

# 44

## FrameMaker palettes

### Overview

To understand palettes and how can be created an modified the anatomy of the Equation palette is analysed and some modifications are demonstrated.

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# Anatomy of a FrameMaker palette

The Equation palette is a View Only FM-document. Due to this it must be adapted in each version of FM - or one gets the message at open *Open a realse x docuemnt yyy. OK to continue?*.

It is also essential to use only fonts which are standard on each target system, for example only Windows standard fonts.

Method 2) Any FrameMaker file can be turned into a palette:

- 1 Save the developed palette as ordinary FM file with some hint, e.g. named palette-open. fm
- 2 Save the same file as MIF (e.g. palette-open. mi f)
- 3 Edit the MIF to change the values of the following parameters (as they are defined on Windows platforms):
  - DViewOnly: keep **No** (or set to No)
  - DViewOnlyWinBorders: Change from Yes to **No**
  - DViewOnlyMenuBar: Change from Yes to **No**
  - DViewOnlyPopup: Change from Yes to **No**
  - DviewOnlyWinPalette: Change from No to **Yes**
- 4 Open this MIF file in FM
- 5 Assure to have switched off view of borders etc.
- 6 Save the palette as *FM-View only* document, but name it without the -open appendix (palette. fm) - or even without any file extension (see the original items in the FM-installation).
- 7 Make a final check in the view only document.
- 8 Close the FM-document.

## Palette basics

A palette creates actions by means of hypertext commands. The hypertext markers appear in text frames either on the body pages or on the master pages. The text frames may be empty (no real text in them) or - for the purpose of creating buttons or drop-down lists - overlay graphics.

### Normal hypertext commands

Hypertext command	Example	Remarks
al ert <i>message</i>	al ert This is a lunch reminder	Displays an Alert box with an OK-button. The message can be up to 249 characters long.
gotol i nk <i>filename:linkname</i>	gotolink Repair.fm:Brakes If the newlink is in the current file, filename: is not needed.	Jumps to the page of the specified FrameMaker document containing a newl i nk command with a matching <i>linkname</i> .
gotol i nk <i>filename:firstpage</i> gotol i nk <i>filename:lastpage</i>	gotolink fistpage gotolink kukolores.fm:lastpage	Displays the first or last page of the (current) document.

- 2 This is taken form [Dan Emory's paper from 1991](#). Similar information is given by Shlomo Perets in the paper [Creating Your Own Toolbars in FrameMaker from 1997](#).

Hypertext command	Example	Remarks
gotopage <i>filename:pagenumber</i>	gotopage 17	To go to a specific page of the current file, filename: is not needed
matrix rows columns flowname	matrix 3 2 Sample	See <i>Example of a button matrix</i> on page 44-4.
message <i>apiclient yourmessage</i>	message FmDispatcher insert entity entname	Sends a message to another application that's already running.
message openfile <i>path</i>	message openfile D:/System_ddd/DDDcontrol.ini	Open file with associated application.
message winexec <i>application path[,windowstate]</i> <sup>a</sup>	message winexec calc.exe	Launch Windows application
nextpage previouspage	nextpage previouspage	Displays the next/previous page of the current document.
openlink <i>path</i>	openlink D:/System_ddd/Syshw.fm	Open document (same type as source: fm or pdf)
opennew <i>filename</i>		Opens the specified file as an untitled document in a new document window. <sup>b</sup>
popup <i>flowname</i>	popup Menu5	See <i>Example of a drop down list</i> on page 44-4
previouslink	previouslink	Displays the last page the viewer viewed.
quit quitall	quit quitall	If several locked documents are open, quit removes only the current locked document. To remove all locked documents, use the quitall command.

a. Windows-state: SW\_HIDE SW\_MINIMIZE SW\_RESTORE SW\_SHOW SW\_SHOWMAXIMIZED SW\_SHOWMINIMIZE SW\_SHOWNONACTIVE SW\_SHOWNA SW\_SHOWNOACTIVE SW\_SHOWNORMAL

b. This command may not be valid in the view-only palette.

## Syntax rules for hypertext commands

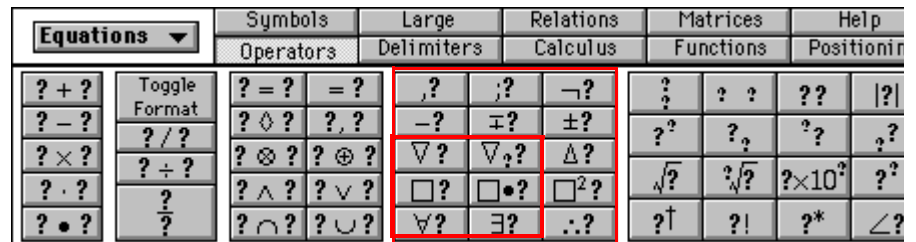
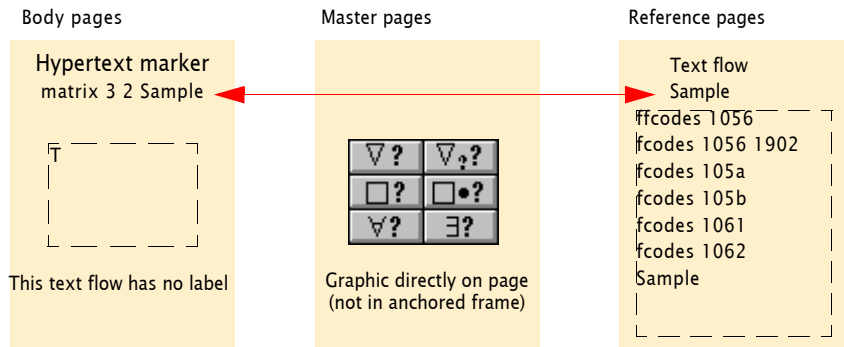
- Path names must use the forward slash (as in HTML). Path names can be relative to the current document (.../.../opts/xyz. fm) or absolute (E: /docs/xyz. fm). See examples in *Path names* on page 44-9 (For hypertext commands in the menu customisation file customui. cfg a relative path starts at \$HOME).
- Flow names (Sample) and hypertext commands (matrix) are case sensitive.
- Fcodes must be provided in hexadecimal. Some sources provide the decimal notation or the notation required in the menu customisation files (\*. cfg): \x1061, which is also hexadecimal.
- For matrices there may be superfluous lines for the human reader. It is good practice to note the flow name here.
- For drop down lists the name of the drop down list must be in the first line. This will become the session-wide menu name.
- There must not be line breaks (event automatic by narrow frame width) in the command lines on the reference pages! this is essential for multiple fcodes etc.

