

# 30

## Customising FrameMaker ≥14

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# Introduction

From the beginning FrameMaker could be customised.

- Menus can be switched from complete to quick. This is a standard feature.
- Menus can be modified.
- Commands can be created and referenced in menus and toolbars.

Until the arrival of the new user interface with FM-9 the process was described in an Adobe file, which was lastly issued for FM-7. The text provided by this file was grosso modo still valid for FM ≥9. However, the new interface requires significantly more information, which is not available from Adobe until now.

## Document history

- 2013-02 Use FM-11 version of document as a base. FM-12 introduces two button sizes and colours. Image reference in *toolbar.xml* files can use a base-name. The additional product interface XMLAuthor has no influence on this document.
- 2014-09 Check the situation with FM-13-M1. It seems that nothing related to the customisation has changed.
- 2015-12 Add text concerning scripts as commands. Amend the example toolbar with this.
- 2016-01 Change the document title to reflect scope of document; rework structure; add scheme and examples.
- 2016-12 Clarifications concerning command names from scripts and plugins, clean up the example files. Add “short-cuts in ExtendScript”.
- 2017-04 FM-14 requires significant changes for three icon sizes. Additional menu customisation example; better explanation for hypertext commands and scripts. XMLAuthor is no more integrated.
- 2018-07 No logical changes required for FM-15.
- 2022-04-13 Some clarifications for session and workspace
- 2022-12-20 Update for the location of `customui.cfg`

## Sources

- Experiments and beta testing activities.
- FrameMaker related forums as well as personal communication.
- (Very sparse) communication with Adobe developers.
- User guides for FrameMaker.
- Useful videos have disappeared since I started to write this for FM-14 aka Edition 2017.

## Document conventions

Menus and names from the user interface are **in > this > font**.

Variables (place holders) use *italic* script.

Keywords and the like are in **fixed pitch font**.

`This is sample code`

# Terminology

**Note:** *IMHO the terminology of FM has not yet settled. The term pod should be eliminated - but is used since FM-9 and confuses more than it clarifies. Panel, palette and dialogue are somewhat synonymous. Terminology is not coherent between the workspace files, the tool tips and context menus.*

For better understanding of some terms look at the picture [Elements of the workspace](#) on page 4

**\$HOME** The FM installation directory. In my case this is H:\Adobe\FrameMaker.14en\AdobeFrameMaker 2017<sup>1</sup>).

**Access character** An access character<sup>2</sup>) in a menu item is preceded by the ‘&’ symbol (e.g. E&xit).

In Windows 7 and beyond these access characters are visible at the menu items *only* when pressing the left **ALT** key. To use the short cut for **Exit**, you type left ALT f x.

**Dialogue** Prior to FM-9 a dialogue was either modal or non modal. Some of these have been replaced by dockable panels which can be grouped into panel groups and minimised to icons.

Even in FM-16 there are still many of the old dialogues active.

**Dock** A dock is an area on the application window to which UI elements can be docked (anchored) and aligned.

Dock content	What can be in
palatte toolbar	Iconised or expanded dialogs/pds, the graphics palette
multi-controlbar	Horizontal groups of toolbars on top of the application window
palette	Special tab panes such as the bottom pod (palette-kit data)

**FCode** The function code is the connection between the command (as defined in a configuration file such as cmd.cfg) and the routine in the application which performs the function.

**Menus and commands** The UI information basically is split into 2 groups:

- Command sets assembled according to views.
  - Menus and tool bars assemble according to views.
- modal vs. non-modal**
- A modal dialogue must be closed before work can continue on the document.
  - A non-modal dialogue could stay open like a palette.

**Panel** A docked or undocked dialogue, which need not be closed to work on the document. The automatic behaviour depends on **Preferences > General > Interface > Pods**.

**Panel group** A collection of panels which can be handled as a whole.

**Pod** Outdated term for panel; first used in **RoboHelp**.

**UI** User interface. The elements of user interaction: windows, panes, menus and dialogues. Also keyboard short-cuts belong into this category.

**Palette** This term was first used in FM for the read-only FM-documents which behave as non modal dialogues (Equation palette, Vertical toolbar, Tem-

1 The installation program does not allow to modify the last level. This is due to new mechanism (introduced with FM-10) using a data base for installation/de-installation.  
2 The Adobe document calls this a *mnemonic* short-cut. The access character must be carefully chosen to avoid duplicates within a menu.

plate browser, Element catalogue ...). This term is used in the workspace files.

**Product interface**

FM≥12 contains three product interfaces (also known as modes): Structured, and UnStructured.

**Toolbars**

Toolbars are an alternative to menus for a specific function.

**User-area**

In Windows this is %appdata%\Adobe\FrameMaker\##\ (## is the internal FrameMaker version<sup>3</sup>), e.g. 13. With this version Adobe started marketing versions, e.g. Edition 2015 or 2019 Release)

**View**

Views were introduced with FM-11. A view groups elements of a workspace. Hence there are more menus and toolbar groups than before FM-11.

In Structured mode there are three views: XMLView, AuthorView, and WYSIWYGView. See [Relationship between the UI files](#) on page 9. These are represented as icons in the top right hand corner before the Workspace selection:



FM-12/13



FM-14

Unstructured mode knows only the WYSIWYGView. In the above picture this is the rightmost icon (active).

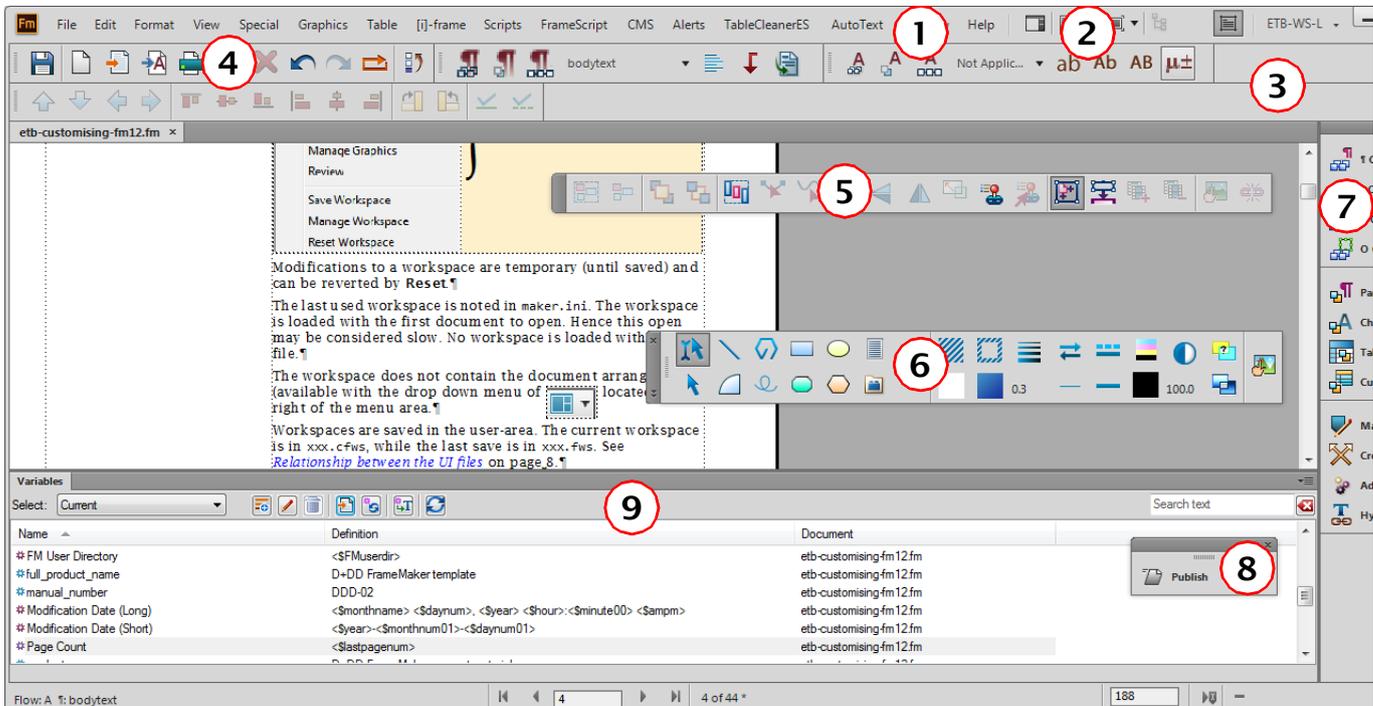
This has consequences for the customisation: it is no more sufficient to have a \$HOME\fm\init\configui\customui.cfg file. The contents of such a file must also be appended to a menu file.

**Workspace**

A workspace is a saved set of frequently used panels/toolbars in a desired arrangement for repeated use.

**Elements of the workspace**

The workspace contains various elements, which are demonstrated on the following screen shot:



1 Menu bar

3 This version is reported in Help > About FrameMaker

- 2 Arrangement panel. A chosen arrangement (e.g. 2 document panes side by side) is not saved in the workspace file.
- 3 Multi control bar (dock) spanning multiple rows of tool bars. In the workspace file a row of this is a Control Bar Pane.
- 4 Toolbar, docked. In the workspace file this is a Control Bar.
- 5 Toolbar, undocked = floating
- 6 Graphic toolbar (undocked, horizontal arrangement)
- 7 Tab group (docked ) with minimised panels.
- 8 Tab group (undocked)
- 9 Bottom pod - a special palette.

If used, work space information (workspace, tool bars, menus), are copied from \$HOME to the user area. Any modifications are only kept there.

For details see [Relationship between the UI files](#) on page 9.

## General procedure for customisation

If a requirement can not be satisfied with entries in the [Initialisation files maker.ini and others](#) on page 50, consider setting up a custom workspace:

- 1 For special menu entries set up a custom menu file by means of [customui.cfg](#) and append it to the relevant menus. See
- 2 A custom toolbar requires creation of a [custom-toolbar.xml](#) file and a modification of the toolbar set file [fmttoolbar.xml](#). It may require the creation of button images.
- 3 For both cases it may be necessary to define new commands in [customui.cfg](#) (which must be appended to the relevant menus).
- 4 To define a custom workspace copy an existing workspace file ([xxx.fws](#)) to a custom named file and modify the references to menu and toolbar set.

You can download the example customisation files from [my website](#).

You may also study the process by analysing the files provided by the [Enhanced Tool Bars](#).

### Download example customisation

# UI properties

## Session

When a FrameMaker session is closed, the following properties are saved in the user area in `RestoreSession.txt` and can be restored at the next start of FM (Restore Last Session):

- Whether the session was closed in **Maker** or **Structured FrameMaker** (it can be restored only in the same type).
- Last used View (also noted in `maker.ini`: `LastActiveView`)
- Used Workspace (also noted in `maker.ini`:  
`LastUsedWorkSpaceInStructuredMode` |  
`LastUsedWorkSpaceInUnStructuredMode`)
- Paths of currently opened books and documents
- Which of these is the current document or book
- Some other not decipherable information

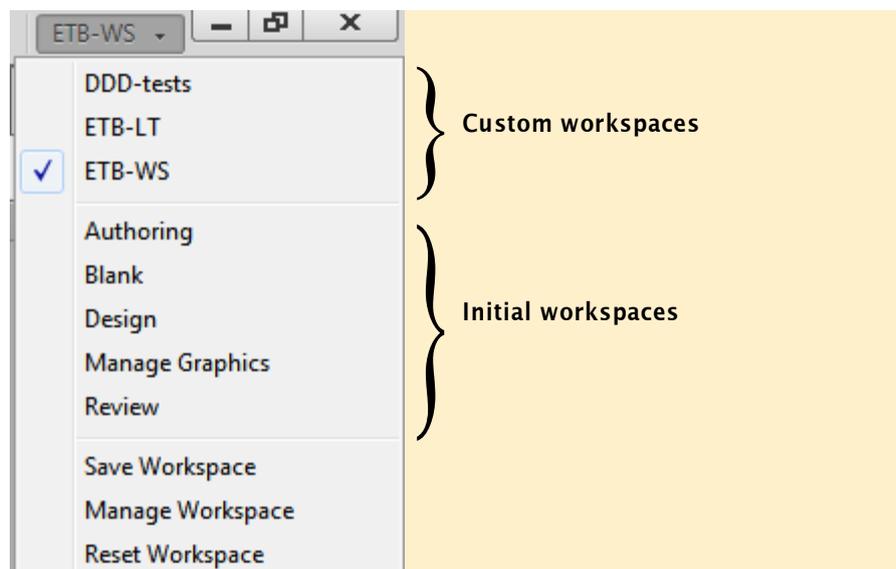
## Workspaces

A workspace is a saved set of panels/toolbars in a desired arrangement for repeated use. It also offers flexibility of screen usage, by allowing a user to place panels in numerous possible forms/arrangements: default, iconic, minimized, docked (left, right, bottom, top), floating, grouped. A Workspace saves these properties of the FM session:

- Menu file (`menus.xml`) and Tool bar file (`toolbars.xml`)
- Tool bars: location, size and state (docked, undocked)
- Panels: location, size and state (minimised, docked, undocked)

The workspace is loaded with the first document to open. This open may be considered slow. No workspace is loaded with a book file.

FrameMaker ships with a set of standard Workspaces tailored for different tasks. They can be modified and then saved with a new name. FM also provides an empty workspace to start with.



Modifications to a workspace are temporary (until saved) and can be reversed by **Reset**.



The drop down list for the arrangement of document windows – located to the right of the menu items – no more exists in FM-14 and higher. The function is ‘integrated’ into **Window > Tile** (with less choices)

Workspaces are saved in the user-area. The current workspace is in xxx.cfws, while the last saved is in xxx.fws. See [Relationship between the UI files](#) on page 9.

At the first use of workspaces the necessary files (workspace definition, toolbars, menus) are taken from \$HOME and copied to the user-area.

To design a new workspace for a specific task, open all the required panels and save the Workspace using **Save Workspace**. The names are case sensitive.

## Toolbars

**Tool-set** The toolbars available for the UI are listed in an xml file which is referenced in the workspace file (see [Relationship between the UI files](#) on page 9). The standard name is `fmttoolbar.xml`<sup>4</sup>. There may be more toolbar files, but only those listed in this file are visible in the menu.

