorCapture state can be set and retrieved
with Get(ErrorCaptureState), but all script steps run as if it is set to True.
```

Files

Close File

```
Implemented with differences. Closing a file in lcfm-native closes all
its windows and reverts it to being in the background.
```

Open File

```
Implemented with differences. All files compiled into an lcfm-native
app are opened in the background on startup, calling Open File causes the
file to be brought to the foreground, running appropriate triggers.

Note: You can only open files which were included in the app at compile-time.

* Close Data File

* Create Data File

* Delete File

* Get Data File Position Into Field

* Get Data File Position Into Variable

* Get File Exists Into Field

* Get File Exists Into Variable

* Get File Size Into Current Field

* Get File Size Into Field

* Get File Size Into Variable

* Open Data File Into Field

* Open Data File Into Variable

* Read From Data File Into Field

* Read From Data File Into Variable
```

```
* Set Use System Formats

*  Set Data File Position

*  Write To Data File From Field

*  Write To Data File From Variable
```

Foundsets

Omit Multiple Records

```
Partially implemented. The 'with dialog' form is not yet implemented.
```

Sort Records

```
Partially implemented. The 'with dialog' form is not yet implemented.
```

Miscellaneous

Configure Local Notification

```
Partially implemented. Buttons on the notifications are not yet
supported and in the script parameter line two will always be
`NotificationSelected` and line 3 will always be 0 as these values are not
yet being determined.
```

Open URL

```
Implemented, including the 'with dialog' form.
```

Send Mail

```
The Multiple emails and Collect addresses across foundset options of the Send
Mail script step are now implemented.

The dialog presented when SSL server verification fails when sending mail via
SMTP now includes an option to always trust the server.

Presence of the normal double-quote ( " ) character in an email subject or
message will no longer cause Send Mail to fail silently when using a mail
client on macOS.

The SMTP server reply address setting of the Send Mail script step is now
implemented.
```

Navigation

Go To Layout

```
Partially implemented. Animation is not yet implemented.
```

Go To Record Request Page Number

```
Partially implemented. The 'with dialog' form is not yet implemented.
```

Go To Related Record

```
Partially implemented. Animation is not yet implemented.
```

Go To Related Record In New Window

```
Partially implemented. Only 'document' and 'card' styles are supported.
Only the 'name', 'x', 'y', 'width' and 'height' new window options are
honoured.
```

```
* Refresh Portal is now implemented
* Sort portal is now implemented
* Filter portal is now implemented
```

Records

Commit Records Requests

```
Partially implemented. The skip-validation option currently has no
effect as field validation is not yet implemented. The force-commit option is
not supported. The 'with dialog' form is now implemented.
```

Delete All Records

```
Partially implemented. The 'with dialog' form is not yet implemented.
```

Revert Record Request

```
Partially implemented. The 'with dialog' form is not yet implemented.
```

Windows

Adjust Window

```
Partially implemented. Only the ResizeToFit option is currently
implemented.
```

New Window

```
Partially implemented. Only 'document' and 'card' styles are supported.
Only the 'name', 'x', 'y', 'width' and 'height' new window options are
honored.
```

Refresh Window

```
Partially implemented. The flush-joins option is not yet implemented.
The flush-sql option is not supported.
```

View As