## This Button-groups and menus

Example of a button matrix

Special hypertext commands or buttons or pop up menus (matrix, popup) refer to flows on the reference pages containing the detail commands

This example is part from the Equation palette.



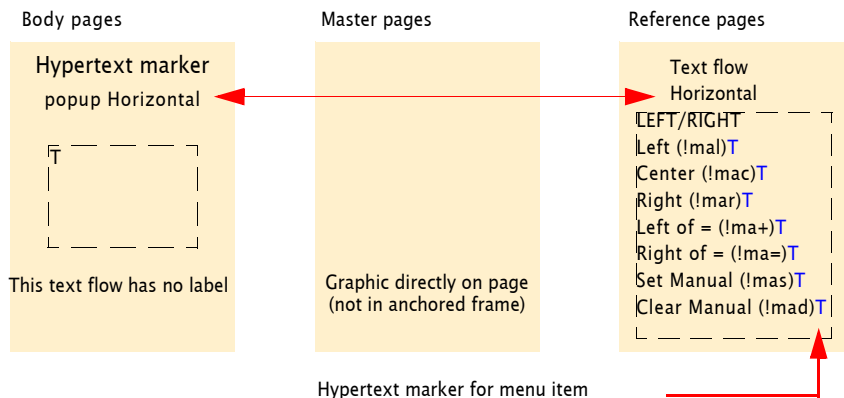
The definition for our sample palette (Reference page, flow Sample) comprises 3 rows and 2 columns.

The definition of the matrix is Row, Column (3,2), hence the codes of all columns in the first row are listed, before the row changes.

Row, Column	Hypertext command: Fcode in hex	Fcode decimal	Command
1 1	fcodes 1056	4182	MathGrad
1 2	fcodes 1056 1902	4182 6402	MathGrad, MathNewOperand
2 1	fcodes 105a	4186	MathBox
2 2	fcodes 105b	4187	MathBoxDot
3 1	fcodes 1061	4193	MathForAll
3 2	fcodes 1062	4194	MathExists
4	Sample	Flow name for the human reader	

Example of a drop down list

This is also an excerpt from the Equations palette.



The hypertext commands in the text flow Horizontal :

LEFT/RIGHT					
Left (!mal)	fcodes 11f5	4597	MathAlignLeft	5952	1740 (as in mathcmds.cfg)
Center (!mac)	fcodes 1742	5954	MathAlignCenter		
Right (!mar)	fcodes 11f5	4597	MathAlignRight	5953	1741 (as in mathcmds.cfg)
Left of = (!ma+)	fcodes 1747	5959	MathAlignEqualL		
Right of = (!ma=)	fcodes 1746	5958	MathAlignEqualR		
Set Manual (!mas)	fcodes 1749	5961	MathAlignSetManual		
Clear Manual (!mad)	fcodes 174a	5962	MathAlignClearManual		

## Layout considerations

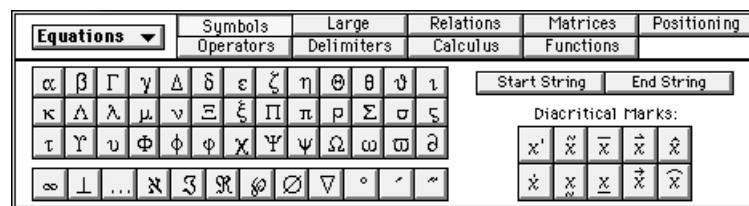
### Attention to details

- Graphics must not be referenced but copied into the document. Otherwise the palette may be used only on your system.
- The text frame with the hypertext commands must be the top level element (either on the body pages or on the master pages). Any graphic or text must be 'below' that. Text may of course also be within the text frame.
- Only Windows standard fonts must be used: Courier New, Times New Roman, Arial (Unicode) and Symbol. This may still impose Font messages because of inconsistencies in Windows itself (Times, Times Roman, Times New Roman, Courier, Courier New).

### Legacy palettes

To be platform independent most palettes have been designed with graphics showing all text in them. No fonts beyond the standard font in the reference pages (Times something) has been used.

Most existing palettes are from the time of low resolution screens and hence text is not easily recognisable:



In the Equation palette the whole page is an image located on the body page, with the text frames as overlay. There are only two master pages Left and Right and they contain unused text frames with a line in them.

In the vertical tool bar the button images are on the master pages and the text frames are on the body pages.

Due to the small 'page' size of both cases the reference pages contain overlapped and cropped text frames.