### fmttoolbar.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<FMTOOLBARLIST version="1">
  <TOOLBAR file="graphics.xml"/>
  <SEPARATOR sep_id="0"/>
  <TOOLBAR file="quick_access.xml"/>
  <TOOLBAR file="structured.xml"/>
  <SEPARATOR sep_id="1"/>
  <TOOLBAR file="text_format.xml"/>
  <TOOLBAR file="table_format.xml"/>
  <TOOLBAR file="para_format.xml"/>
  <SEPARATOR sep_id="2"/>
  <TOOLBAR file="align_object.xml"/>
  <TOOLBAR file="object_properties.xml"/>
  <SEPARATOR sep_id="3"/>
  <TOOLBAR file="trackchanges.xml"/>
  <SEPARATOR sep_id="4"/>
  <TOOLBAR file="direction.xml"/>
</FMTOOLBARLIST>
```

**Toolbar** The toolbars themselves are defined in xml files The only toolbar which can not be customised is the graphics tool palette.

Toolbars can be docked in the top toolbar pane, to the right or left of the application window or undocked (floating).

**Note:** *Toolbars containing a drop-down list can not be docked to the left or right!*

4 A much clearer term would be `toolbar-set.xml`

## Files for the UI

If used, work spaces are copied to the user area. Any modifications are kept only there.

FM-14 and later contains two interfaces: **Structured** and **UnStructured**. XMLAuthor is no more an option.

The UI information basically is split into 2 groups:

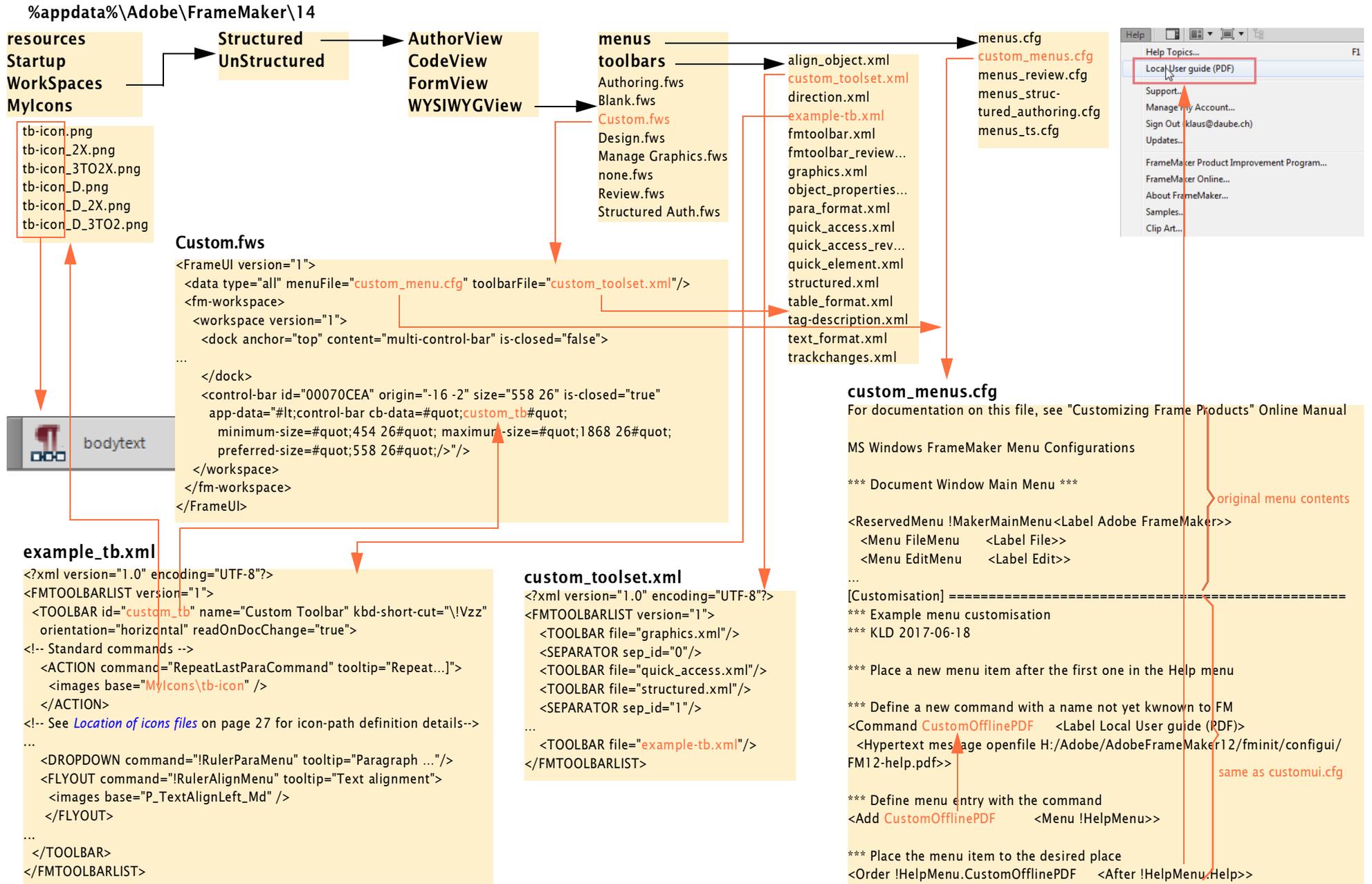
- Command sets assembled according to views
- Menus and tool bars assemblies according to views.

Product interface View	Structured <sup>a</sup>			Unstructured
	AuthorView	CodeView (XML)	WYSIWYG	WYSIWYG
Standard commands	Commands independent of views are located in <code>\$HOME\fminit\configui: cmds.cfg</code>			
Commands <sup>b</sup>	mathcmds.cfg wincmds.cfg	wincmds.cfg	mathcmds.cfg wincmds.cfg	mathcmds.cfg wincmds.cfg
Work spaces <sup>c</sup>	Authoring.fws none.fws <sup>d</sup>	Authoring.fws none.fws	Authoring.fws Blank.fws Design.fws Manage Graphics.fws none.fws Review.fws Structured Authoring...	Authoring.fws Blank.fws Design.fws Manage Graphics.fws none.fws Review.fws
Menus	menus.cfg	menus.cfg	menus.cfg menus_review.cfg menus_structured_au- thoring.cfg menus_ts.cfg <sup>e</sup>	menus.cfg menus_review.cfg menus_ts.cfg
Tool bars	direction.xml fmtoolbar.xml <sup>f</sup> graphics.xml quick_access.xml quick_element.xml structured.xml trackchanges.xml	fmtoolbar.xml quick_access.xml xpathtoolbar.xml xslttoolbar.xml	align_object.xml direction.xml fmtoolbar.xml graphics.xml object_properties.xml para_format.xml quick_access.xml structured.xml table_format.xml tag-description.xml text_format.xml trackchanges.xml	align_object.xml direction.xml fmtoolbar.xml graphics.xml object_properties.xml para_format.xml quick_access.xml structured.xml table_format.xml tag-description.xml text_format.xml trackchanges.xml
Customisation	<code>\$HOME\ fminit\configue\cusomui.cfg</code> This file contains both menu definitions and (hypertext) command definitions.			

- a. FM-13 introduced an additional view: FormView, which is a user friendly Code View (guided by forms).
- b. Commands are located in `fminit\configui\interface\view\`
- c. Work spaces are located in `fminit\WorkSpaces\interface\view\`
- d. `none.fws` is an empty workspace used if no document or book is open. It can be used to build a custom work space from scratch. It can refer to a custom menu, but does not honour the definition of a custom toolbar set — IMHO this is an error.
- e. The purpose of menus named `menus_ts.cfg` is IMHO unclear.
- f. `fmtoolbar.xml` does not define commands and icons for a tool bar, but lists all the tool bars available in this work space.

# Relationship between the UI files

6



# Menus

**customui.cfg** For FM versions prior to FM-11 all customisation was established in the file `$HOME\fminit\configui\customui.cfg`

The possibilities in this file are explained extensively in the Adobe document *Customisation of Frame Products (FM-7)*.

This file is still required if the menu modifications are to be visible from the beginning.<sup>5)</sup>

However, the contents of this file must also be appended to the relevant menu file. It is good practice to copy a menu file to a new file, e.g. `custom-menu.cfg` and then append the contents of `customui.cfg` to it.

**Views** Since FM-11 the contents of menus depend on a view. Hence there are several menu files. See *Files for the UI* on page 8. As an example the WYSIWYG view of the unstructured interface of FM-12/13 is listed:

```
$HOME\fminit\configui\
  cmds.cfg
  sample.cfg
  UnStructured\
    WYSIWYGView
      mathcmds.cfg
      wincmds.cfg

$HOME\fminit\WorkSpaces
  UnStructured
    WYSIWYGView\
      Authoring.fws
      Blank.fws
      Design.fws
      Manage Graphics.fws
      None.fws
      Review.fws
      menus\
        menus.cfg
        menus_review.cfg
      toolbars\
        align_object.xml
        fmtoolbar.xml
        fmtoolbar_review.xml
        graphics.xml
        object_properties.xml
        para_format.xml
        quick_access.xml
        quick_access_review.xml
        structured.xml
        table_format.xml
        tag-description.xml
        text_format.xml
        trackchanges.xml
```

5 `customui.cfg` in FM-12 and later is only relevant before a workspace is selected - that is, before any book or documents have been opened. After closing all documents or books no customisation is active.  
`none.fws` is an empty workspace. It can be used to build a custom work space from scratch. It can refer to a custom menu, but does not honour the definition of a custom toolbar set — IMHO this is an error.

# Customising menus

**Note:** Some menu entries are not reflected in the \*.cfg files. They are created during initialisation of FM based on FM's environment. For example File > Script and File > Launch.

## Customisation

To create your custom menu, take the appropriate standard menu and copy it to a new file. Name this file with a prefix of your customisation project. For example custom-menus.cfg.

You develop the customisation in a file customui.cfg. As long as you have not a customised menu assigned to a workspace, the menu customisation is only visible during the display of the splash screen (before you have opened a document or book).

To be available regularly the contents of customui.cfg must also be appended to a menu file, which is referenced in the workspace (see [Relationship between the UI files](#) on page 9).

To be available also with no document or book open, workspace \$HOME\fm\init\WorkSpaces\UnStructured\none.cws must point to the modified menu file (see table footnote c on page 8):

```
<FrameUI version="1">
  <data type="all" menuFile="custom-menus.cfg" toolbarFile="fmtoolbar.xml"/>
  <fm-workspace>
```

## Testing menus

You do not need to restart FM to test a modified menu. With **View > Menus > Modify...** it can be read into the current workspace.

Errors in the customisation file are reported in the FM console window. Even if an error is found, reading and interpreting the file continues.

## Commands in menus

In the various existing menus you can find a desired command for your special menu entry. You may however need to set up a new command:

- See [Hypertext commands](#) on page 37.
- See [Command names from plugins and scripts](#) on page 41

Open a file

```
Hypertext message openfile H:/Adobe/AdobeFrameMaker12/fm\init/configui/FM12-help.pdf
```

Execute a program

```
<Command ETBfmConsole <Label Console Log File>
  <Hypertext message openfile H:/Adobe/AdobeFrameMaker12/
  fm\init/configui/GetLogFile.exe>>
```

Hyper-links with relative paths always point to files in the same directory as the parent file. While for documents this can be interpreted, it is not clear what it means for menus.

Relative paths do not start in \$HOME as in pre-FM9. They start in the current document folder: \$path[initdir]/fm\init does not work (neither upper/lower/mixed case, nor with path in quotes or double quotes).

For addressing scripts see [Note concerning scripts](#) on page 25.

Execute a FrameScript

```
<Add iFrameMultiCatalog <Menu FormatMenu>>
```

Execute an ExtendScript

```
<Add ImportFormatsSpecial <Menu FormatMenu>>
```

## Menu customisation, examples

### Example 1

You are tired of searching for the offline user guide (pdf). Once you have downloaded it via **Help > Help Topics > Getting Started > General Resources**. You placed it in `$HOME\fminit\configui\` with the name `FM-12-help.pdf`.

You want to open this file with **Help > User Guide PDF**.

**Note:** *This example establishes a customisation only for the unstructured interface in the WYSIWYGView:*

- Create/update `customui.cfg` in an appropriate location.
- Modify the relevant menu in `%appdata%\Adobe\FrameMaker\##\` (`##` is the number of the involved FM version, e.g. 14).

`customui.cfg`

In a plain vanilla FM installation this file does not exist. Hence you need to create it. This file must be in Windows code page (cp 1252), not in UTF-8<sup>6</sup>!

```
«-- Example menu customisation [KLD 2017-04-07] 7)
<Command CustomOfflinePDF> «-- Define a new command (name not yet known to FM)
  <Label Local User guide (PDF)>
  <Hypertext message openfile H:/Adobe/AdobeFrameMaker12/fminit/configui/FM12-help.pdf>>
<Add CustomOfflinePDF <Menu !HelpMenu>> «-- Define menu entry with the command
<Order !HelpMenu.CustomOfflinePDF «-- Place the menu item to the desired place
  <After !HelpMenu.Help>>
```

**Note:** *For test purposes you may reference any pdf file in the command. Adjust the file location - use forward slash (/) in place of backslash (\). Only absolute paths work!*

#### Modify the relevant menu

The customisation by `customui.cfg` is only active when no document or book is open. Hence we need to do more:

- The menu to be modified is `%appdata%\Adobe\FrameMaker\##\WorkSpaces\UnStructured\WYSIWYGView\menus\menus.cfg`.
- Create a backup of the original menu file: `menus_ori.cfg`.
- Append the contents of `customui.cfg` to the relevant menu of the workspace to be available for open documents or books.

After starting FM and selecting the WYSIWYG view, the menu modification is active.

### Example 2

You want to have a context menu for inserting special characters. The existing flyout is not touched.

**Note:** *This example establishes a customisation only for the unstructured interface in the WYSIWYGView:*

- Create/update `customui.cfg` in an appropriate location.
- Modify the relevant menu in `%appdata%\Adobe\FrameMaker\##\` (`##` is the number of the involved FM version, e.g. 14).

6 The file coding is not at all consistent:  
cp 1252: \*.cfg (customui.cfg, cmd.cfg, mathcmd.cfg, menu.cfg etc.)  
UTF\_8: \*.xml (toolbars), \*.fws, \*.cfws (work space), maker.ini.

7 Relevant information starts with < and ends with >. This may be nested. Hence there is no special notation for comments. I use the guillemets.

`customui.cfg` In a plain vanilla FM installation this file does not exist. Hence you need to create it. This file must be in Windows code page (cp 1252), not in UTF-8<sup>8)</sup>!