```
Partially implemented. The table view mode is not yet implemented.
```

User Interface Feature Limitations

Active Fields

Typing into the active field whilst it is not visible is not yet implemented.

Allow Edit

The Allow Edit and Allow Other options will cause 'Edit...' to be added to the list, but its action is not yet implemented.

Autocomplete

The Autocomplete option is not yet implemented.

Error Capture

Steps (and scripts) execute as if Error Capture is turned On. Automatic error handling when error capture is off and the dialogs which appear as a result are yet to be implemented.

Field Validation

Field validation is yet to be implemented.

Group Button

Currently children of a group button object will not highlight whilst the mouse is pressed on the group button.
Layout Modes
Table view state is not yet implemented.

Layout Triggers

The following layout triggers are not yet implemented:
– OnGestureTap
– OnExternalCommandReceived
– OnObjectAVPlayerChange

Portals

The 'retain scrollbar position' option is not yet implemented.

The 'allow row deletion' option is not yet implemented.

Show Icon

List field objects which were created in historic versions of FileMaker and not changed in more recent versions can loose their 'Show Icon' property. To rectify this, toggle the property value in the FileMaker UI and re-run the import phase.

Show Scrollbars

On MacOS, if the system preference 'always show scrollbars' option is enabled then the scrolling content area size is not yet correct.

Status, Formatting bar & Ruler

The status bar, formatting bar and ruler are not yet supported.

Tooltips

Layout object tooltips are not yet implemented.

User Interface Objects not Implemented

Chart

Not yet implemented.

FileMaker Core Feature Limitations

User accounts are not currently implemented. The User Name is always
'System User' and the account name is always '[Full Access]'.

The OnFileAVPlayerChanged trigger is yet to be implemented.

Menusets are yet to be implemented.

Accounts, privilege sets and extended privileges are yet to be implemented.
Tables, Fields and Relationships

The override language option for sorting is yet to be implemented.

Table, record and field level access are yet to be implemented.

Valuelists

The order and uniqueness of values in non-custom valuelists is determined by
sorting case insensitively using standard Unicode rules. Using the index
language or the resort-language setting is yet to be implemented.

Partially Implemented Functions

Context

Get (AccountExtendedPrivileges)

Implemented as override. Currently the value returned by
Get(AccountExtendedPrivileges) will be that specified by the corresponding
override at compile-time, or empty if one isn't set.

Get (AccountGroupName)

Implemented as override. Currently the value returned by
Get(AccountGroupName) will be that specified by the corresponding
override at compile-time, or empty if one isn't set.

Get (AccountName)

Implemented as override. Currently the value returned by
Get(AccountName) will be that specified by the corresponding
override at compile-time, or

Get (AccountPrivilegeSetName)

Implemented as override. Currently the value returned by
Get(AccountPrivilegeSetName) will be that specified by the corresponding
override at compile-time, or "[Full Access]" if one isn't set.

Get (ApplicationVersion)

Implemented with override. The value returned by Get(ApplicationVersion) will be
that specified as the corresponding override at compile-time. If no override is
set then "Go 18.0.0" is returned.

Get (Device)

Implemented with override. The value returned by Get(Device) will be that
specified as the corresponding override at compile-time. If no override is set
then it returns the same value as FileMaker for the current platform.

Get (PersistentID)

Implemented with differences. The id returned is generated on first-run of the
app on a given device. The id will survive backups but not necessarily deletion
and reinstallation of the app. It is now possible to override the value returned
by the `Get(PersistentID)` function at runtime.

A new setting 'Clear Application Data' has been added, allowing for control of
+ when an app's mutable data will be cleared.

Get (SystemPlatform)

Implemented with override. The value returned by Get(SystemPlatform)will be that
specified as the corresponding override at compile-time. If no override is set
then it returns the same value as FileMaker for the current platform.

Get (UserName)

Implemented with override. The value returned by Get(UserName) will be that
specified as the corresponding override at compile-time. If no override is set
then it returns the full name of the current user on macOS, `iPad` or `iPhone`
on iOS, and `Android` on android.

Get (WindowOrientation)

Implemented with override. The value returned by Get(WindowOrientation) will be
that specified as the corresponding override at compile-time. If no override is
set then it returns the same value as FileMaker would.

Functions Not Yet Implemented

Aggregate

* Last

Container

* Get (Height)

* Get (Width)

* VerifyContainerContext

* Get (AllowFormattingBarState)

* Get (CurrentExtendedPrivileges)

* Get (CurrentMenuSetName)

* Get (CurrentPrivilegeSetName)

* Get (EncryptionState)

* Get (HighConstrastState)

* Get (HighContrastColor)

* Get (HostName)

* Get (LayoutAccess)

* Get (MenubarState)

* Get (PreferencesPath)

* Get (PrinterName)

* Get (QuickFindText)

* Get (RecordAccess)

* Get (RegionMonitorEvents)

* Get (ScreenDepth)

* Get (ScreenScaleFactor)

* Get (ScriptAnimationState)

* Get (StatusAreaState)

* Get (TextRulerVisible)

* Get (TriggerExternalEvent)

* Get (TriggerGestureInfo)

* Get (WindowZoomLevel)

Design

Logical

* LookupNext

Mobile

* RangeBeacons

Number

* Combination

* Factorial

Text

* Furigana

* Hiragana

* KanaHankaku

* KanaZenkaku

* KanjiNumeral

* Katakana

* NumToJText

* RomanHankaku

* RomanZenkaku

* TextColorRemove

Script Steps not Yet Implemented

Control

Allow User Abort

Not fully implemented. The AllowUserAbort state can be set and retrieved with
Get(AllowAbortState), but the setting has no effect.

Fields

Export Field Contents

Partially implemented. When used on desktop platforms, the 'Auto Open' and
'Create Email' options do not currently appear in the file dialog.

Export Field Contents To File

Partially implemented. On desktop platforms, the Create Email option is not yet
implemented.

Set Multi User

Implemented as no-op. Solutions run locally and cannot be shared so this has no
effect.

Control

* Set Error Logging

Editing

* Perform Find Replace

* Undo / Redo

Fields

* Insert File Into Variable

* Insert From Index

* Insert From Last Visited

* Relookup Field Contents

Files

* Convert File

* Open File With Dialog

* Rename File

* Set Data File Position

Miscellaneous

* Allow Formatting Bar

* AVPlayer Play Field

* AVPlayer Play Object

* AVPlayer Play URL

* AVPlayer Set Options

* AVPlayer Set Playback State

* Clear Region Monitor Script

* Configure Region Monitor Script Geolocation

* Configure Region Monitor Script Ibeacon

* Get Directory

* Install Menu Set

* Perform Apple Script

* Send DDEExecute File

* Send DDEExecute Topic

* Send Event With File

* Send Event With Message

* Set Layout Object Animation 33

Records

* Copy All Records

* Save Records As Excel

* Save Records As Snapshot Link

Spelling

* Check Current Field Selection

* Check Found Set

* Check Record

* Check Selection

* Correct Word

* Edit User Dictionary

* Select Dictionaries

* Spelling Options

Windows

* Arrange All Windows

* Set Zoom Level

* Show Hide Menubar

* Show Hide Text Ruler

* Show Hide Toolbars

Script Steps Not Supported by LCFM Native

Fields

* Insert Object

* Install Plugin File from Field

* Update Link

Files

* Close ODBCData Source

* New File

* Open ODBCData Source

* Recover File

* Save A Copy As

* Save A Copy As To File

* Save A Copy As XML

Menus

* Open Edit Saved Finds

* Open File Options

* Open Find Replace

* Open Help

* Open Hosts

* Open Manage Containers

* Open Manage Data Sources

* Open Manage Database

* Open Manage Layouts

* Open Manage Themes

* Open Manage Value Lists