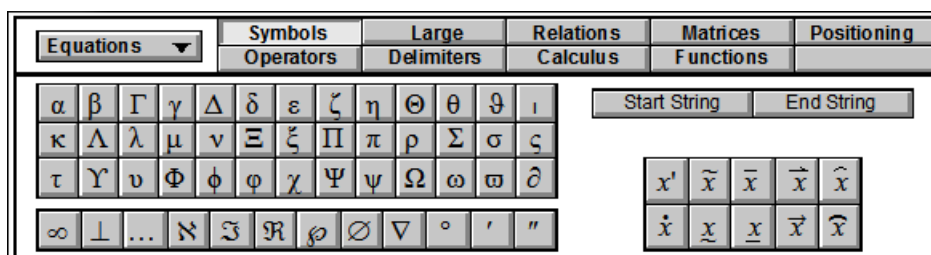
### New palette layout

For the new (enlarged) Equation palette I choose the following approach:

- Button images are empty and located on the master pages.

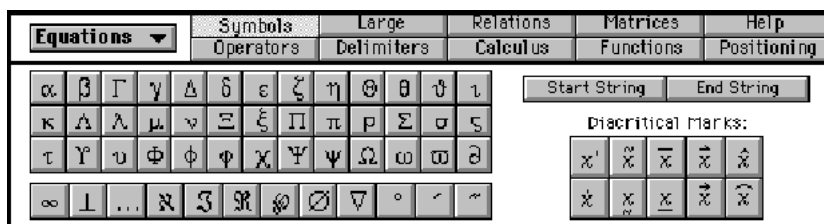
- Text (both inside and outside of button perimeter) are text lines on the body pages using character formats. There are only very short texts, hence no standard text frames are used for this purpose.
- The text frames on the reference pages have borders (black for button matrices and red for popup menus).
- To adapt the text frames on the reference pages better to their content multiple column layout is used where necessary to avoid cropping. I have also added a reference page for the same reason.
- The text in the reference frames use paragraph styles.
- Some detailed hypertext replaced by matrix commands.

Example display    The new Equation palette is 125% the size of the old one:



# Equation palette

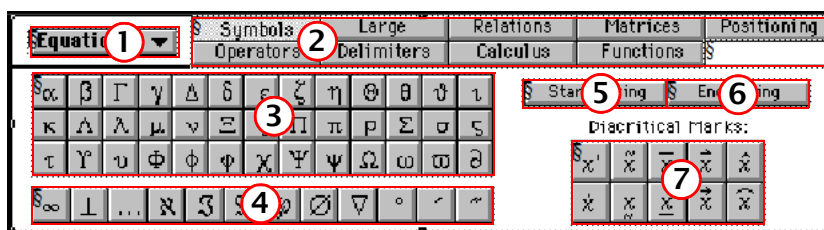
Until FM 5.5 the equation palette contained 10 switching buttons. the rightmost in the second row invoked a Help panel. This button does not exist in newer (since FM-6) versions.



## Anatomy

### Body pages

Each body page contains a full image of the palette area. Various text frames containing the hypertext markers are overlaid, for example for the symbol pane (frames are marked in red):



Due to the graphic it is difficult to just select a frame.

The text frames have no flow names and contain hyper text markers referring to the frames on the reference pages:

- 1 popup Equations
- 2 matrix 2 5 pager
- 3 matrix 3 13 Symbols1
- 4 matrix 1 12 Symbols2
- 5 fcodes 1004
- 6 fcodes 1605
- 7 matrix 2 5 Diacriticals

### Master pages

Only two master pages exist: Right, Left. There is only a single line on the page which is not used on the body pages.

### Reference pages

The reference pages contain the necessary text frames (with the flow names referred to). Most of them are overlapping and/or cropped. The following table lists the commands from the flow Operator3:

Row, Column	Hypertext command: Fcode in hex	decimal	Command
1 1	fcodes 1067	4199	MathUComma
1 2	fcodes 1068	4200	MathSemicolon
1 3	fcodes 105f	5191	MathNeg

Row, Column	Hypertext command:		Command
	Fcode in hex	decimal	
2 1	fcodes 1900	6400	Matho_NEGATE
2 2	fcodes 1039	4153	MathMp
2 3	fcodes 1038	4152	MathPm
3 1	fcodes 1056	4182	MathGrad
3 2	fcodes 1056 1902	4182 6402	MathGrad, MathNewOperand
3 3	fcodes 1066	4198	MathChange
4 1	fcodes 105a	4186	MathBox
4 2	fcodes 105b	4187	MathBoxDot
4 3	fcodes 105c	4188	MathBox2
5 1	fcodes 1061	4193	MathForAll
5 2	fcodes 1062	4194	MathExists
5 3	fcodes 1060	4192	MathTherefore
	operators3		

## Mysterious Fcodes

It turns out that on the tab **Position** Fcodes are used, for which no command is defined in `mathcmds.cfg`:

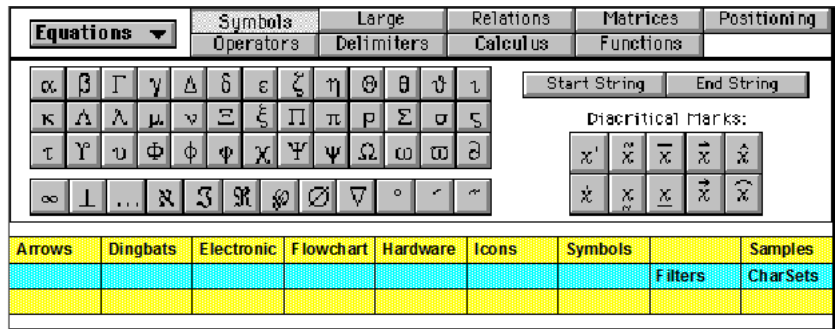
Command	Fcode in hypertext	Fcode in <code>mathcmds.cfg</code>
MathAlignLeft	11f5	1740
MathAlignRight	11f5	1741

The Fcode in the hypertext for `MathAlignRight` is 1742 as it is in `matchcmd.cfg`. Although Fcode 11f5 looks like a toggle here (same for two commands) it is not.