```
«-- SpecialChars Context menu [KLD 2017-04-07]
<Menu SpecialCharsContext          «-- define a new context menu
  <Label Insert Special Character >>

<Command MyCharEllipsis            «-- for each entry you specify these parameters:
  <Definition \xC9>
  <Label \xc9  &ellipsis>          «-- the menu label starts with symbol
  <KeySeqLabel \e> >
<Add MyCharEllipsis <Menu SpecialCharsContext>>

<Command MyCharOneQuarter          «-- another symbol to be in my list 9)
  <Definition \xB9>
  <Label \xb9  quarter &1>
  <KeySeqLabel \\xb9> >
<Add MyCharOneQuarter <Menu SpecialCharsContext>>
          «-- Add the new menu to various contexts:
<Add SpecialCharsContext <Menu !TextContextMenu>>
  <Order !TextContextMenu.SpecialCharsContext <Before !TextContextMenu.Undo>>
<Add SpecialCharsContext <Menu !TableTextContextMenu>>
  <Order !TableTextContextMenu.SpecialCharsContext <Before !TableTextContextMenu.Undo>>
<Add SpecialCharsContext <Menu !TextLineContextMenu>>
  <Order !TextLineContextMenu.SpecialCharsContext <Before !TextLineContextMenu.Undo>>
```

### Modify the relevant menu

If you need characters which are not in the FrameRoman code page (arbitrary Unicode symbols) you need to set up a script for this ([ETB-14](#) contains such a script).

The customisation by `customui.cfg` is only active when no document or book is open. Hence we need to do more:

- The menu to be modified is  
%appdata%\Adobe\FrameMaker\vv\WorkSpaces\UnStructured\WYSIWYGView\menus\menus.cfg.
- Create a backup of the original menu file: `menus_ori.cfg`.
- Append the contents of `customui.cfg` to the relevant menu of the workspace to be available for open documents or books.

After starting FM and selecting the WYSIWYG view, the menu modification is active.

8 The file coding is not at all consistent:  
cp 1252: \*.cfg (customui.cfg, cmd.cfg, mathcmd.cfg, menu.cfg etc.)  
UTF\_8: \*.xml (toolbars), \*.fws, \*.cfws (work space), maker.ini.

9 Command names must not contain figures (My1Quarter is invalid).

# Toolbars

## Customising Toolbars

Customising toolbars or creating new toolbars is more elaborate than customising menus, because more files are involved (See *Relationship between the UI files* on page 9):

- The toolbar file itself (e.g. custom-tb.xml).
- The list of toolbars in fmttoolbars.xml.
- The icons needed for the toolbar.
- You may also have the need to implement scripts.
- You may save the modified workspace with a new name.

**Note:** *Toolbars containing a drop-down list can not be docked at left or at right to become vertically oriented!*

### Toolbar commands

When setting up a toolbar you need to have an idea which commands to use. Get the exact names from the appropriate menu (see *Commands* on page 18) or from a command list. See for example [www.daube.ch](http://www.daube.ch).

For more details see *Commands* on page 30.

There are some not so well known things about commands. Hence see also *Some particularities of commands* on page 37.

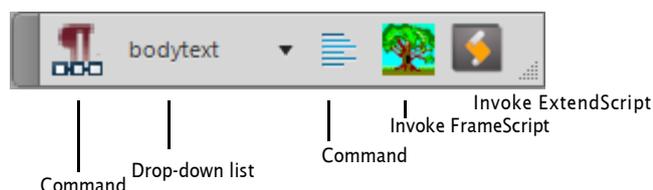
Using ExtendScripts in a toolbar can be done in two ways:

- The script defines its command name internally. See the red names in *File simple.jsx* on page 16. Such scripts can be compiled to jsxbin for hiding its innards.
- An ExtendScript can also be invoked by a hypertext command. In this case the script must reside in %userprofile%\Documents\Adobe Scripts\ and it can only be of file type jsx<sup>10</sup>:

```
<Command ETBnudge <Label Nudge object info>
  <Hypertext message openfile C:/Users/Klaus/Documents/Adobe
  Scripts/ETBnudge.jsx>>
```

## Example toolbar

**Task** The following is an example toolbar with all types of widgets. We will add it to the common toolbar list.



This tool bar shall be available in the unstructured interface, in the WYSIWYG View.

You can find all files for this example toolbar [on my website](#).

<sup>10</sup> An xxx.jsxbin file would just be opened in Notepad and of course presents gibberish.

**Note:** If not specially noted, the file locations start with %appdata%\Adobe\FrameMaker\vv\ (vv is 14).

## Create the example toolbar

The following steps are required:

- Create file  
...\Workspaces\UnStructured\WYSIWYGView\toolbars\example-toolbar.xml defining the buttons and their commands as well as keyboard-short cuts. See [File example-tb.xml](#) on page 15.
- Save a copy of  
...\Workspaces\UnStructured\WYSIWYGView\toolbars\fmtoolbar.xml as fmtoolbar-ori.xml before inserting the following just before the last line:

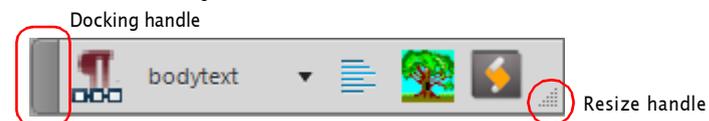
```
<SEPARATOR sep_id="5"/>
<TOOLBAR file="example_tb.xml"/>
```

- Save the FrameScript file primitive.fsl to any location you want, for example to \$HOME\fminit\configui\
- Save the ExtendScript simple.jsx to ...\StartUp\
- Since we need custom icons, you can create them according to [Toolbar icons](#) on page 26. You can find three icons for this example toolbar
- After start of FrameMaker select the WYSIWYG View, for which we have set up the two files custom\_toolset.xml and example\_tb.xml.

In menu **View > Toolbars** you will find the new toolbar and can activate it.

The toolbar will appear in menu **View > Toolbars**. There you activate it and it will initially float around.

The workspace mechanism has assumed a certain width of the toolbar which can be adjusted with the lower resize handle:



As usual the toolbar is docked to the other toolbars with the docking handle.

You can now save the current workspace, with or without a different name.

## Integrating toolbar into workspace

### File example-tb.xml

This file describes the contents of the toolbar. This example references standard commands as well as a FrameScript and an ExtendScript.

```
<?xml version="1.0" encoding="UTF-8"?>
<FMTOOLBARLIST version="1">
  <TOOLBAR id="custom_tb" name="Custom Toolbar" kbd-short-cut="!\Vzz"
    orientation="horizontal">
<!-- Standard command -->
    <ACTION command="RepeatLastParaCommand" tooltip="Repeat last ¶ command [Esc j j]">
      <images base="etb-para-repeat" />
    </ACTION>
<!-- Drop-down list -->
    <DROPDOWN command="!RulerParaMenu" tooltip="Paragraph formats"/>
<!-- Fly-out menu -->
    <FLYOUT command="ETBPgfAlignPopup" tooltip="Text alignment">
      <images base="P_TextAlignLeft_Md" />
    </FLYOUT>
<!-- simple FrameScript -->
    <ACTION command="MyCommand1" tooltip="This FrameScript just provides a message">
```

```

    <images base="tst-fs" />
  </ACTION>
<!-- simple ExtendScript -->
  <ACTION command="msgJS" tooltip="This ExtendScript just provides a message">
    <images base="tst-estk" />
  </ACTION>
</TOOLBAR>
</FMTOOLBARLIST>

```

The ID of the toolbar need not be the same as the file name. I choose `custom_tb` for the ID, although the file names is `example_tb.xml`. The ID is used in the workspace files only.

For each tool button a type is defined:

- ACTION** Button for standard command.
- DROPDOWN** Open a drop down list of commands.
- FLYOUT** Open a sub menu of commands. The corresponding command uses a special code and a parameter. See [Command for FlyOut in tool bar](#) on page 31.

See [Tags in toolbar files](#) on page 22 for more details.

## File `simple.jsx`

This ExtendScript shall be placed into `...\Startup\`

```

// simple.jsx
#target framemaker

var msg1 = "JavaScript alert message\nYou always get an information icon"
var msg2 = "FrameMaker Alert dialogue\nIcon/Buttons depend on second parameter"

// set up menu with just two items
var mMenu = app.GetNamedMenu("!MakerMainMenu");
var simpleMenu = mMenu.DefineAndAddMenu("Simple", "Alerts");
simpleMenu.DefineAndAddCommand(1,"msgJS","JS alert","");
simpleMenu.DefineAndAddCommand(2,"msgFM","FM Alert","");
UpdateMenus();

// watch the subtle difference in syntax: alert | Alert
function Command(cmd){
  switch(cmd) {
    case 1:
      alert (msg1, "Message title");
      break;
    case 2:
      Alert(msg2, Constants.FF_ALERT_CONTINUE_NOTE);
      break;
  }
}

```

## File `primitive.fsl`

This FrameScript can be placed wherever you want, for example to `$HOME\fm\init\configui\`

In FrameScript this script must be installed to start with FM. Only after the next start of FM the function will be available.

```

// A primitive Event FrameScript: just some messages
// [2016 Klaus Müller, itl]

// An event script is necessary if a static command name is required,
// e.g. to be used in a tool bar or menu (and be distributable)
// Ordinary FrameScripts get generic command names which may be
// different at each start and are hence not distributable

```

```
// Event FrameScripts must be installed, not just run
//
// In an EventScript commands must reside within Events
// Menus and commands are defined within the Event Initialize
// It is good practice to remove the menu with Event Terminate
// A menu item is not necessary, for example if the command is used in a toolbar

// --- Set up a command name and the event trigger
Event Initialize
// Get Object Type(Menu) Name('!MakerMainMenu') NewVar(gvMainMenu);
// New Menu Label('My Menu') NewVar(gvMyMenu) AddTo(gvMainMenu);
  New Command Name('MyCommand1') Label('My Command 1')
    EventProc(evtCmdEvent) NewVar(gvMyCmd1) // AddTo(gvMyMenu)
    EnabledWhen(EnableAlwaysEnable)
EndEvent

// --- Remove command and menu at de-installtion time
Event Terminate
// Remove CommandObject(gvMyCmd1) From(gvMyMenu);
// Remove MenuObject(gvMyMenu) From(gvMainMenu);
EndEvent // Terminate

// --- The event procedure is the real task
Event evtCmdEvent
If ActiveDoc = 0
  MsgBox 'No active document --- Nevertheless: Welcome to the club.';
Else
  MsgBox 'We have a document open --- Eventhough: Welcome to the club.';
EndIf
EndEvent // evtCmdEvent
```

2022-12-20

E:\\_DDDprojects\ETB-14up\Sources\etb-customising.fm

D+D D

# Configuration files

Configuration files define both commands and menus. These files still have the format as in previous FM versions. That is, they are named `xxx.cfg` and use the well-known MIF syntax (not real xml).

The names of these configuration files are specified in the initialisation file for FrameMaker (see [Files] in `maker.ini`).

## customui.cfg

This is a special configuration file which normally is located in `$HOME\fminit\configui\ 11)`. It is called customisation file, because with this file commands and menus are customised.

If this file does not exist or does not have the path defined in `maker.ini` (see [Files] in `maker.ini`) then no customisation is performed.

**Note:** *To be able to customise commands and menus in a company environment (where only IT has access to the application installation folder \$HOME), you must define a location in your user's area:*

- In `%appdata%\Adobe\FrameMaker\##\maker.ini` look for section [Files]
- If this section does not exist, create it, probably before the section [Preference]
- Modify or create the entry `ConfigCustomUIFile` to a location in your `%appdata%` where you will store `customui.cfg`, for example:

```
ConfigCustomUIFile =
C:\Users\user\AppData\Roaming\MyFMcustomisation\customui.cfg
```

### Commands

Existing commands are defined in three files located in `$HOME\fminit\configui`:

File	Contents
<code>cmds.cfg</code>	General commands, Escape sequences
<code>mathcmds.cfg</code>	Commands for the Equation Editor
<code>wincmds.cfg</code>	Platform dependent commands, definition of short-cuts

With the introduction of views, multiple files `cmds.cfg` and `wincmds.cfg` exist.

### Menus

Until FM-10 menus were located in `$HOME\fminit\maker`. FM-11 introduced the concept of views which requires a multitude of menus. See [Relationship between the UI files](#) on page 9.

**Note:** *While standard menus are in their own files (separated from commands) the customisation file `customui.cfg` may contain both commands and menus. Also a custom menu may contain both kinds of definitions.*

## Configuration file statements

A configuration file consists of a series of statements that define menus, menu items, and the order of those items. Commands are also defined in configuration files and may contain definitions for details which may also be present in menu files.

### Properties of statements

- Statements are case-sensitive.
- Each statement is enclosed in angle brackets (< and >).
- Statements must appear in a particular order.
- A statement begins with a keyword defining its function.
- A statement may span several lines.

11 This is by the definition of the location in the `maker.ini` file in `$HOME`.

comment examples

```
[etb --- ETB addenda] =====
«-- The [label] supports file navigation in EditPad
- This file (customui.cfg) can not be UTF-8, it must
  use Windows encoding and FrameRoman coding for Labels
- Default path ($HOME) is named here + fm-root+
  (no blank after first +). This is exchanged by the
  installation pgm with the real $HOME directory.
```

## Initialisation sequence

When FrameMaker starts, it first reads the standard menu and command configuration files and then a customisation file<sup>12</sup>). The information in each file overrides the information in files read previously. Hence the following order is necessary:

- 1 Definition of the commands.
- 2 Modification of labels, short-cuts.
- 3 Definition of a menu item referring to a command.
- 4 Order of the menu item or sub menu within parent menu.

## Statements in configuration files

Purpose	Statement, statement detail
Define a command	<a href="#">Command</a> on page 31
Define a command for a menu item that is chosen while the Shift key is held down	<a href="#">ShiftCommand</a> on page 31
Define a new label for a command or menu item	<a href="#">Modify</a> on page 32
Define the test for Command Search	<a href="#">Description</a> on page 33
Define the function to be called when a command is chosen	<a href="#">Definition</a> on page 33
Define a label for a menu or command that is visible in the user interface	<a href="#">Label</a> on page 33
Define a context-sensitive label for a menu or menu item.	<a href="#">ReservedLabel</a> on page 33
Define a keyboard short-cut for a command	<a href="#">KeySequence</a> on page 35
Define a label for the short-cut which appears next to the command name on the menu	<a href="#">KeySeqLabel</a> on page 35
Define whether a command is a general command, a FrameMath command (for the Equation Editor), or both	<a href="#">Mode</a> on page 36
Define an Asian typography command	<a href="#">AsianFonts</a> on page 36
Define entry in Search Command	<a href="#">Description</a> on page 33
Define a new menu	<a href="#">Menu</a> on page 44
Define a new reserved menu	<a href="#">Reserved menu</a> on page 44
Add a menu item to a menu	<a href="#">Add</a> on page 45

<sup>12</sup> This process is called *Localisation* in the progress indication during the start. This is due to the fact that the menu files are different for each UI language. In FM the UI language is defined at installation - it can not be changed afterwards.

<b>Purpose</b>	<b>Statement, statement detail</b>
Define a particular place for a menu item on a menu.	<a href="#">Order on page 46</a>
Remove a menu or menu item	<a href="#">Remove on page 31</a>

---

## Debugging customisation files

If you're writing a lengthy menu customisation file, consider writing and testing the customisations a few at a time. This will make it much easier to locate problems in the statements you write. As you create the file, you can save the file and then read it into FrameMaker to test your statements.

With **View > Menu > Modify...** the modified menu can be read.

To display error messages when you load a menu customisation file, set `ShowErrors` in `maker.ini` to **On**. You can also turn **On** the keyboard short-cut alerts (`ConfigWarnKbdOverride`, `ConfigWarnKbdOverride`) to see error messages in the console window<sup>13</sup>. If you find errors, you can fix them immediately and continue writing.

When you read the same menu customisation file again, you'll see error messages about redefining a command (because the same statements are being read again). Ignore these messages. Use comments throughout the menu customisation file to document your work. Others may need to edit the file later.

---

<sup>13</sup> Please note that even a plain vanilla FrameMaker installation will create a huge number of such messages, because definitions are 'overloaded'. It may be difficult to find real errors this way ...

# Tags in toolbar files

**Note:** Be aware that in strings (e.g. defining the tool tip) no & must be used. Character entities (e.g. #amp;) are not resolved. Use the word 'and' or the '+' sign in place of the '&'.

First line of toolbar file `<?xml version="1.0" encoding="UTF-8"?>`

Comments Comments are in the standard XML/HTML format:

```
<!-- One line comment -->
<!-- Multiline comment
intermediate line
last line -->
```

**Note:** XML comments must not appear before the FMTOOLBARLIST statement!

Example See [File example-tb.xml](#) on page 15. It displays most of the following tags.

## FMTOOLBARLIST

This is the root tag in a toolbar file.

Syntax `<FMTOOLBARLIST attributes />`  
 TOOLBAR statement with details  
`</FMTOOLBARLIST>`

**Attributes** `version="1"` Parser version for which this toolbar file was written.  
 Value needs to be compatible with the current parser version.

## TOOLBAR

This tag defines the toolbar and is a wrapper for the items on the toolbar.

Syntax `<TOOLBAR attributes />`  
 tool tags (ACTION, DROPDOWN, ...)  
`</TOOLBAR>`

**Attributes** `file` File name of the toolbar, if the description is to be picked from somewhere else. If this attribute exists no other attributes are parsed here.  
 This attribute is not present in any of the Adobe toolbars up to FM-13.

`id` Unique identifier for the toolbar, for workspace identification, FDK access and API notifications

`name` Name of the toolbar as visible in the menu.  
 This may contain character entities, for example `name = "Paragraphs #amp; Characters"`

`orientation` Keyword defining the default orientation of the toolbar:

`horizontal`: Default orientation is horizontal.

`vertical-narrow`: Default orientation is vertical and the items are arranged in a single column.

`vertical-wide`: Default orientation is vertical and the items are arranged in two columns.

`dock` Keyword defining the preferred/default dock (currently horizontal toolbars can be docked only at the top):

`left`: Toolbar will be docked at the left anchor

`right`: Toolbar will be docked at the left anchor

`top`: Toolbar will be docked at the top anchor

`none`: Toolbar will be floating

`kbd-short-cut` Key-sequence to activate the toolbar (default = none)

readOnDocChange I have no idea, what this is good for. Found only in quick\_element.xml.

## Tool tags

### ACTION

The action tag defines the command assigned to an UI button.

**Syntax**

```
<ACTION attribute/>
  <IMAGES ...>
</ACTION>
```

<b>Attributes</b>	<b>command</b>	Identifier of an already defined FM action - a required attribute.
	<b>name</b>	Name of the action (default is the tag defined for the command)
	<b>tooltip</b>	Tool tip displayed on mouse hover (default is the name of the action)
	<b>help</b>	Help String for the action command (default= none)
	<b>image</b>	An image-name for the action (default= None) <sup>14</sup> .

### TOGGLE

A toggle tag is used to define two (logically alternating) actions to be performed from a single widget.

**Note:** *I have not managed to get this working. I have also not seen this tag in any Adobe tool bar yet.*

**Syntax**

```
<TOGGLE attributes1 />
  <command attributes2 />
</TOGGLE>
```

<b>Attributes1</b>	<b>name</b>	Name of the toggle (default= None)
	<b>tooltip</b>	Tool-tip that is displayed on mouse hover (default= name of the toggle)
	<b>help</b>	Help String for the toggle command (default= None)
	<b>image</b>	An image-name for the toggle (default= None) <sup>14</sup> .
<b>Attributes2</b>	<b>on</b>	Required identifier of an already defined FM action (non-toggle type).
	<b>off</b>	Required identifier of an already defined FM action (non-toggle type).

### FLYOUT

This is used to define a popup menu.

**Syntax**

```
<FLYOUT attributes />
```

<b>Attributes</b>	<b>command</b>	The corresponding command uses a special code and a parameter. See <a href="#">Command for FlyOut in tool bar</a> on page 31..
	<b>name</b>	Name of the flyout (default= the tag defined for the command)
	<b>tooltip</b>	Tool tip that is displayed on mouse hover (default= name of the flyout)
	<b>help</b>	Help string for the flyout command (default= none)
	<b>image</b>	An image-name for the flyout (default= none) <sup>14</sup> .

<sup>14</sup> This tag attribute may be replaced by `images = list of images` (see [IMAGES](#) on page 24)

## DROPDOWN

This is used to (generally) define a menu whose sub items are a list of options that can be chosen one at a time, for example, fonts.

Syntax	<code>&lt;DROPDOWN attributes /&gt;</code>	
Attributes	command	Identifier of an already defined FM Menu - required field"
	tooltip	Tool tip that is displayed on mouse hover (default= name of the drop-down)
	help	Help String for the drop-down command (default= none)

**Note:** *There is no width indication for this widget. The width is assumed by the workspace mechanism. If more than one drop-down list appears in a tool bar then resizing ins applied to all proportionally.*

## SEPARATOR

This tag places a separator between two items

```
<SEPARATOR/>
```

## Detail tag

Detail tags are optional. Currently only the **IMAGE** tag is in this category.

## IMAGES

This tag describes the images displayed on an **ACTION**, **FLYOUT** and **TOGGLE**. Alternatively only one image can be defined (see [ACTION](#) on page 23).

Syntax	<code>&lt;images attributes /&gt;</code>	
Attributes	normal	Default image displayed when the UI is bright (default= none)
	rollover	Image displayed on mouse hover when the UI is bright (default= normal image)
	dark_normal	Default image displayed when the UI is dark (default= normal image)
	dark_rollover	Image displayed on mouse hover when the UI is dark (default= dark_normal image)

Example See [Using icon-images](#) on page 27.

## Toolbar commands

See also section [Commands](#) on page 30.

All the menu items/commands that end up executing an FCode can be used here. Hence hypertext commands can not be used. However, scripts (FrameScript, ExtendScript) can be referenced. See [Example toolbar](#) on page 14.

### Note concerning scripts

- Scripts must be loaded during the start of FrameMaker. This action generates a command name and an FCode for the script.
- The FCode assigned to a script may differ from FM session to FM session. Hence it is useless.
- **ExtendScripts** are located in  
%appdata%\Adobe\FrameMaker\vv\Startup\  
The name of the script name (without the file extension) provides the command name. Installed ExtendScripts get command names from their internal command definitions.
- **FrameScripts** may be located anywhere. However it must be assured that they are loaded at start of FrameMaker. See FrameScript options.
- The name for the command may not be identical to the script file name (excluding the file extension) due to an initial script. You may get the proper command name by the free FrameScript [Report FM Commands](#) from itl.

File name of script	Command name
ImportFormatsSpecial.jsx	ImportFormatsSpecial
MultiCatalog.fso	iFrameMultiCatalog
RemoveUnusedFormats.fsl	ESLSSRUN305 <sup>a</sup>

a. This is an automatically generated command name.

For details see [Command names from plugins and scripts](#) on page 41.

## Toolbar icons

FM-14 introduces three icon sizes to be able to accommodate to high resolution screens which are normally used with Windows scaling > 100%. FM-14 supports only grey icons, FM-15 also coloured ones.

### Standard icons

Icons for toolbars and for the dialogues are located in resource files: `fmcustom.dll`, `fmres.dll`, `owlres.dll`, `fmdlg.dll`.

If one or more of these fits the purpose, they can be referenced in custom tool bars. Names of such icons can be deducted from existing tool bars or by inspecting the `dll` with an appropriate application, for example ResHacker.

Icon size	FM-14 has only these (S_xyz_SM...)		FM-15 adds these coloured icons (S_xyz_SM...)	
	Normal	Dimmed (inactive)	Normal	Dimmed (inactive)
Normal (18x18)	..._N.png	..._N_D.png	..._N_C.png	..._N_C_D.png
Larger (27x27)	..._N_3TO2X.png	..._N_3TO2X_D.png	..._N_C_3TO2X.png	..._N_C_D_3TO2X_D.png
Double (36x36)	..._N_2X.png	..._N_2X_D.png	..._N_C_2X.png	..._N_C_D_2X_D.png
Example double size	S_OPEN_SM_N_2X.png	S_OPEN_SM_N_2X_D.png	S_OPEN_SM_N_C_2X.png	S_OPEN_SM_N_2X_D.png
Reference in the tool bar file	<images base="S_OPEN"/>			

### Custom icon files

If images are needed, which are not in the `dll` — for example to have coloured icons in FM-14 — custom icon files must be defined <sup>15)</sup> <sup>16)</sup>:

- Per icon 6 images must be provided. The image files must be type `png` (Portable Network Graphic) and the background must be transparent.
- To avoid 6 additional files for coloured icons in FM-15 I recommend to use grey icons for the dimmed version.
- The image base name can be anything, for example `ALIGNMIDDLE`, `OBJ_ALIGN_MIDDLE`, `AlignMiddle` or `Align_Middle`. There is no need to start the name with `S_` as in the icons from the `dll`.
- The image base name must not bear the file extension <sup>17)</sup>:  
`<images base="etb_icons\Align_Middle.png"/>`  
 will create the default icon on the tool bar.
- Since Windows file names are not case sensitive, the casing in the tool bar file may be different to that of the file name. But for the sake of clarity keep the case identical.
- If you don't care about colour or b/w and dimming as well as various sizes supporting higher resolution screens: one icon file (colour or grey) is sufficient:  
`<images base="etb_icons\Align_Middle"/>`  
 and one file `Align_Middle.png`
- To get the 6 variants the following suffixes (Caps!) must be added to the base name:

15 For FM-14 correct handling of custom icons is only available since update 2.425.

16 In this section `etb_icons` is just an example of the subdirectory containing icon files. Also `ANCHORED_FRAME` is just an example of the base name.

17 In FM-13 (2015) this extension was accepted.

Icon size	Icon file names	
	Normal	Dimmed (inactive)
Normal (18x18)	<i>basename.png</i>	<i>basename_D.png</i>
Larger (27x27)	<i>basename_3TO2X.png</i>	<i>basename_D_3TO2X.png</i>
Double (36x36)	<i>basename_2X.png</i>	<i>basename_D_2X.png</i>
Example for double size	ANCHORED_FRAME_2X.png 	ANCHORED_FRAME_D_2X.png 

## Location of icons files

### Relative path

- For a relative path definition the icon files can be located either in %appdata%\Adobe\FrameMaker\14\ or in \$HOME.
- For an absolute path definition the files can be located anywhere.

Do not bloat %appdata%\Adobe\FrameMaker\14\ or \$HOME directly with the icon files. Specify a subdirectory. The detail definition depends on the location of this directory.

Location of subdirectory	icon reference with sub directory	plain icon reference
	images base="etb_icons\ANCHORED_FRAME"	images base="ANCHORED_FRAME"
%appdata%\Adobe\FrameMaker\14\ or ...\\15\	No item in maker.ini	Subdirectory not possible. Icon files must be in appdata 'root'.
\$HOME	not possible	ToolbarCustomImageDir=etb_icons This setting must be in section [Directories]

### Absolute path

In this case you must specify only the base name in the tool bar file. The path must be defined in the maker.ini setting:

```
[Directories]
ToolbarCustomImageDir = D:\System_ddd\etb_icons
```

### Directory structure

For an absolute path you may set up a hierarchy of directories. Example structure on E:

```
custom
  icons
    feature-a
      gugus-icon.png
      kukolores-icon.png
    feature-b
  ...
```

Then you can define this path in maker.ini [Directories] as

```
ToolbarCustomImageDir = E:\custom\icons\feature-a
```

And in the toolbar you reference the icons as

```
<ACTION command = "gugus">
  <images base = "gugus-icon"
</ACTION>
<ACTION command = "kukolores">
  <images base = "kukolores-icon"
</ACTION>
```

If you have a similar set of icons in sub directory feature-b you can switch them by changing the setting in maker.ini.

## Using icon-images

- 1 Add the base name of the icon in the base attribute of the image element.

```
<ACTION command="RepeatLastParaCommand"
  tooltip="Repeat last ¶ command [F4]">
  <images base="para_repeat" />
<!-- <images base="etb_icons\para_repeat" /> in subdir -->
</ACTION>
```

- 2 Create a custom icon. I prefer to create the image as 256×256 pixel image and deduct from this the required sizes and variants <sup>18)</sup>.
- 3 For each icon derive the necessary variants with correct naming (suffix): para\_repeat\_2X, etc.
- 4 Place the icon files according to *Location of icons files* on page 27.

Example icons These are all from fmcustom.dll, base name = S\_ADDCOLS

Small		Medium		Large	
Active	Inactive	Active	Inactive	Active	Inactive
..._SM_N	..._SM_N_D	..._SM_N_3To2X	..._SM_N_D_3TO2X	..._SM_N_2X	..._SM_N_D_2X

**Note:** When hovering over active buttons, they get a border. Inactive buttons do not get this border on hovering.

## Default icons

Missing (not found) images are displayed with a default icon:

## Tool bar icons and workspaces

- A workspace defines the toolbars to be active in it.
- There is no setting in **Preferences** to define the default size of the tool bar icons (as it was in FM-13). FM takes the information from the Windows scaling factor.  
On a high resolution monitor this factor is at least set to 150% to get a reasonable appearance of the icons. This will take the icons names ...\_3TO2X. A zoom factor ≥200% will take the icons named ...\_2X. On standard monitors with about 100dpi resolution you will have this factor set to 100% which takes the icons named without a scaling suffix.

## Contents of the resource files in fminit

FM-9 introduced the new UI with an additional resource file: owlres.dll (owlres.res). These contain png images which are not handled by known resource editors. Also fmcustom.dll now contains png images, no more bit maps (bmp).

File	Icons, pictures	Dialogues	Other
fmcustom.dll	Images for toolbar also icons for the panels and graphic toolbar. 2 to 8 variants per image.	none	version info
fmdl.dll	Rubi-bit maps [bmp]. Many new items (panels)	classic dialogues, panels, panel-lists	Icngroup (icons for the dialogues) version info; 500 (?)
fmres.dll	Button images for dialogues, palettes and panels (16x16), [bmp]. Some items no more used	none	Cursor group (32x32 cursors); Icngroup (icons in panels etc.)
owlres.dll	Images for the new toolbars [png]. 2 to 4 variants per image. This file is new with FM-9	C-like definitions for application bar, grafix bar, UI preference dialogue etc.	Xstr (strings with all text in xml notation); version info (correct)

<sup>18</sup> For batch modification of images (resize, convert to greyscale, etc. I use the tool [ImBatch](#)).

## Extract icons

To get the icons out of the DLLs – to have individual files to work on for the tool bar buttons – *my procedure* is the following:

### Extract and rename

- 1 Open the dll in **ResHacker**.
  - Select the appropriate resource type (e.g. bitmap).
  - Save the resources with **Action > Save [...] resources**.
  - Use an rc name such as fmres-bmp.rc .
- 2 Open the rc file in **EditPad**.
  - Convert double to single line spacing
  - Use the REGEX to exchange the 'columns':

fmcustom	binaries	(.+)	png "(.+)"	\2\t\1
fmres	bitmaps	(.+)	bitmap "(.+)"	\2\t\1
	cursors	(.+)	cursor "(.+)"	\2\t\1
	icons	(.+)	icon "(.+)"	\2\t\1
owlres	binaries	(.+)	png "(.+)"	\2\t\1

- Remove blanks at start of line
  - Save the table as fmres-rename-table-bmp.txt
- 3 Start **RenameByTable.ahk**
    - **Attention:** the table file must be in Windows code page 1252, or UTF-8, not UTF-16.
    - Fill in all fields, including the target file extension.

### PDF of all icons

- 1 Open the directory (e.g. E:\FM-specials\FM-12-tests\Resources-owlres\renamed-png) in **Thumbs+**.
- 2 In **Image > Print Catalog** set up a layout (or use icon-overview) with the following properties:
  - Printer = Adobe PDF
  - Print Thumbnail borders OFF
  - Colour output
  - Margins all: 0.5cm
  - Thumbs width 4.5cm, height 2.2cm
  - Header: Resource icons xxx
  - Header font 12 pt, Caption font 8pt
  - Items for caption: only File name
  - Files to process: Current folder
  - Print Heading for each folder: OFF
  - FINISH: provide file path for PDF file

Be aware that with FM-14 most file names are too long for complete display. In the tabular arrangement of the icons; the names may overlap.

# Commands

There are three command files in \$HOME\fminit\configui:

```
cmds.cfg
mathcmds.cfg
wincmds.cfg
```

In the various views there are different versions of these files, since not all commands are relevant in a particular view.

For customisation it is not necessary to modify any of the standard command files. All customisation of commands is done in `customui.cfg` and one or more menu files.

**Note:** *A complete list of FM-14 commands can be found on [www.daube.ch](http://www.daube.ch). These command lists are created with the free FrameScript [Report FM Commands](#) from *itl*.*

## Syntax peculiarity

Inside a main definition (such as Command, Add, Order ...) a blank must precede a nested option:

Invalid `<Add MyCharOneQuarter<Menu SpecialCharsContext>>`

This definition will not become active.

Valid `<Add MyCharOneQuarter <Menu SpecialCharsContext>>`

## Command examples

For explanation of the keywords see [Command statements](#) on page 31.

Normal command	<pre>&lt;Command NewDocument   &lt;Label Document...&gt;   &lt;KeySequence \!fn&gt;   &lt;Definition \x300&gt;   &lt;Mode All&gt;&gt;</pre>	<p>Name of the command</p> <p>What you see in the menu</p> <p>short-cut (ESC sequence)</p> <p>FCODE, the command definition</p> <p>Valid contexts for this command</p>
Command with restricted context	<pre>&lt;Command SelectAll &lt;ReservedLabel Flow Select All in Flow&gt; &lt;ReservedLabel Frame Select All in Frame&gt; &lt;ReservedLabel Page Select All on Page&gt; &lt;KeySequence \!ea&gt; &lt;Definition \x327&gt; &lt;Mode All&gt;&gt;</pre>	
Modify the short-cut	<pre>&lt;Modify SelectAll   &lt;KeySequence ^a&gt; &gt;</pre>	
... and indicate it in the menu	<pre>&lt;Modify SelectAll   &lt;KeySequenceLabel CTRL+A&gt; &gt;</pre>	
Combine these two modifications	<pre>&lt;Modify SelectAll   &lt;KeySequence ^a&gt;   &lt;KeySequenceLabel CTRL+A &gt;&gt;</pre>	

# Command statements

## Command

The command statement is the wrapper definition for the command:

**Syntax** `<Command cmd-name <detail1> <detail2> <detailN>>`

Details may be added to a command also by the *Modify statement* on page 32.

**Cmd-name** A unique name of the command. This serves as a reference between the various statement types.

**Details** For the detail specifications see *Command details* on page 33.

**Examples** See also *Command examples* on page 30.

```
<Command PrintingDisplay
  <ReservedLabel Document &Printing Display>
  <KeySequence \!qqp >
  <KeySeqLabel Esc q q p>
  <Definition \x4F1 \x4F2 \x4F3 \x3F8>
  <Mode All>>
```

**Note:** *This command is defined by 4 function codes which imposes some problems. See the remark at *Multi-code commands* on page 39.*

**Custom command** A custom command must not use an already existing name. Hence it is good practice to prefix the name with an indicator, for example:

```
<Command ETBVertToolBar ...>      Enhanced Toolbar
<Command _MTCharSet ...>         Microtype's Customisation
```

## ShiftCommand

This statement defines a command for a menu item that is chosen while the Shift key is held down. This statement normally appears in a menu file (not a command file).

**Syntax** `<ShiftCommand cmd-unshifted cmd-shifted>>`

**Cmd-unshifted** This is the identifier of the command as it normally appears.

**Cmd-shifted** This is the identifier of the command you want to appear when you hold down the Shift key.

```
<ShiftCommand Save SaveAll>
<ShiftCommand FindNext FindPrevious>
```

**Note:** *Commands defined by ShiftCommand can not be placed in context menus<sup>19</sup>. The insertion of the command (by Add) does not create an error, although the command is not inserted. A further Order command will not find the (not) inserted command and creates an error.*

Example creating the error:

```
<ShiftCommand GraphicsObjProps GraphicsPickObjProps> ...
<Add GraphicsPickObjProps <Menu !GraphicsContextMenu>>
<Order !GraphicsContextMenu.GraphicsPickObjProps
  <After !GraphicsContextMenu.GraphicsObjProps>>
```

## Remove

You can not remove commands. Only the menu entry is removed.

**Syntax** `<Remove cmd-name <Menu menu-id>>`

```
<Remove GraphicsReshape <Menu GraphicsMenu>>
<Remove GraphicsReshape <Menu QuickGraphicsMenu>>
```

## Command for FlyOut in tool bar

Command which is used in a flyout action in a tool bar must use this scheme. The code is always the same. The parameter defines which menu to display:

```
<Command ETBPgfAlignPopup <Label ETB paragraph alignment>
```

<sup>19</sup> I have reported this as bug # 3494702 as of 2013-02-01.

	<code>&lt;Definition \x914&gt;</code>
	<code>&lt;Param ETBPgfAlignMenu&gt;&gt;</code>
ETBPgfAlignMenu	<code>&lt;Menu ETBPgfAlignMenu &lt;Label Alignment&gt;&gt;</code>
	<code>&lt;Add LeftPara &lt;Menu ETBPgfAlignMenu&gt;&gt;</code>
	<code>&lt;Add CenterPara &lt;Menu ETBPgfAlignMenu&gt;&gt;</code>
	<code>&lt;Add RightPara &lt;Menu ETBPgfAlignMenu&gt;&gt;</code>
	<code>&lt;Add FullyJustifyPara &lt;Menu ETBPgfAlignMenu&gt;&gt;</code>

## Modify statement

### Modify

The Modify statement is used to change details of a command. This command must be defined already. The change may affect:

- the label(s)
- the key sequence aka short-cut(s)
- the key sequence label(s)
- The description used in the Search Command function.

**Syntax** `<Modify cmd-name <new-detail1> ... <new-detailn>>`  
`<Modify cmd-name [context-id] <new detail>>`

**Cmd name** This is the name (ID) of the command whose properties shall be modified

**Details** In the Modify statement the same details can be defined as in a Command statement. See [Command details](#) on page 33.

Modifications are cumulative for key sequences (short-cuts)<sup>20</sup>. The other details are overwritten by the newest one.

**Examples** `<Modify NewDocument`  
`<KeySeqLabel Ctrl+N>>`  
`<Modify TerminateMaker`  
`<Label E&xit>> Define Label with access character`

**Renaming a context sensitive command** To rename the label of a context sensitive command, both the command-name and the context-identifier (here: Frame) must be given:

`<Modify SelectAll <ReservedLabel Frame Select Everything in Frame>>`

**Various labels for same command** To get a different label for a command in only one place, define a new command that duplicates the function of the old one (using the same key sequence, definition, and mode), but use a different label. Then put the new command on the menu in place of the old one.

<sup>20</sup> If a customisation file contains short-cut definitions for commands that already have short-cuts defined for them, warning messages may be written to the console log file. This happens with `ConfigWarnKbdRedundant = On` in `maker.ini` (see [\[Preferences\] in maker.ini](#)).

# Command details

## Definition

This defines the function of the command.

**Syntax** `<Definition Fcode1 [Fcode2 ... Fcoden]>`

**Fcode** The function code is the connection between the command and the routine in the application which performs the function. A command may issue several functions, although most commands have only one Fcode associated.

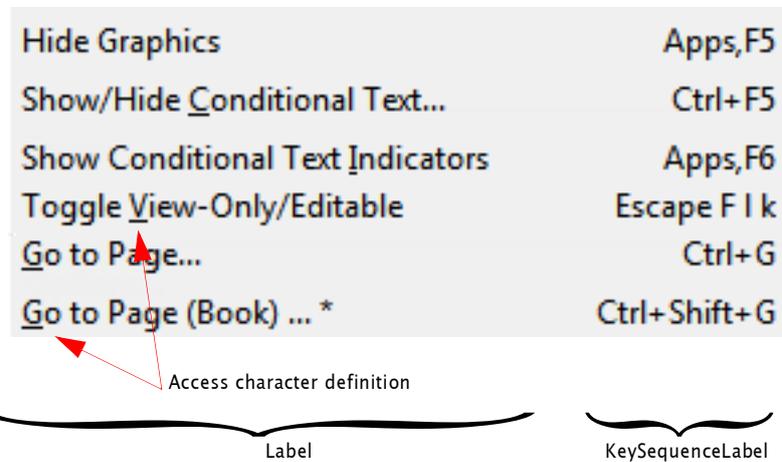
The Fcode is noted as \xnnn with nnn being a hexadecimal number. You can find relevant Fcodes in the FDK<sup>21)</sup> documentation or in the command files or in special lists derived from these files.

**Examples**

<code>&lt;Definition \x300&gt;</code>	Create new document
<code>&lt;Definition \x302&gt;</code>	Command Help
<code>&lt;Definition \x3F1 \x3F2 &gt;</code>	Borders and Text symbols On

## Label

The label defines the entry in a menu. It also provides a default for tool tips on buttons using this command.



**Syntax** `<Label Label-string defining the menu entry>`

**Label string** If an ampersand character (&) is needed in the *Label-string*, it must be doubled. This is due to the fact that the & precedes an access character. This will be underlined in the menu.

**Example** `<Label P&rint Setup...>`

This will display in a menu as **Print Setup...**

## Description

A string used in the function Search Command feature.<sup>22)</sup>

**Syntax** `<Description description-string>`

**Example** `<Description Save book as old FM version [ETB] >`

## ReservedLabel

Some commands have a different label, and a different effect, depending on the context – where the insertion point is, what is selected, and so on. In these cases, the command gets a context-id defining the condition in which it can be chosen. Each of the conditions has a ReservedLabel statement.

**Syntax** `<ReservedLabel context-id Label-string>`

21 In the FrameMaker Developer Kit (FDK) see include\fcodes.h

22 Do not append the KeySeqLabel string. This is automatically appended from the KeySequence definitions.

*Context-id* The following context-ids are used in commands<sup>23</sup>):

Context-id	Condition
Body	Body pages are displayed
Book	Book window is active
CMTOC	Mini TOC can be created here
Ditamap	Ditamap is active
Document	Document is active
Flow	Flow is selected
Frame	Frame is selected
Generic	Set up any generated file
History	History window
Long, Long2	Complete (Long) menus is active
LongMultiple	Multiple book components are selected
LongSingle	Single book component is selected
MacEdition...	Deprecated, since Macintosh is no more supported.
Master	Master pages are displayed
MultiGraphics	More than one object is selected
NoDelete	This page can not be deleted (e.g. Left/Right master page)
NoName	This page has no name (not yet saved)
NotRegistered	Product not yet registered
Other	Other than body pages are displayed
Page	A document page is active
Project	Project pane is active
Redo	Undo command list
Reference	Reference pages are displayed
Repeat	Repeat xxx
Scratch	Probably a left-over from program development
Search	AFAIK only used to search references.
Short, Short2	Short (Quick) menus is active
Straddle	Selected cells are not straddled
Table	Table is selected
TextInset	Text inset is active
TOC, LOF, ...	Set up the respective generated file TOC, LOF, LOT, LOP, LOE, APL, AEL, LOM, AML, LOR, IX, AIX, SIX, IOM, IOR)
ToTable	Selection is paragraph(s)
ToText	Selection is a table
UMTOC	MiniTOC is selected
Undo	Redo command list
Unstraddle	Selected cells are straddled

*Label string* The same rules as with the Label detail apply. See [Label](#) on page 33

Example