```
* Open My Apps

* Open Preferences

* Open Script Workspace

*  Open Sharing

* Open upload to host

*  Upload to File Maker Server

*  Set Allowed Orientations
```

Functions Not Supported

```
* CryptDecrypt

* CryptDecryptBase64

* CryptEncrypt

* CryptEncryptBase64

* Get (InstalledFMPlugins)
```

User Interface Features Not Supported

Layout Editing Mode

```
Layout editing mode is not supported.
```

Functions Partially Not Supported

CryptAuthCode

```
The SHA and MDC2 digest algorithms are not supported.
```

CryptDigest

```
The SHA and MDC2 digest algorithms are not supported.
```

Extended Script Steps

In LCFM Native we are adding new script steps that do not exist in FileMaker, to give you extra functionality for example around syncing. So that you can use these script steps, a plugin for FileMaker is automatically installed on startup. You will then see the new script steps appear in your FileMaker menu when building your file to compile via LCFM Native. The script steps will not run in your native FileMaker solution, but they will become active once the app has been compiled in LCFM. For more

information about using these script steps please see the User Guide embedded in your LCFM Native Compiler.

Licensing Controls

The LCFM Native plugin provides script steps to manage your app's LCFM Native license.

Named User Licenses

Functions

GetRegisteredNamedUser – Get named user registered for license

Script Steps

Register Named User – Register a named user for the license.

Snapshot

The LCFM Native plugin provides steps allowing apps to take snapshots of windows. The snapshots taken will be compressed PNGs and can be entered into a variable or field.

Script Steps

Take Snapshot Of Current Window Into Variable

Take a snapshot of the current window

Take Snapshot Of Window Into Variable script

Take Snapshot Of Window Into Variable

Sync controls

The LCFM Native plugin provides the ability to control the application's sync settings within FileMaker solution scripts, as well as the ability to actually trigger syncs manually.

If automatic sync is enabled, the application will sync with the server after every local commit, and also periodically when idle (at a frequency governed by the automatic sync interval). If automatic sync is disabled, sync can only be triggered explicitly through the Sync or Request Sync script steps.

Functions

GetAutomaticFullSyncFrequency – Get the frequency of automatic full syncs

GetAutomaticFullSyncOnLocalCommit – Determine whether automatic sync is full or not after local commit

GetAutomaticSyncEnabled – Determine whether automatic sync is enabled or not

GetAutomaticSyncInterval – Get the interval between automatic syncs

GetLastSyncTimeUTCMilliseconds – Get the time of the last sync

GetTableSyncConstraint – Get the sync constraint applied to a table

GetTableSyncMode – Get the sync mode of a table

Cancel Sync – Cancel a pending sync request

Disable Automatic Sync – Disable automatic sync

Enable Automatic Sync – Enable automatic sync

Request Sync – Request a sync

Resync Table – Resync a table

Set Automatic Full Sync Frequency – Set the frequency of automatic full syncs

Set Automatic Full Sync On Local Commit – Toggle whether automatic sync is full or not after local commit

Set Automatic Sync Enabled – Toggle whether automatic sync is enabled or not.

Set Automatic Sync Interval – Set the interval between automatic syncs

Set Table Sync Constraint – Set the sync constraint applied to a table

Set Table Sync Mode – Set the sync mode of a table

Sync – Sync immediately

Planned but not yet Implemented Extended Script Steps

Delete All Local Records

Delete Local Record

Omit All Journaled Records

Resync All Tables

Show Journaled Only

Printing Implementation Details

Printing of simple print-oriented layouts is implemented.

The `Enter Preview Mode` script step works on all platforms, and has an initial prototype user interface allowing exit, page navigation, saving as pdf, page setup and print.

The `Print` script step works on all platforms and allows printing a layout through the system printing user interface. The print-related part options are implemented.

The `Do not print`, `Sliding left` and `Sliding up` print-related layout object options are implemented. Printing of the following layout objects is implemented:

Field objects (only one repetition is currently printed)

Rectangle objects

Rounded Rectangle objects

Oval objects

Line objects

The majority of style related options is implemented. Notable exceptions are:

Full justification of text

Text tab stops

Gradient fills

Image fills