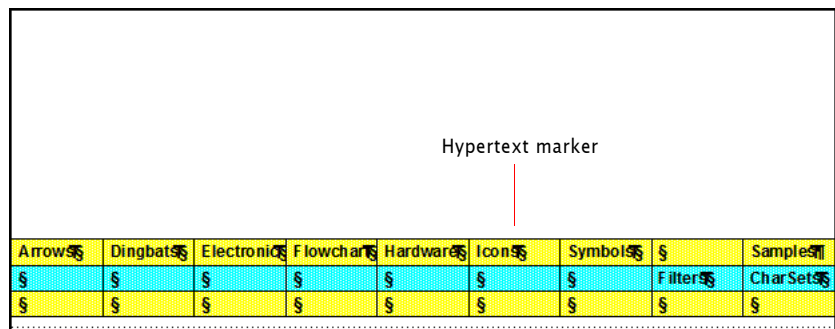
# Equation palette with links to clipart

Somebody<sup>3)</sup> extended the palette with links to the clipart files for FM-6:



The body page gets an additional area which hypertext links. The other items are not touched.

## Body page



## Path names

The markers on the body pages contain the following definitions

```

openlink <$path[clipart]>/arrows.fm:firstpage
openlink <$path[clipart]>/dingbats.fm:firstpage
openlink <$path[clipart]>/electronic.fm:firstpage
openlink <$path[clipart]>/flowchart.fm:firstpage
openlink <$path[clipart]>/hardware.fm:firstpage
openlink <$path[clipart]>/icons.fm:firstpage
openlink <$path[clipart]>/symbols.fm:firstpage
openlink <$path[FMhome]>/fminit/configui/FMsample.fm:firstpage
message openfile ../../OnlineManuals/Filters.pdf
message openfile ../../OnlineManuals/Character_Sets.pdf

```

The `<$path[dirname]>` construct refers to directories which are noted in the maker.ini file:

```

[Directories]
Samples=samples
OnlineManuals=Documents
ReleaseNotes=relnotes
Clipart=clipart
Templates=templates



```

**Note:** *It seems from these (working) examples, that the path name in the [] is not case sensitive.*






















3 Most likely Bernhard Schulze (Germany)



Commands in the switching area:

Row, Column	Hypertext command / Fcode hex	Command	Icon
1 1	gotolink lastpage	-	
1 2	gotolink previouspage	-	

Commands in the lower area, page 1:

Row, Column	Hypertext command / Fcode hex	Command	Icon
1 1	fcodes 27d	SelPlain	
2 1	fcodes 27a	SelBold	
3 1	fcodes 27b	SelItalic	
4 1	fcodes 27c	SelUnderline	
5 1	fcodes 11f	IncFontSize	
6 1	fcodes 120	DecFontSize	
7 1	fcodes 36a	SetToLowerCase	
8 1	fcodes 36b	SetToInitialCap	
9 1	fcodes 369	SetToUpperCase	
10 1	fcodes 329	Find/Change	
11 1	fcodes 32a	SpellingChecker	
12 1	fcodes 350	AnchoredFrame	
13 1	fcodes 351	Footnote	
14 1	fcodes f80	TableInsert	
1 2	fcodes fa1	SelectRow	
2 2	fcodes fa2	SelectColumn	
3 2	fcodes fa5	SelectColumnBodyCells	
4 2	fcodes fa3	SelectTable	
5 2	fcodes fb9 fb5 fa0	MoveIPToColumnTop MoveIPToLeftmostCell SelectCell	
6 2	fcodes f97	ClearRemovingCells	
7 2	fcodes f93	AddRowsBelow	

Row, Column	Hypertext command / Fcode hex	Command	Icon
8 2	fcodes f95	AddColumnsToRight	
9 2	fcodes 290	AlignTop	
10 2	fcodes 291	AlignMiddle	
11 2	fcodes 292	AlignBottom	
12 2	fcodes f89	TableStraddle	
13 2	fcodes fd0	TableShrinkWrapColWidth	
14 2	fcodes f86	TableCustRuleAndShade	

Commands in the lower area, page 2:

Row, Column	Hypertext command / Fcode hex	Command	Icon
1 1	fcodes 382	GraphicsGroup	
12	fcodes 383	GraphicsUngroup	
2 1	fcodes 380	GraphicsBringToFront	
2 2	fcodes 381	GraphicsSendToBack	
3 1	fcodes 385	GraphicsDistribute	
3 2	fcodes 376	GraphicsReshape	
4 1	fcodes 374	GraphicsSmooth	
4 2	fcodes 375	GraphicsUnsmooth	
5 1	fcodes 370	GraphicsFlipUpDown	
5 2	fcodes 371	GraphicsFlipLeftRight	
6 1	fcodes 373	GraphicsScale	
6 2	fcodes 387	GraphicsObjProps	
7 1	fcodes 37a	GraphicsSnap	
7 2	fcodes 37b	GraphicsGravity	
8 1	fcodes 125	Nudge 1 ptUp	
8 2	fcodes 126	Nudge 1 ptDown	
9 1	fcodes 127	Nudge 1 ptLeft	
9 2	fcodes 128	Nudge 1 ptRight	

Row, Column	Hypertext command / Fcode hex	Command	Icon
10 1	fcodes 129	AlignGfxTop	
10 2	fcodes 12d	AlignGfxLeft	
11 1	fcodes 12a	AlignGfxTBCenter	
11 2	fcodes 12c	AlignGfxLRCenter	
12 1	fcodes 12b	AlignGfxBottom	
12 2	fcodes 12e	AlignGfxRight	
13 1	fcodes 389	RotateGfxClockwise	
13 2	fcodes 38a	RotateGfxCounterClock	
14 1	fcodes 402	SetPatternSolid	
14 2	fcodes 403	SetPatternDashed	

## Invoking the vertical tool bar













It turns out that the vertical tool bar can be invoked with fcode 90D (PaletteToggleHToV) only until FM-8.