```
<Command SelectAll
  <ReservedLabel Flow Select All in Flow>
  <ReservedLabel Frame Select All in Frame>
  <ReservedLabel Page Select All on Page>
```

<sup>23</sup> This table is deducted from the various cmdxxx.cfg files of FM-13. See also *FP\_EnabledWhen* value in the FDK reference.

## KeySequence

... >>

The `SelectAll` command acts as a place holder on the menu for the group of commands: `Flow`, `Frame`, and `Page`, all of which have the same command definition.

The key sequence defines a keyboard short-cut for the command.

Syntax  
Sequence

`<KeySequence sequence>`

This defines the sequence of keystrokes. Two cases must be distinguished: Keys to be pressed together (key group) and keys to be pressed one after the other (key sequence).

If you need the modifier key symbols literally in a sequence, the symbol must be preceded by a solidus (/). For example to use the '+' in a key sequence literally, you provide '/+'.

**Key group** A base key is pressed together with modifier keys. These modifier keys are defined with special symbols:

Escape key: \!  
Shift key: +  
Control key: ^  
Alt key<sup>24</sup>: ~

FM supports only two modifier keys for a key group.(and:, humans have only two hands ...)

**Key Sequence** These sequences mostly start with the Escape key. Non-alphanumeric keys need a special notation<sup>25</sup>:

Escape key: \!  
Function keys: /F1 ... /F12  
Insert key: /Insert

***Note:** Defining a key sequence must consider existing key sequences. If a key sequence ESC,q,q is already defined, ESC,q can no more be defied, because the input process waits for the next q. If You then enter just any other character (e.g. z), nothing will happen. Existing key sequences mostly mimic the menu entries they support. They depend on the UI language. For example the sequence for **Repeat last character modification** is Esc,c,c in the English, and Esc,z,w in the German FrameMaker.*

Examples

`<KeySequence +^b >` Shift+CTRL+B (one key stroke)  
`<KeySequence \!/+c >` Escape, Plus, c (three key strokes)

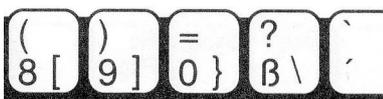
short-cuts on the Equations palette

The short-cuts that appear on the Equations palette can not be customised. This palette is actually a special view-only document containing hypertext commands. The same is true for the Vertical Toolbar.

## KeySeqLabel

Syntax

`<KeySeqLabel descriptive-string>`



24 On European keyboards the right **Alt** key is engraved **AltGr** (Alternate Graphic). Pressing this key together with another key types the special graphic engraved at lower right of the symbol key. **AltGr** is equivalent to **Alt+Ctrl**.

25 Since Windows 95 the following keys available only on Windows Keyboards can no more be used for short cuts in FrameMaker:  
Application Key – also called Menu Key (/Apps) right of the space bar. Its standard function is to open the context menu of an application.  
The Windows logo key (/Win) left of the space bar is used for various Windows functions, for example, to open the Start Menu. See [Wikipedia](http://Wikipedia).

**Descriptive string** This echoes the key sequence of the command. You should distinguish the two cases of key sequences by different notation:

Key group                      Key names concatenated with a '+' sign.

Key sequence                 A list of key-names (separated by blank or comma).

**Examples**

<code>&lt;KeySeqLabel CTRL+A&gt;</code>	Key group
<code>&lt;KeySeqLabel Escape, q, q, e&gt;</code>	Key sequence
<code>&lt;KeySeqLabel Esc q q p&gt;</code>	Key sequence
<code>&lt;KeySeqLabel ALT+Shift+F9&gt;</code>	Key group

**Note:** *FM-14 has a mechanism to derive the KeySeqLabel from the key sequence. Only if a command does not have a KeySequence detail, the command will be displayed on the menu with no short-cut.*

## Mode

The Mode defines the validity of a command for a particular environment.

**Syntax** `<Mode mode >`

**Mode** Defined modes (used in commands) are:

Mode	
All	The default
Math	During Equation editor
NonMath	Anything but Math

**Example** `<Mode NonMath >`

## AsianFonts

To define a command that appears in menus only if your system supports typing Asian text in documents and dialogue boxes, use this detail:

**Syntax** `<AsianFonts Yes>`

**Note:** *AsianFonts No has the same effect as omitting the statement. In this case the command applies to all configurations.*

## Some particularities of commands

### Hypertext commands

- The following hypertext commands can not be used in menu or tool bar: `newlink`, `gotolink`, `gotolinkfitwin`, `previouslink` and `previouslinkfitwin`.

See a synopsis of the hypertext commands at *Synopsis of FM hypertext commands* on page 52.

- It is not possible to define short-cuts for hypertext commands. For example, the short-cut defined in the `Modify` statement is not executed:

```
<Command Test1 <Label Using FrameMaker 11>
  <Hypertext message openfile H:/.../etbfm11-help.pdf>>
<Modify Test1 <KeySequence \!qqq>
  <KeySeqLabel Escape q q q>>
```

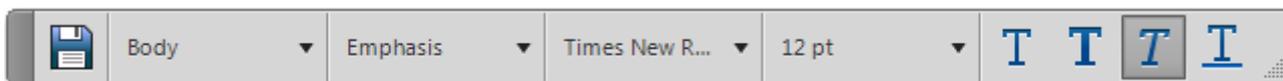
- Hypertext commands do not work in books, neither do short-cuts to hypertext commands in a book window. Although it is possible to define an entry in a book menu for such commands, they are inactive (greyed out).
- It is possible to define FM read only documents containing buttons with hypertext commands. Examples are the Equations palette and the Vertical tool bar. See more on this method on [www.daube.ch](http://www.daube.ch).

### Hypertext commands in tool bars

In tool bars the same hypertext commands as in menus are possible. However, they do not work, if the command is only used in the toolbar. Hence it is necessary to at least define a dummy menu entry. See *Menu and tool bar files* on page 54.

### Note on drop-down lists

More than one drop-down list can appear in a tool bar<sup>26</sup>:



### Scripts as commands

#### Binary scripts

Binary scripts (\*.jsxbin) must reside in the **Startup** folder of the user area. They define the command name and a menu where used (See *Menu and tool bar files* on page 54).

Binary scripts can not be addresses by a hypertext command<sup>27</sup>.

The general procedure is this [[Ric Quatro](#)]:

- 1 Create a new custom command in your script.
- 2 Use the built in `Command` function to wait for the custom command to be invoked and have it call a function with your simple code in it.
- 3 Optionally compile the script to a `jsxbin` and install it in the **Startup** folder.

**Note:** See *File simple.jsx* on page 16 for an example. This will, however run at start of FM also, not just on demand by a button or menu. To avoid running at start of FM you need to add a `Notify` function:

```
function SetupNotifications () { // Watch for the following notifications =====
  Notification (Constants.FA_Note_PostActiveDocChange, true);
} // --- end SetupNotifications
```

<sup>26</sup> Example provided by Shmuel Wolfson.

<sup>27</sup> This is, because no program association can be defined for such files. A `xxx.jsxbin` file would just be opened in Notepad and of course presents gibberish.

```
function Notify (note, object, sparam, iparam) { // Handle triggered events =====
  if (typeof wSaveOld == "undefined") {return;} // just started in StartUp folder
  switch (note) {
    ...
  } // --- end Notify
```

The item in red is the name of the window (dialogue, panel) object.

Source scripts Source scripts (\*.jsx) can reside in the Startup folder of the user area, but also in the general script folder at %userprofile%\Documents\Adobe Scripts.

## Simulating alert and alerttitle

The following ExtendScript is a replacement for the alert/alerttitle hypertext commands:

```
// ETBnudge.jsx
// to be placed in C:/Users/Klaus/Documents/Adobe Scripts/
#target framemaker

var msgtitle = "Nudging objects";
var msg = "At zoom 100% unit is 1pt; at zoom 353% unit is 0.1mm"
  + "\n• Use ALT+arrow to nudge 1 unit"
  + "\n• Use SHIFT+ALT+arrow to nudge 6 units"
  + "\n\nATTENTION: SHIFT+ALT (without arrow) changes the system locale."
  + "Check your system tray, if keyboard behaves strangely!";

alert(msg, msgtitle);
```

## Keyboard short-cuts

For ordinary commands (not hypertext commands) keyboard short-cuts can be redefined. However, this will provoke a log message if ConfigWarnKbdOverride = On is set in maker.ini. Even an unmodified FM-UI will issue such messages<sup>28</sup>).

If the same short cut is given more than once to a command, another message is issued if ConfigWarnKbdRedundant = On is set in maker.ini<sup>29</sup>). This happens in particular for settings both in customui.cfg and in the menu file in %appdata% – which is common for many UI modifications.

## Command overloading

A command (name) can be redefined<sup>30</sup>). Initial definition:

```
<Command Test2
  <Label Using FrameMaker 11>
  <Hypertext message URL http://help.adobe.com/en_US/.../11.0/Using/index.html>
  <KeySequence \!qqq>
  <KeySeqLabel Escape q q q>>
```

Later definition

```
<Command Test2
  <Hypertext alert Test2 is testing hypertext> >
  <Add Test2 <Menu ViewMenu>>
```

Result The short-cut ESCqqq brings up an alert that says “Test2 is testing hypertext”.

28 For example: The short-cut !ph in file FMPublisher overrides one or more previous short-cuts.

29 For example The short-cut !SFL in file \$HOME\fmnit\configui\structured\wysiwygview\wincmds.cfg is a duplicate of an existing short-cut.

30 Lynne Price, 2014-10-23

## Multi-code commands

For multi-code commands only two of the three UI elements may be defined: button, menu item, short-cut. If all three are defined, then only the first code will be executed.<sup>31)</sup>

For the following no menu item will be defined:

```
<Command EditingDisplay
  <ReservedLabel Document &Editing Display>
  <KeySequence \!qqe >
  <KeySeqLabel Esc q q e>
  <Definition \x3F1 \x3F2 >
  <Mode All>>
```

And for the following only a menu item (and no short-cut or button) will be defined:

```
<Command ETBGoToMasterPage
  <Definition \x343 \x345 >
  <Label Go to a Specific Master Page... >>
<Add ETBGoToMasterPage <Menu ViewMenu>>
  <Order ViewMenu.ETBGoToMasterPage
  <Before ViewMenu.ViewMasterPages>>
```

## OWL commands

The new interface requires special commands:

Show next tab in panel group

```
<Command ShowNextKit <Label Show Next>
  <KeySequence ^ /F6>
  <Definition \x971>
  <Mode All>>
```

Show previous tab in panel group

```
<Command ShowPrevKit <Label Show Previous>
  <KeySequence ^ +/F6>
  <Definition \x972>
  <Mode All>>
```

???

```
<Command ThemeLoad <Label LoadTheme...>
  <KeySequence \!LT>
  <Definition \x974>
  <Mode All>>
```

???

```
<Command ThemeSave <Label SaveTheme...>
  <KeySequence \!ST>
  <Definition \x975>
  <Mode All>>
```

Toggle between the following 3 screen modes

```
<Command ToggleScreenMode <Label Toggle Screen Mode>
  <KeySequence ~+/Return>
  <KeySequence \!SMt>
  <Definition \x978>
  <Mode All>>
```

Standard mode (UI, normal size)

```
<Command ScreenModeStandard <Label Standard Screen Mode>
  <KeySequence \!SMs>
  <Definition \x979>
  <Mode All>>
```

Full width with UI

```
<Command ScreenModeFullWithUi <Label Full Screen Mode with UI>
  <KeySequence \!SMu>
  <Definition \x97A>
  <Mode All>>
```

Full screen, no UI

```
<Command ScreenModeFullScreen <Label Full Screen Mode>
  <KeySequence \!SMf>
  <Definition \x97B>
  <Mode All>>
```

Preferences > Interface

```
<Command UiPreferences <Label Interface...>
  <KeySequence \!ip>
```

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<sup>31</sup> This is a problem since FM-9 and is most likely a consequence of the new user interface.

Preferences > Alert Strings

```
<Definition \x980>
<Mode All>>

<Command UiAlertStringsPreferences <Label Alert Strings...>
<KeySequence \!asp>
<Definition \x981>
<Mode All>>
```

Show all tool bars

```
<Command ToolBarShowAll <Label Show All>
<KeySequence \!TSA>
<Definition \x989>
<Mode All>>
```

Hide all tool bars

```
<Command ToolBarHideAll <Label Hide All>
<KeySequence \!THA>
<Definition \x98A>
<Mode All>>
```

### Some graphic commands

Keep next selected graphic tool active

```
<Command GraphicsKeepTool
<Label Keep Tool>
<KeySequence \!gk>
```

This keeps the next selected graphic tool active until SmartSelectionTool is activated.

Operate on hot spot graphic

```
<Command GraphicsCreateLink
<Label Create Link to graphic...>
<KeySequence \!gcl>
```

Operate on hot spot graphic

```
<Command GraphicsCreateLinkTable
<Label Create link table for graphic...>
<KeySequence \!gct>
```

### Dead commands

Following commands do nothing since FM-9:

```
<Command !WindowOpen** Not supported on all platforms **
<Label Open>
<KeySequence \!wo>

<Command ViewPublisherBoundaries
<Label Publisher Boundaries>
<KeySequence \!vl> (lowercase L)

<Command ReportCmds_byShortcut
<Label Report Commands by short-cuts>
<KeySequence \!SCR2>
```

### Viewer popup command

The commands for the viewer (and a locked document) also work in the ordinary edit window:

Command	KeySequence	Definiiton
GotoNextPage	\!pn	\x34D
GotoPreviousPage	\!pp	\x34C
GotoFirstPage	\!pf	\x340
GotoLastPage	\!pl	\x341
GotoPreviousScreen	\!vsp	\xD40
GotoNextScreen	\!vsn	\xD41

# Command names from plugins and scripts

Available commands have various sources. Even native FrameMaker comes with plugins: `mapper.dll`, `masterpages.dll` etc. Most installations add scripts, both started automatically or on demand.

To be able to set up custom menus and tool bars it is necessary to get the command names from these sources. The best method is to use the free [FrameScript Report FM-commands](#) from itl.

## Plugins

For example, the plugin `AutoText.dll` from Silicon Prairie Software creates commands which depend on a table in the related document `AutoText.fm`. This is an excerpt of these commands from my personal settings in the table:

Command name	Command label	short-cut	FCode
Editors note in frame [ctrl+3]	Editors note in frame [ctrl+3]	Ctrl+3	1400DF0
Callout figure [ctrl+4]	Callout figure [ctrl+4]	Ctrl+4	1410DF0
Frame outside column [ctrl+4]	Frame outside column [ctrl+4]	Ctrl+5	1420DF0
Icon frame [ctrl+6]	Icon frame [ctrl+6]	Ctrl+6	1430DF0

## ExtendScript

ExtendScript `simple.jsx` (see [File simple.jsx](#) on page 16) creates the following commands:

Command name	Command label	FCode
msgJS	JS alert	18B0DF0
msgFM	FM Alert	18C0DF0

You see that there is no relation between the script file name and the command names.

The above example does not define keyboard short-cuts for the menu entries, because at that time I did not know how to do it.

To define a short cut the last parameter in `DefineAndAddComand` gets the key-sequence. Be aware to double the `\` for the ESC notation (ESC, q, j and ESC, q, f). See [KeySequence](#) on page 35.

You also want to indicate these short cuts in the menu entries. There are two methods:

### Short cut label by TAB

As known from the example ([ExtendScript](#) on page 41) the following actually precedes the Define Short cut section in the script:

```
var oMenus = {}, menuLocation, simpleMenu;
oMenus.MenuMain = "Test Alerts";
oMenus.MenuJS = "Alert by JS\tESC,q,j";
oMenus.MenuFM = "Alert by FM\tESC,q,f";
menuLocation = app.GetNamedMenu("!MakerMainMenu");
simpleMenu = menuLocation.DefineAndAddMenu("Simple", oMenus.MenuMain);
simpleMenu.DefineAndAddCommand(1,"msgJS","JS alert","\!qj");
simpleMenu.DefineAndAddCommand(2,"msgFM","FM Alert","\!qf");
UpdateMenus();

function Command(cmd){
switch(cmd) {
case 1:
alert (msg1, "Message title");
break;
case 2:
```

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```

    Alert(msg2, Constants.FF_ALERT_CONTINUE_NOTE);
    break;
}
}

```

#### Explicit definition of short-cut label

The command property `KeyboardShortcutLabel` is used for this method. To me it is not clear why this is a property of the command and not of the menu item.

```

var oMenus = {}, menuLocation, simpleMenu, commandJS, commandFM;
oMenus.MenuMain = "Test Alerts";
oMenus.MenuJS = "Alert by JS";
oMenus.MenuFM = "Alert by FM";
commandJS = 1, "msgJS", "JS alert", "\\!qj");
commandJS.KeyboardShortcutLabel = "ESC,q,j";
commandFM = 2, "msgFM", "FM Alert", "\\!qf"
commandFM.KeyboardShortcutLabel = "ESC,q,f";
menuLocation = app.GetNamedMenu("!MakerMainMenu");
simpleMenu = menuLocation.DefineAndAddMenu("Simple", oMenus.MenuMain);
simpleMenu.DefineAndAddCommand(commandJS);
simpleMenu.DefineAndAddCommand(commandFM);
UpdateMenus();

function Command(cmd){
switch(cmd) {
  case 1:
    alert (msg1, "Message title");
    break;
  case 2:
    Alert(msg2, Constants.FF_ALERT_CONTINUE_NOTE);
    break;
}
}

```

## FrameScript

**Note:** This example is part of the download of [FM-customisation-example.zip](#).

Ordinary scripts get generic names (ESLRUNxxx) which may change from FrameMaker start to start. Hence a menu or tool bar using these can not be distributed to other installations.