Starting with FM-9 (the new interface) only the gotoLink method works, which seems to make trouble in FM-11.



## New vertical tool bar

It turns out that most of the top area buttons are not of much use, because their functions are normally performed by keyboard shortcuts (e.g. Open: CTRL+O, Save: CTRL+S).

A more useful arrangement of functions for the top area is:

Row, Column	Hypertext command / Fcode hex	Command	Icon
1 1	fcodes 314	ImportFile	
1 2	fcodes 1430DF0	ImportFormats	
2 1	fcodes 3F1 3F2	EditingView	
2 2	fcodes 342	ViewBodyPages	
3 1	fcodes 4F1 4F2 4F3 3F8	PrintingView	
3 2	fcodes 343	ViewMasterPages	
4 1	fcodes EF0	GotoPreviousView	
4 2	fcodes 344	ViewReferencePages	
5 1	fcodes 326	CopyPgFormat	
5 2	fcodes 325	CopyCharFormat	
6 1	fcodes 286	RepeatLastParaCommand	
6 2	fcodes 26B	CharacterRepeatLast	

Commands in the switching area:

1 1	gotolink lastpage	-	
1 2	gotolink firstpage	-	

Commands in the lower area are the same as in the Enhanced Tool Bar.

### Establishing the New Vertical Toolbar

Since this menu item or button does not exist in FM-9 and higher, file `wi ncmds. cfg` must be modified to look:

```
<Command PaletteToggleHToV
  <Definition \x90D>
  <KeySequence \!qqv> <KeySeqLabel Esc q q v>
  <Mode All> >
```

If the command is no more available, you need to provide a file `customui. cfg` with following content:

```
<Command _VertToolBar      <Label Vertical Toolbar>
  <Hypertext openlink fminit/vertqab >>
<Modify _VertToolBar <KeySequence \!qqv> <KeySeqLabel Esc q q v>>
```

## Description

2019-09-11

E:\\_DDDprojects\FM-palettes\FM-palettes.fm

<p>Import file</p> <p>Editing View</p> <p>Pint View</p> <p>Goback</p> <p>Copy ¶ format</p> <p>Repeat ¶ action</p> <p>Text normal</p> <p>Bold</p> <p>Italic</p> <p>Unterline</p> <p>Increase font size</p> <p>Decrease font size</p> <p>Lower case</p> <p>Initial caps</p> <p>Upper case</p> <p>Search/Replace</p> <p>Spell checking</p> <p>Anchored frame</p> <p>Footnote</p> <p>Table</p> <p>D+DD</p>	<p>Import formats</p> <p>Show body pages</p> <p>Show master pages</p> <p>Show reference pages</p> <p>Copy character format</p> <p>Repeat character action</p> <p>Switch</p> <p>Select table row</p> <p>Select table column</p> <p>Select body cells in column</p> <p>Select table</p> <p>Select first cell in table</p> <p>Delete rows/columns</p> <p>Add rows below</p> <p>Add columns at right</p> <p>Align top</p> <p>Align middle</p> <p>Align bottom</p> <p>Straddle/unstraddle cells</p> <p>Shrinkwrap column width</p> <p>Custom ruling/shading</p>		<p>Import formats</p> <p>Show body pages</p> <p>Show master pages</p> <p>Show reference pages</p> <p>Copy character format</p> <p>Repeat character action</p> <p>Switch</p> <p>Ungroup</p> <p>Bring to front</p> <p>Distribute</p> <p>Smooth</p> <p>Flip up/down</p> <p>Scale</p> <p>Snap</p> <p>Move up 1 pt *</p> <p>Move left 1 pt *</p> <p>Align top</p> <p>Align hor. centre</p> <p>Align bottom</p> <p>Rotate clockwise</p> <p>Make line solid</p>	<p>Group</p> <p>Send to back</p> <p>Reshape</p> <p>Unsmooth</p> <p>Flip right/left</p> <p>Object properties</p> <p>Gravity snap</p> <p>Move down 1 pt *</p> <p>Move right 1 pt *</p> <p>Align left</p> <p>Align vertical centre</p> <p>Align right</p> <p>Rotate counterclockwise</p> <p>Make line dashed</p> <p>Enhanced Toolbar</p>
--	--	--	--	---