Command name	Command label	FCode
ESLSSRUN306	Primitive	18E0DF0
ESLSSRUN307	Something Else	18F0DF0

To get a static command name to be used in a menu or tool bar the script must be set up as an EventScript.

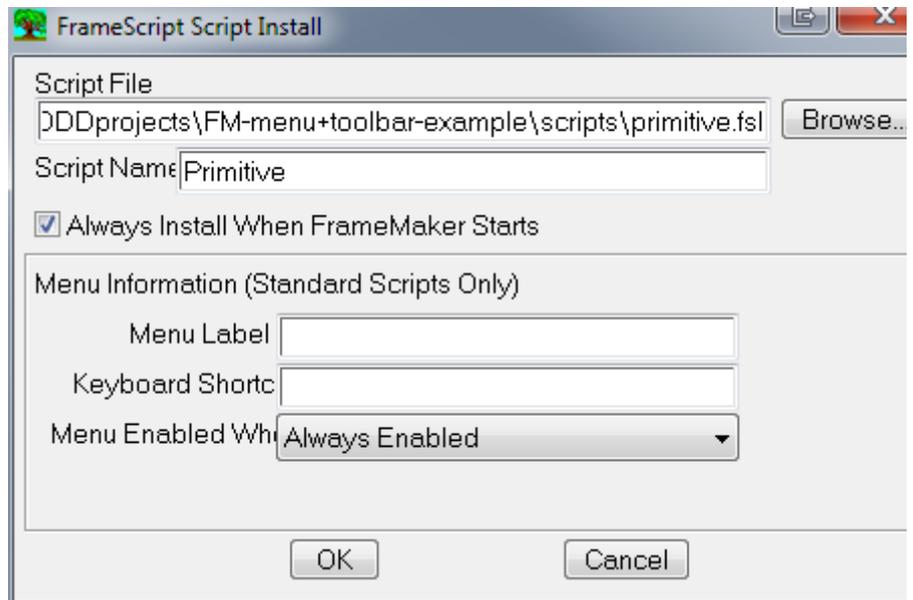
- EventScripts must be installed, not just run.
- In an EventScript commands must reside within Events.
- Menus and commands are defined within the Event Initialize.
- It is good practice to remove the menu with Event Terminate.
- A menu item is not necessary, if the command is used in a toolbar only.

The installed script FrameScript primitive.fsl (see [File primitive.fsl](#) on page 16) gets the following properties:

Command name	Command label	FCode
MyCommand1	My Command 1	A0DF0

**Note:** Be aware that the FCodes generated for the script may differ from FM session to FM session! Hence do not use them.

### Installing the example script



Since this example script has no menu entry, you do not see an action of it as long as you do not have a toolbar with a button ...

## Menu statements

**Note:** *Commands do not need a corresponding menu entry. They may be invoked by a keyboard short cut or a button only.*

### Menu

A new menu or sub menu is defined with this statement:

Syntax	<code>&lt;Menu menu-name &lt;Label menu-label&gt;&gt;</code>
Examples	<code>&lt;Menu ETBmenu &lt;Label Enhanced Toolbar (ETB)&gt;&gt;</code> <code>&lt;Menu ETBlocalDocuments &lt;Label Local documentation (pdf)&gt;&gt;</code>

### Reserved menu

Many of the menus defined in the standard menu files for FrameMaker are reserved menus. FrameMaker has intrinsic knowledge about reserved menus; it can refer to these menus directly by name.

Syntax	<code>&lt;ReservedMenu !menu-name &lt;Label menu-label&gt;&gt;</code>
Menu-name	FrameMaker relies on Permanent menus and also on Context menus. Both are defined with the ReservedMenu statement in the standard menu files. Custom menus must not use names of these reserved menus. It is a good idea to prefix custom menu names by a project abbreviation. For example, <b>ETBmenu</b> or <b>!_MTmenu</b> .
Menu-label	The Label detail is the same as for commands, because the command is represented in the menu item. See <a href="#">Label</a> on page 33.
Reserved menus	By convention, the names of reserved menus begin with an exclamation point (!). The highlighted items in the table are permanent menus <sup>32</sup> .

Menu ID	Description
<b>!BookMainMenu</b>	Menu bar for complete menus (book window active)
<b>!CustomMakerMainMenu</b>	Menu bar for custom menus (document window active)
<b>!EmbeddedObjectMenu</b>	Submenu <b>Edit &gt; Object</b>
<b>!HelpMenu</b>	Menu <b>Help</b>
<b>!MakerMainMenu</b>	Menu bar for complete menus (document window active)
<b>!MenusMenu</b>	Submenu <b>View &gt; Menus</b>
<b>!MSWindowMenu</b>	Menu <b>Window</b>
<b>!QuickBookMainMenu</b>	Menu bar for quick menus (book window active)
<b>!QuickMakerMainMenu</b>	Menu bar for quick menus (document window active)
<b>!RulerAlignMenu</b>	¶-alignment pop-up menu in the formatting bar
<b>!RulerAlignMenu</b>	¶-alignment pop-up menu in the formatting bar
<b>!RulerControlMenu</b>	Formatting bar: commands !ShowRulerToggle, !ShowRulerAlignmentSpacingAndTabs and !ShowRulerParagraphTags - all with an empty definition (\x0).
<b>!RulerParaMenu</b>	¶-formats pop-up menu in the formatting tool bar
<b>!RulerSpaceMenu</b>	Line-spacing pop-up menu in the formatting tool bar
<b>!StructureViewMainMenu</b> <sup>a</sup>	Structure menu bar (structured product interface only)
<b>!ViewOnlyMainMenu</b> <sup>a</sup>	View-only menu bar

a. Not used in any of the FM-14 \*cfg files - deprecated?

### Permanent menus

FrameMaker relies on some menus existing. In the table of Reserved Menus their ID is bold. You cannot remove these menus from a menu configuration file. FrameMaker will not work properly without them.

<sup>32</sup> This table is deducted from the various cmdxxx.cfg files of FM-13.

## Context menus

The default context menu for a particular selection does not contain every possible command. If a menu item is not applicable to the selection and the current state of FM, the menu item will be dimmed.

Context menus can not contain shifted commands. See *ShiftCommand* on page 31).

Context menus can also be displayed by pressing **Shift+F10**. In this case, the appearing menu depends on whether there exists a selected object, an insertion point, or neither.<sup>33)</sup>

Context menu id	Object providing the context
!AnchoredFrameContextMenu	an anchored frame
!AutoSpellCheckContextMenu	
!BookContextMenu	a book window
!BookContextMenuContainer	
!DitamapContextMenu	
!DitamapContextMenuContainer	
!DocumentContextMenu	the document as a whole (no active insertion point and nothing selected)
!EmbeddedObjectContextMenu	an OLE object
!GraphicsContextMenu	all graphic objects except an anchored frame
!MathContextMenu	an equation
!MiniTOCContextMenu	Mini TOC
!MultiGraphicsContextMenu	any grouped graphic object
!ProjectContextMen	
!ProjectContextMenuContainer	
!QuickBookContextMenu	a book window when Quick Menus is the current menu set up
!QuickBookContextMenuContainer	
!StructureContextMenu	the Structure View in FrameMaker+SGML
!StructuredTextContextMenu	text in a structured text flow in FrameMaker+SGML
!TableContextMenu	a table
!TableTextContextMenu	text in a table
!TextContextMenu	text
!TextLineContextMenu	text line selected as text
!TextLineGraphicContextMenu	text lines selected as graphic objects
!ViewerPopup	a View-only document window
!ViewOnlyBookContextMenu	a View-only book window
!ViewOnlyBookContextMenuContainer	
!ViewOnlyDitamapContextMenu	DitaMap
!ViewOnlyDitamapContextMenuContainer	
!ViewOnlyDitamapContextMenuUnsupp	
!TableMenuInTextContextMenu	

## Add

This statement adds an item to a menu at the end of the already existing entries. Hence normally a corresponding Order statement exists in a customisation file.

Syntax

```
<Add command <Menu menu-name>>
<Add submenu-name <Menu menu-name>>
<Add Separator <Menu menu-name>>
```

<sup>33</sup> This table is deduced from the various cmdxxx.cfg files of FM-13. See also *FP\_EnabledWhen* value in the FDK reference.

<i>Command</i>	This identifies an already defined command.
<i>Submenu-name</i>	This identifies an already defined menu.
<i>Menu-name</i>	Name of the menu to which the command or sub-menu shall be added.
<i>Separator n</i>	Within a menu the separators must be numbered to get unique names for an Order statement.
<i>Examples</i>	<pre>&lt;Add Open           &lt;Menu FileMenu&gt;&gt; &lt;Add ETBspecial    &lt;Menu ETBmenu&gt;&gt; &lt;Add Seaprator5    &lt;Menu ETBmenu&gt;&gt;</pre>

## Order

This statement defines where a menu entry shall be placed in the menu.

<i>Syntax</i>	<pre>&lt;Order <i>menu.new-item</i> &lt;First <i>menu</i>&gt;&gt; &lt;Order <i>menu.new-item</i> &lt;Last <i>menu</i>&gt;&gt; &lt;Order <i>menu.new-item</i> &lt;Before <i>menu.ref-item</i>&gt;&gt; &lt;Order <i>menu.new-item</i> &lt;After <i>menu.ref-item</i>&gt;&gt;</pre>
<i>Menu</i>	The menu we are talking about, defined by a Menu statement.
<i>New-item</i>	The item to be placed. It has been defined in the <i>menu</i> .
<i>Ref-item</i>	The reference item in <i>menu</i> relative to which the new item is inserted.
<i>Examples</i>	<pre>&lt;Order !TextLineContextMenu.SpecialCharsContext   &lt;Before !TextLineContextMenu.Undo&gt;&gt; &lt;Order !TextLineContextMenu.Separator1   &lt;Before !TextLineContextMenu.Undo&gt;&gt; &lt;Order ViewMenu.ViewGraphicsOn   &lt;Before ViewMenu.Separator3&gt;&gt;</pre>

# Workspace definition

Workspaces are defined in files `xxx.cfws` (current) and `xxx.fws` (last saved). In most cases we need not create or modify (besides line 2) such a file.

## Modify or create workspace

Menus and toolbars appear in a view due to the file location of them. Multiple workspaces can be defined for a particular view. Activating a newly introduced toolbar (docked or undocked) modifies the current workspace, which can be saved to a new name.

## workspace file

The following is the definition of custom workspace `Custom.cfws` which refers to a custom menu file and a custom tool-set file (long lines are truncated to display the structure):

```

1 <FrameUI version="1">
2   <data type="all" menuFile="custom_menus.cfg" toolbarFile="custom_toolset.xml"/>
3   <fm-workspace>
4     <workspace version="1">
5       <dock anchor="left" content="palette toolbar" is-closed="false"/>
6       <dock anchor="right" content="palette toolbar" is-closed="false">
7         <tab-pane mode="expanded" preferred-iconic-length="0" layout-mode="auto-flow">
8           <tab-group active-palette="00070CB2" is-closed="false">
9             <palette id="00070CB2" is-closed="false" preferred-unconstrained-size="135
10            <palette id="00060F46" is-closed="false" preferred-unconstrained-size="135
11            <palette id="000A10CE" is-closed="false" preferred-unconstrained-size="135
12            <palette id="00060BAA" is-closed="false" preferred-unconstrained-size="135
13          </tab-group>
14          <tab-group active-palette="00060DD6" is-closed="false">
15            <palette id="000C1118" is-closed="false" preferred-unconstrained-size="317
16            <palette id="00060DD6" is-closed="false" preferred-unconstrained-size="359
17          </tab-group>
18        </tab-pane>
19      </dock>
20      <dock anchor="top" content="multi-control-bar" is-closed="false">
21        <control-bar-pane >
22          <control-bar id="00060B9A" origin="4 35" size="858 34" is-closed="false" app-
23        </control-bar-pane>
24      </dock>
25      <dock anchor="bottom" content="palette" is-closed="false"/>
26    </workspace>
27  </fm-workspace>
28 </FrameUI>

```

Key in the workspace file are the **palette** and **control-bar** statements, which hold various information about the panels and toolbars.

*Note:* For customisation we are normally only dealing with the second line which defines the menu set and the toolbar set. Be aware that xml comments are removed from workspace files!

## Size of toolbar

Only if a drop down box appears in the toolbar you may need to adjust the size parameters in the **control-bar** statement. You do this after the workspace file has been created. Normally you adjust the parameters `size = preferred-size` and then minimum and maximum.

```

<control-bar id="004C0966" origin="874 31" size="255 34" is-closed="false" app-
data="#lt;control-bar cb-data="#quot;custom_tb#quot; minimum-size=#quot;240 34#quot; maximum-
size=#quot;300 34#quot; preferred-size=#quot;255 34#quot;/>"/>

```

## Custom menu

If you want to refer to a custom menu you will change the references in line 2, for example

from

```
<data type="all" menuFile="menus.cfg" toolbarFile="fmttoolbar.xml"/>
```

to

```
<data type="all" menuFile="custom_menus.cfg" toolbarFile="fmttoolbar.xml"/>
```

You also need to set up a menu file `custom-menus.cfg` and place it in appropriate directory.

## Custom toolbar set

If you want to refer to a custom toolbar set, you will change the references in line 2, for example

from

```
<data type="all" menuFile="menus.cfg" toolbarFile="fmttoolbar.xml"/>
```

to

```
<data type="all" menuFile="menus.cfg" toolbarFile="custom_toolbar.xml"/>
```

You will set up a corresponding list of toolbars in `custom_toolset.xml`. This list refers to the individual tool bar files.

**Note:** *Toolbars containing a drop-down list can not be docked left or right to become oriented vertically!*

# Problems and pitfalls

You have set up the menu and tool bar modification carefully, but you still have issues....

## Button is not active

Although the cursor is in the proper environment, the button may not become active. The following cause is particularly prone to Popup drop-down menus:

Switch to another work space and then back to the one in which you have modified the tool bar. After switching back to that workspace the tool bar icon is active and I can select the proper function and everything works as expected!

Menu file	<pre>&lt;Command ETBCellAlignPopup   &lt;Label Cell Alignment... [ETB]&gt;   &lt;Definition \x914&gt;   &lt;Param ETBCellAlignMenu&gt;&gt;  &lt;Menu ETBCellAlignMenu &lt;Label Cell Alignment... [ETB]&gt;&gt;   &lt;Add AlignTop      &lt;Menu ETBCellAlignMenu&gt;&gt;   &lt;Add AlignMiddle   &lt;Menu ETBCellAlignMenu&gt;&gt;   &lt;Add AlignBottom   &lt;Menu ETBCellAlignMenu&gt;&gt;</pre>
Toolbar	<pre>&lt;FLYOUT command="ETBCellAlignPopup" tooltip="Cell Alignment..."&gt;   &lt;images base="etb_icons\table_cell_align"/&gt; &lt;/FLYOUT&gt;</pre>

## Multi-code command does not work

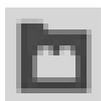
Since FM-9 (the new interface) multi-code commands work only correctly, if only two of the three UI elements may be defined: button, menu item, short cut. If all three are defined, then only the first code will be executed.

Hence it is possible to have multi-code commands, as long as they - for example - only serve a tool bar button:

Menu file	<pre>&lt;Command ETBPrintingDisplay   &lt;Label Document &amp;Printing Display&gt;   &lt;Definition \x4F1 \x4F2 \x4F3 \x3F8&gt;&gt;</pre>
Toolbar	<pre>&lt;ACTION command="ETBPrintingDisplay"   tooltip="Hide frames and text symbols"&gt;   &lt;images base="etb_icons\display_print"/&gt; &lt;/ACTION&gt;</pre>

## Strange button image

If the image can not be found in the given location (see [Location of icons files](#) on page 27) you get only a default image:



# Initialisation files maker.ini and others

The \*.ini files are a standard Windows initialisation files which are divided into sections. Section names are enclosed in brackets. The equal sign may be surrounded by spaces:

```
[Frame]
ProductInterface=FrameMaker
; Comment lines start with a semicolon.
```

The coding of these files vary. Most use the Windows cp 1252, maker.ini uses UTF-8.

When opening an initialisation file in FrameMaker, assure to open it as **Text**. When you're finished editing the file, use the **Save As** command to save it as **Text Only**.

For FM-13 the maker.ini file comprises about 350 entries. Some of them are necessary to get back the behaviour of previous FM-versions , for example

```
SymbolSortingBeforeAlphaNumeric = On
```

Since FM-7.1 the file in \$HOME is considered the master file and only the file in the user-area should be modified. These files are now coded in UTF-8. Special characters can still be defined in the traditional way:

```
FindSpaceBefore=On
!%),. : ; ? ] } \ u00bb \u201d \u2019 \u203a
;SmartQuotes \xd4\xd5\xd2\xd3 ) English curved
quotes
SmartQuotes=‘ ’“ ”
```

The last line shown above uses the Unicode of the characters, while the comment line uses the traditional FrameRoman notation.

Of course it is possible to establish a complete copy of the \$HOME file in the user-area and then open FrameMaker. However, some entries, such as ProductInterface are not present in the main file. They describe items which might differ between users of the same system.

## Other ini files

Special features are supported by additional ini files<sup>34</sup>):

Initialisation file	Purpose, used by
AuthorView.ini	Set-up of the Author View
ditafm-output.ini	Set-up for DITA output processing
ditafm.ini	Set-up for DITA processing
DynaHelpPreview.ini	Publisher: Dynamic Help extension
MathFlowPlugin.ini	Set-up of the none-Adobe plug-in MathFlow
ModalDialogPosition.ini	Save the current positions of the modal dialogues
pdfsize.ini	Settings from Format > Document > Optimise PDF Size > Options
SkinGallery.ini	Publisher: skins (WebHelp, WildFire, AirHelp)
sqSkin.ini	Publisher: sqSkin extension
WHATSTHS.INI	Set-up for the What's This function of Publisher
XmlCodeView.ini	Set-up of the XML Code View

<sup>34</sup> List according to FM-13 installation.

## Entries in ini files

To avoid redundancy I do not list the entries of `maker.ini` and other `ini` files here. Look at [www.daube.ch](http://www.daube.ch) for a maintained list. The list by Adobe ( **Help > Help Topics >**

**5<sup>th</sup> icon (FrameMaker Help Center) > FrameMaker Resources**) is not well maintained.

# Synopsis of FM hypertext commands

Command (drop down list in FM)	Syntax	Example <sup>d)</sup>													
Alert <sup>h)</sup>	<code>alert text</code>	 <code>alert</code> Time for lunch now! <sup>i)</sup>													
Alert with title <sup>h)</sup>	<code>alerttitle title:text</code>	<code>alerttitle</code> Hello - I'm the title:This is in the first line\x0dand this is in the next.													
Specify named destination	<code>newlink name</code>	<code>newlink</code> here_we_go													
Jump to named destination	<code>gotolink name</code>	<code>gotolink</code> hereafter													
Jump to ... and fit to page	<code>gotolinkfitwin path:link</code>	<code>gotolinkfitwin</code> hereafter													
Jump to first page in file <sup>j)</sup>	<code>gotolink path:firstpage</code>	<code>gotolink</code> dummy.fm:firstpage													
Jump to last page in file	<code>gotolink path:lastpage</code>	<code>gotolink</code> dummy.fm:lastpage													
Jump to page number	<code>gotopage path:pagenumber</code>	<code>gotopage</code> dummy.fm:2 <sup>k)</sup>													
Jump to previous page / next page of current document	<code>previouspage</code> <code>nextpage</code>	<code>previouspage</code> <code>nextpage</code>													
Jump back (to last view)	<code>previouslink</code>	<code>previouslink</code>													
Jump Back & Fit To Page	<code>previouslinkfitwin</code>	<code>previouslinkfitwin</code>													
Open document	<code>openlink path</code>	<code>openlink</code> dummy.fm													
Open document ... and fit to page (same type as source: fm or pdf) <sup>l)</sup>	<code>openlinkfitwin path</code>	<code>openlinkfitwin</code> dummy.fm													
Open Document As New	<code>opennew path</code>	<code>opennew</code> H:/Adobe/framemaker.13en/AdobeFrameMaker2015/Templates/Book/Chapter.f													
Open document at first/last page <sup>j)</sup>	<code>openlink path:firstpage</code> <code>openlink path:lastpage</code>	<code>openlink</code> dummy.fm:firstpage <code>openlink</code> dummy.fm:lastpage													
Open document at page number	<code>openpage path:pagenumber</code>	<code>openpage</code> dummy.fm:2													
Go to URL	<code>message URL url</code>	<code>message URL</code> http://www.daube.ch/docu/fmaker00.html													
Message client: Open document with associated application	<code>message openfile path<sup>l)</sup></code>	<code>message openfile</code> C:\Windows\win.ini													
Launch Windows application	<code>message winexec application path[,windowstate]<sup>n)</sup></code>	Start the Windows calculator (C:\WINDOWS\System32\calc.exe)													
Popup menu (works only in FrameMakerView mode)	<code>popup textflow_on_refpage</code>	<code>popup</code> popup1													
<table border="1" data-bbox="82 1467 402 1751"> <tr><td>Variables</td></tr> <tr><td>Cross references</td></tr> <tr><td>Update references</td></tr> <tr><td>Footnotes</td></tr> <tr><td>Hyperlinks</td></tr> <tr><td>Bibliographies</td></tr> </table>	Variables	Cross references	Update references	Footnotes	Hyperlinks	Bibliographies	<table border="1" data-bbox="454 1444 774 1668"> <tr><td>Popup Menu Sample</td></tr> <tr><td>Variables<sup>T</sup></td></tr> <tr><td>Cross references<sup>T</sup></td></tr> <tr><td>Update references<sup>T</sup></td></tr> <tr><td>Footnotes<sup>T</sup></td></tr> <tr><td>Hyperlinks<sup>T</sup></td></tr> <tr><td>Bibliographies<sup>T</sup></td></tr> </table>	Popup Menu Sample	Variables <sup>T</sup>	Cross references <sup>T</sup>	Update references <sup>T</sup>	Footnotes <sup>T</sup>	Hyperlinks <sup>T</sup>	Bibliographies <sup>T</sup>	The marker in the text flow contains a hypertext command <code>gotolink xxx</code> with xxx being the name in a hypertext marker <code>newlink xxx</code> at the location to be jumped to with the menu.
Variables															
Cross references															
Update references															
Footnotes															
Hyperlinks															
Bibliographies															
Popup Menu Sample															
Variables <sup>T</sup>															
Cross references <sup>T</sup>															
Update references <sup>T</sup>															
Footnotes <sup>T</sup>															
Hyperlinks <sup>T</sup>															
Bibliographies <sup>T</sup>															
Button matrix	<code>matrix nrows ncolumns flowname</code>	Equation palette, Vertical toolbar													
Close current window	<code>quit</code>	<code>quit</code>													
Close all hypertext windows	<code>quitall</code>	<code>quitall</code>													
Exit Framemaker application	<code>exit</code>	<code>exit</code>													

## Notes

- d Be aware that not all examples will work on your system.
- e M: equivalent function from Acrobat menu available.

- f Y = works in principle, but certain restrictions apply.
- g Hypertext commands indicated with Y work in `menus.cfg` files. The same commands work in toolbar files (e.g. `quick-access.xml`) only, if also used in a menu! This can be a menu which is not inserted in an existing menu (I call this an orcus-menu). See *Menu and tool bar files* on page 54.
- h In PDF this will be a text note, the title will not be presented as such, but stay within the text. See also *Difference in presentation* on page 53.
- i To get line breaks in the `alert` and `alerttitle` display, use `\x0d` in the FM-document and `\x09` in command `config` files. Inspecting the hypertext marker later will display the `\x0d` as blank. A tab may be inserted as `\r` in the FM document and as `\x08` in `config` files.
- j FrameMaker hyperlinks have two variations: `goto` and `open`. The `goto` variation displays the target document in the current window (closing the currently-displayed file); the `open` variation displays the target document in a new window, leaving the current document open. If you hold the Shift key when activating a link/cross-ref with `Ctrl+Alt/link` (that is, `Ctrl+Alt+Shift+click`), the `goto...` is interpreted as an `open...` action (and vice versa).
- k The current document will be closed (user prompt, if edited), before the linked document is opened. “Jump Back” opens the current document again.
- l For this command both the backslash and the solidus are allowed in path names.
- m If the file is a binary script, it will be opened in Notepad rather than executed.
- n The window state is a string constant such as `SW_SHOWMAXIMIZED` (see help for more).
- o To test a popup switch the document to View only by locking it. The flow with same name as the popup must be located on a reference page.

## File paths

In file paths or URLs the backslash is not valid. The solidus (normal slash) must be used. Both absolute and relative paths (relative to current document) are possible.

same folder	message URL <code>file.ext</code>
sub-folder	message URL <code>subfolder/file.ext</code>
parallel folder	message URL <code>../folder/file.ext</code>
one level above	message URL <code>../../upperfolder/file.ext</code>

This destination is used in the example hyperlinks above.

Both in the FM document and in the `cfg` files the carriage return and the  need unusual coding.

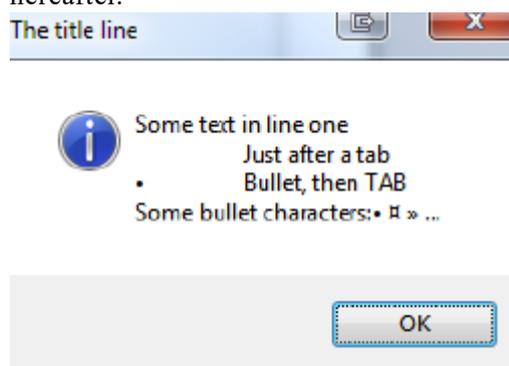
`alerttitle` The title line: Some text in line one\r\x09Just after a tab\r•\x09Bullet, then TAB\rSome bullet characters:•  
 ⌘ » ...

## Target of gotolink

## Difference in presentation

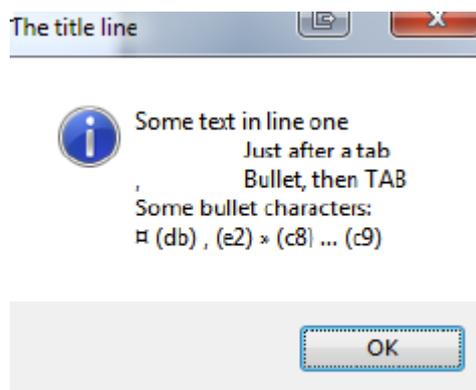
In FM document

In the document the hypertext command uses Unicode which gives a rich set of special characters. The contents of the hypertext statement is listed hereafter.



In cfg file The cfg files must be in Windows 1252 code page and use the FrameRoman coding for special characters.

```
<Command Test01 <KeySequence \!991>
  <Hypertext alerttitle The title line:Some text in line
one\x09\x08Just after a tab\x09\xe2\xe2\x08Bullet, then
TAB\x09Some bullet characters:\x09\xdb (db) \xe2 (e2) \xc8
(c8) \xc9 (c9) >>
```



## Menu and tool bar files

### menus.cfg

Command definition

```
<Command ETBtest1 <Label ETB test hypertext commands>
  <Hypertext alerttitle Test Hypertext Commands: Just a simple text to test the West\x09And
this is on the next line>>
<Command ETBtest2 <Label ETB test hypertext commands>
  <Hypertext message openfile C:/Users/Klaus/Documents/Adobe Scripts/ETB/ETBnudge.jsx>>
```

Use in orcus-menu An orcus menu (my personal naming) is a dead end. It is not connected to any existing menu, hence not visible.

```
<Menu ETBDummy <Label Orcus for toolbar commands only>>
<Add ETBtest1 <Menu ETBDummy>>
<Add ETBtest2 <Menu ETBDummy>>
```

### quick-access.xml

```
<ACTION command="ETBtest1">
  <images base="etb_icons\testing"/>
</ACTION>
<ACTION command="ETBtest2">
  <images base="etb_icons\testing"/>
</ACTION>
```