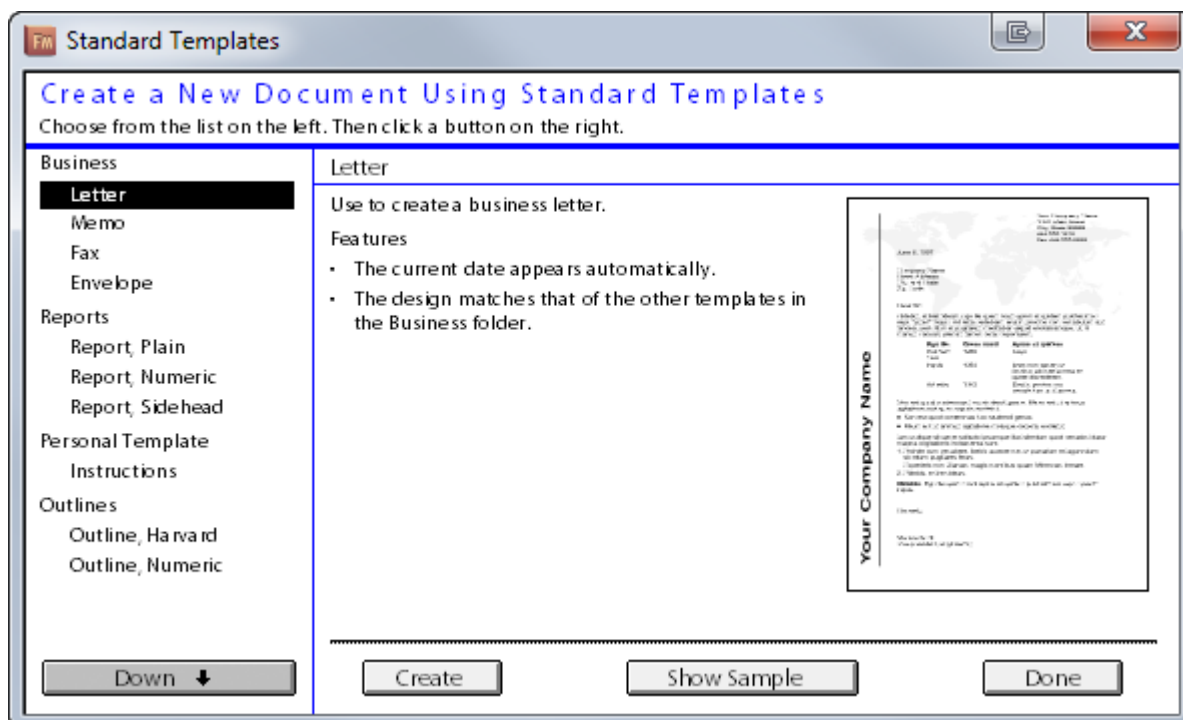
\* at zoom 100% the movement is 1 pt  
at zoom 253% the movement is 0.1 mm

D+DD

# Template Browser

The template browser is another FrameMaker palette. It uses two master pages (Right and More1) albeit quite a number of them are defined.

The reference page contains only one item for to open a Help, which is not used.. Context sensitive Help is no more available since FM 7!



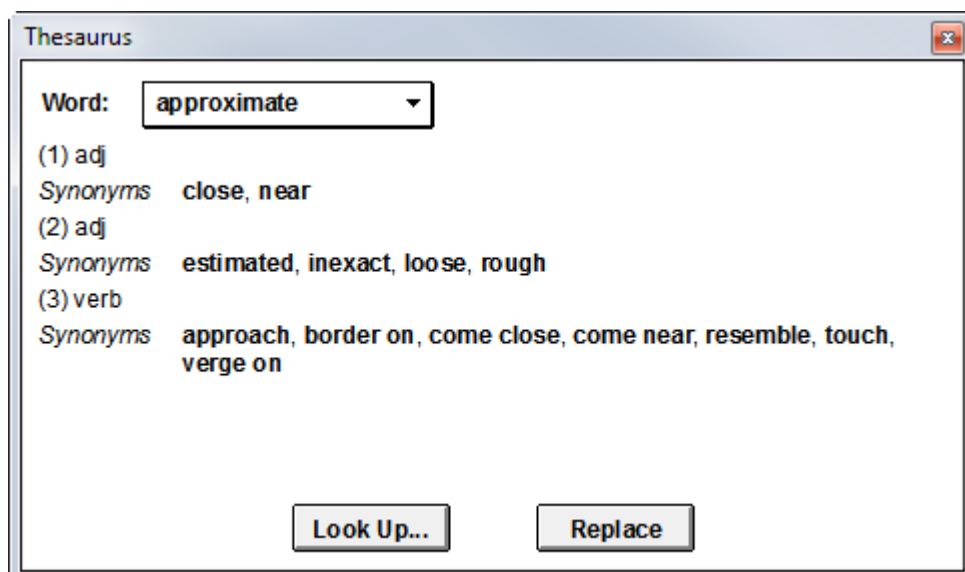
There is a second Template Browser for structured documents which looks very similar (only the blue heading is different).

I know from people who have extended the template browser with their company templates.



# Thesaurus

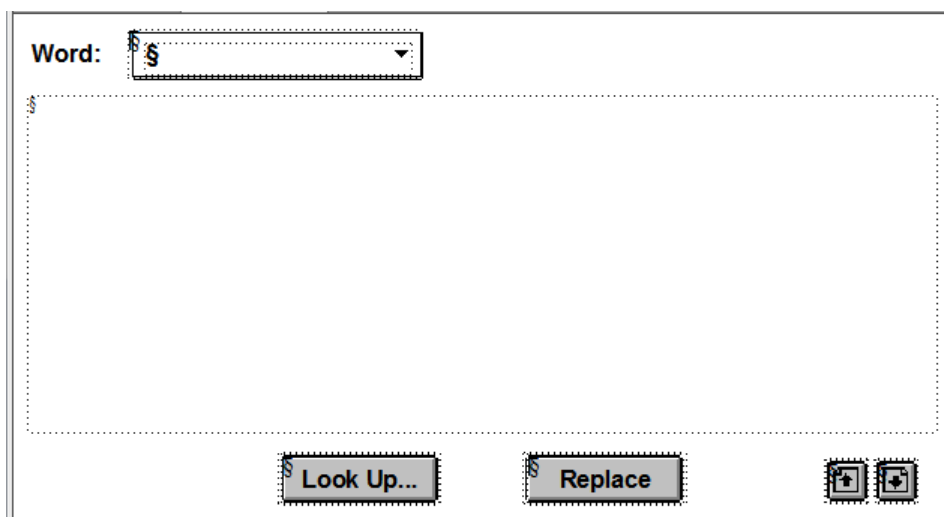
The thesaurus is a palette which is modified on the fly. It is a MIF file containing 4 master pages (Only, First, Right, Last) and two reference pages.



FrameMaker formatting capabilities are used here to dynamically generate a dialogue. Platform dialogues do not provide the capability to change font or highlight, which is used here (bold, italic).

Data for this function come from *lang.ths* files in the `dict` directory.

## Masterpage Right



## Reference page Reference

HistoryMenu	Empty text frame.
History	popup HistoryMenu
Lookup	thslookup
pageup	previouspage
pagedown	nextpage

The following flows exist. The first line contains the hyper-text command, which is repeated as text.

replace	fcodes 3d3
PaletteHelp	edit.fm:DLG_Edit_Thesaurus_ThesaurusLookUp
<b>Note:</b>	<i>The command thsl oolookup can not be found in any command list. I can not interpret the command in PaletteHelp.</i>

## Reference Page Instructions

Body Pages	No special treatment
Master Pages - All	<p><b>Important.</b> objects in order from back to front, select each object in order and bring to front)</p> <ul style="list-style-type: none"> <li>▪ Word popup bitmap</li> <li>▪ Word text column. Empty, unconnected, no tag.</li> <li>▪ Word text column. Hypertext marker “matrix 1 1 history”</li> <li>▪ Word text label. Text “Word”.</li> <li>▪ Text column. Autoconnect, flow tag “A”, empty.</li> <li>▪ Lookup.../Replace button outlines bitmap</li> <li>▪ Lookup... button text line. Text “Lookup...”</li> <li>▪ Replace button text line. Text “Replace”</li> <li>▪ Text column. Hypertext marker “matrix 1 1 lookup”</li> <li>▪ Text column. Hypertext marker “matrix 1 1 replace”</li> </ul>
Master Pages - “Only”/“First”/“Right”/“Last”	<p><b>Important.</b> objects in order from back to front)</p> <ul style="list-style-type: none"> <li>▪ Up and Down arrow bitmaps if needed</li> <li>▪ Text column. Hyper marker “matrix 1 1 pageup” if needed</li> <li>▪ Text column. HT marker “matrix 1 1 pagedown” if needed</li> </ul>
Reference Page - “Reference”	<ul style="list-style-type: none"> <li>▪ Text column. name “HistoryMenu”, empty</li> <li>▪ Text column. name “history”, leave contents as is</li> <li>▪ Text column. name “lookup”, leave contents as is</li> <li>▪ Text column. name “replace”, leave contents as is</li> <li>▪ Text column. name “PaletteHelp”, leave contents as is</li> <li>▪ Text column. name “pageup”, leave contents as is</li> <li>▪ Text column. name “pagedown”, leave contents as is</li> </ul>
Localize Text Lines Only:	Texts “Lookup...”, “Replace”, “Word”
Do Not Localize:	Page names, Flow names, Marker text

# Book error log

The book error log is also a locked file and hence a palette. It is however just some sort of template to fill it with the errors found.

The first reference page contains only a small frame with a line in it. The second reference page (README) contain this informatio:

**Note:** *The Book Error Log uses only the following paragraph tags:*

- Body
- BookBody
- BookHyperlink
- BookHyperlinkBody
- ReportHead
- ReportTitle

The remaining formats in this document have not been revised for the overall look and f feel of the document.

## Localization Notes

The only language that requires a localization for this file is Japanese. In that case, please make the above paragraph formats use a Japanese font.

## Platform Notes

There's a different template on each platform because the desired look re: fonts, zoom size, and window location is different for each platform. Other than these issues, there is no difference between the platform versions.

## Graphics palette

It's not clear to me how the graphics palette was implemented before FM-9 (the new interface). No dll with a matching dialogue definition or FM-palette could be found even back to FM-4.

Since FM-9, owl.res.dll contains the definition of the adam and eve components<sup>4</sup>) for the following items concerning the graphics tool palette, since FM-12 multiplied by the feature of large and coloured icons.

GFXBAR_C_L	coloured, large icons
GFXBAR_C_S	coloured, small icons
GFXBAR_M_L	monochrome, large icons
GFXBAR_M_S	monochrome, small icons.

adam definitions    The adam definitions for GFXBAR\_C\_L implements the data interactions for gfx tool bar. It contains only items concerning the selection sub-panels (e.g. line width, or colour)

eve definitions    The eve-definitions for GFXBAR\_C\_L start with the definition of the f-codes for the tools: The sub-panels for the properties (e.g. line width) are defined in separate eve-sections, e.g. in `gfx_linewidth_C_L.eve`. These do not refer to f-codes.

```

/*
this file implements the graphics toolbar in FM
*/
layout gfx_bar_C_L
{
    constant:
    /*
All these fcodes
The fcodes for the tools are defined as:

#define KBD_ALLSELECT    0xF20
#define KBD_OBJSELECT    0xF21

#define KBD_LINETOOL     0x3A0
#define KBD_RECTTOOL     0x3A1
#define KBD_POLYGT00     0x3A2
#define KBD_POLYLT00     0x3A3
#define KBD_ARCTOOL      0x3A4
#define KBD_ROUNDRECT    0x3A5
#define KBD_OVALTOOL     0x3A6
#define KBD_TEXTLT00     0x3A7
#define KBD_TEXTRTOOL    0x3A8
#define KBD_FREETOOL     0x3A9
#define KBD_FRAMETOOL    0x3AA

#define KBD_HOTSPOT      0x4FD
*/
...

```

4 In the owlres.dll adam and eve are resource groups similar to bitmap, icon or cursor.

## Commands

In `cmds.cfg` the commands related to these f-codes are listed under the heading Tools.

```
<Command SmartSelectionTool
  <Label Smart Selection
Tool>
  <KeySequence \!1s>
  <Definition \xF20>
  <Mode All>>
```

```
<Command ObjectSelectionTool
  <Label Object Selection
Tool>
  <KeySequence \!1o>
  <Definition \xF21>
  <Mode All>>
```

```
<Command Line
  <Label Line>
  <KeySequence \!1l>
  <Definition \x3A0>
  <Mode All>>
```

```
<Command Rectangle
  <Label Rectangle>
  <KeySequence \!1r>
  <Definition \x3A1>
  <Mode All>>
```

```
<Command RoundedRectangle
  <Label Rounded Rectangle>
  <KeySequence \!1R>
  <Definition \x3A5>
  <Mode All>>
```

```
<Command Polygon
  <Label Polygon>
  <KeySequence \!1pg>
  <Definition \x3A2>
  <Mode All>>
```

```
<Command Polyline
  <Label Polyline>
  <KeySequence \!1pl>
  <Definition \x3A3>
  <Mode All>>
```

```
<Command Arc
  <Label Arc>
  <KeySequence \!1a>
  <Definition \x3A4>
  <Mode All>>
```

```
<Command Ellipse
  <Label Ellipse>
  <KeySequence \!1e>
  <Definition \x3A6>
  <Mode All>>
```

```
<Command Textline
  <Label Text Line>
  <KeySequence \!1tl>
  <Definition \x3A7>
  <Mode All>>
```

```
<Command TextFrame
  <Label Text Frame>
  <KeySequence \!1tf>
  <KeySequence \!1tc>
  <Definition \x3A8>
  <Mode All>>
```

```
<Command Freehand
  <Label Freehand>
  <KeySequence \!1f>
  <Definition \x3A9>
  <Mode All>>
```

```
<Command Frame
  <Label Frame>
  <KeySequence \!1m>
  <Definition \x3AA>
  <Mode All>>
```

```
<Command SelectLastUsedTool
  <Label Select Last Used
Tool>
  <KeySequence \!11>
  <Definition \x3AB>
  <Mode All>>
```

\*\*\* Dashed Lines Commands \*\*\*

```
<Command SetPatternSolid
  <Label Set Pattern Solid>
  <KeySequence \!1ds>
  <Definition \x402>
  <Mode All>>
```

```
<Command SetPatternDashed
  <Label Set Pattern Dashed>
  <KeySequence \!1dd>
  <Definition \x403>
  <Mode All>>
```

```
<Command
SelectFirstDashedPattern
  <Label Select First Dashed
Pattern>
  <KeySequence \!0d>
  <Definition \x404>
  <Mode All>>
```

```
<Command
SelectLastDashedPattern
  <Label Select Last Dashed
Pattern>
  <KeySequence \!9d>
  <Definition \x405>
  <Mode All>>
```

```
<Command
SelectNextDashedPattern
  <Label Select Next Dashed
Pattern>
  <KeySequence \!+d>
  <Definition \x406>
  <Mode All>>
```

```
<Command
SelectPreviousDashedPattern
  <Label Select Previous
Dashed Pattern>
  <KeySequence \!-d>
  <Definition \x407>
  <Mode All>>
```

```
<Command DashedOptions
  <Label Dashed Options>
  <KeySequence \!1di>
  <Definition \x408>
  <Mode All>>
```

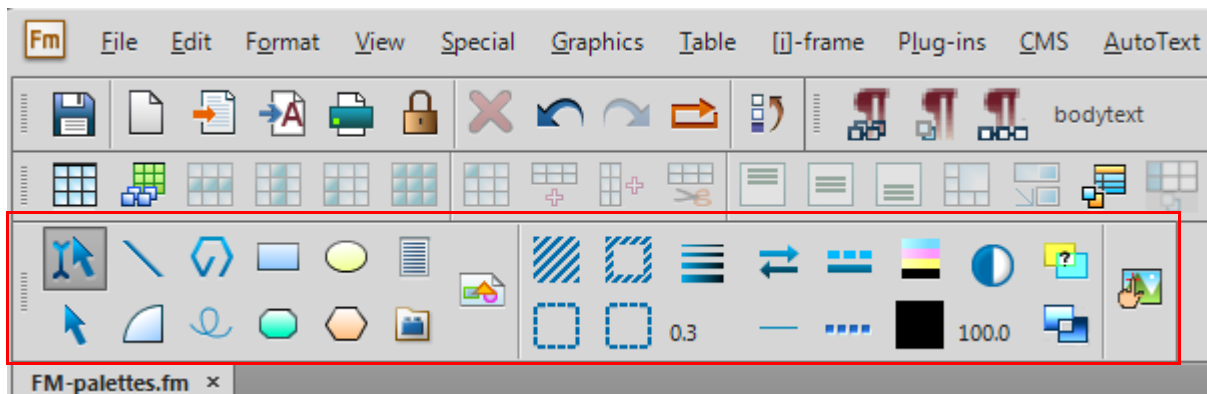
2019-09-11

E:\\_DDDprojects\FM-palettes\FM-palettes.fm

## Conclusion

Hence it would only be possible to set up a toolbar or palette for the commands given in the `cmds.cfg` file.

The new interface allows to dock the graphics tools in the top area with other tool bars - but it remains to be two rows.



## Fcodes

See the various tables I have created with the `itl` script *Report FM commands*: [www.daube.ch/docu/fmaker08.html](http://www.daube.ch/docu/fmaker08.html)

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