

25

FMbiblio – Bibliography with Citavi or EndNote

Overview of version 2.1

Citavi and EndNote are widely used tools for creating bibliographies. These products do however, not support FrameMaker. The ExtendScript *FMbiblio* bridges this gap.

Contents

Introduction	2
Glossary	2
Bibliographic applications	3
Cooperation with FrameMaker	4
Script installation	5
Avoid Windows Defender intervention	6
Details of the D+DD script installation	6
Operating the script	7
Checking the document files	8
Process overview	9
Specialities and restrictions	10
Creating the bibliography	12
Adding bibliography incrementally	15
Bibliography of a FrameMaker book	15
Expanding temporary citations	16
Additional use of expanded citations	18
Expanded citations, second method	18
Setting up and using Citavi	20
Setting up and using EndNote	22
Messages	24
Using the test files	26
Help – it does not work!	27
Some program internals	28
Knowledge and information sources	28
Programming quirks	28
Collect temp. citations (1)	28
Call Bibliographic Application (2)	29
Resolve process (3a)	29
Expanding process (3b)	30

Introduction

- Important
- Any operation performed by a script can not be undone¹⁾! Best practice is to save the document before performing script actions on it.
 - In case of an error or change of Your mind you can simply Revert to Saved for the pertinent document.
 - Only scripts which do not modify document contents (e.g. creating a new document) are safe in this respect.

Function of this script

- You get the temporary citations the usual way with ALT+CTRL+c (Citavi) or CTRL+c (EndNote) and paste it into your document with CTRL+v.
- FMbiblio replaces temporary citations by formatted citations in FM documents and FM books.
- FMbiblio may expand temporary citations to bibliographic references. This is recommended in footnotes only.

FMbiblio controls the collaboration of the following programs:

- FrameMaker (versions 10 upwards [5], de/en/fr).
- EndNote (version 8 upwards).
- Citavi (version 4 and 5)²⁾.

Glossary

bibliographic application

Generic term for either EndNote© or Citavi©.

bibliographic reference

The bibliographic item itself. It refers to another work. The format of this depends both on the publication and of the referenced item (book, journal article, patent etc.).

citation

The reference to a bibliographic item. The format depends on the publication. e.g. for IEEE journals this is a number in brackets: [17].

temporary citation

Also called place holder for the formatted citation.

resolve temp. citations

Process of exchanging the temporary citations (place holders) by the final form of the *citation.*, for example {Bartels, 1981 #14} → [17].

expand temp. citations

Process of exchanging the temporary citations (place holders) by the fully formatted *reference.*, for example {Bartels, 1981 #14} → Bartels, K. (1981). *Veni vidi vici*, Artemis Verlag, Zürich.

1 This must not necessarily be the case for plug-ins represented as dll's.

2 See [Legal issue in the US](#) on page 20.

Bibliographic applications

In Europe **Citavi**© spread very fast as an alternative to End-Note. In the US **EndNote**© is the most used application to maintain bibliographic data bases and generate bibliographies in scientific works.

These products are widely used for dissertations, theses and scientific publications of all kinds and are available for Windows and Mac OS. They are integrated with MS Word but not with FrameMaker.

Forms of bibliographic citations

I came across the following forms of bibliographic citations which are all supported by FMbiblio.

- In-line citation with a reference at end of the document in full form. For the citation various formats are in use. IEEE for example uses just numbers in brackets [4]. In a de-luxe document the citations are cross-references to the references (like in this document).
- Footnotes provide the complete bibliographic reference. The footnote reference is the citation. This form should be used only for short bibliographies.
- Citations being the references themselves, most time enclosed in parentheses. So the reader can easily skip it. This format seems to be used only in non-scholarly works.

From citation to reference

- 1 After collecting references in the database of the bibliographic application, the user can insert a temporary citation (also called place holder) into his document.

At this stage the final form of both the citation and references must not be known.

- 2 If the work is 'finished', the place holders are replaced by their final form and the bibliographic references are listed alphabetically or the numeric order or the citations.

For MS Word these steps are supported by macros. The first step can be performed also in FrameMaker:

- In the bibliographic application select the relevant entry.
- In the FM document the place holder is inserted by paste.

For MS-Word the bibliographic application then scans the document to collect the place holders (and replace by final form). Then it places the list of references (the bibliography) at the end of the document.

These steps are the task of FMbiblio in FrameMaker.

Cooperation with FrameMaker

Advantages using a bibliographic application

Although bibliographies can easily be created in FrameMaker by means of cross references, a bibliographic application provides the following advantages:

- Maintenance of a bibliographic database for several works.
- The database can be filled with data from various sources including the Internet.
- Generated references and citations can adhere to a large number of output formats (most publications require special formatting).
- At the time of inserting temporary citations the final form of both citations and references need be known³.

Using RTF scan facility of the bibliographic application

It may appear reasonable to export the FrameMaker document as RTF, then scan and modify it by the bibliographic application and finally import the RTF again into FrameMaker. However, some problems are:

- Anchored frames get new attributes (at insertion) with all previous content as one image.
- Layout and formats must be re-applied.
- Cross references become useless, must be rebuilt.

Solution with FMbiblio

The script *FMbiblio* controls the collaboration between FrameMaker and the bibliographic application. An intermediate RTF file contains only the data concerning the bibliography and not the complete FM document.

- The script handles either an individual FM document or all documents of an FM book.
- To handle independent FM documents, start FMbiblio in the first of these documents, then in the next, etc.
- To handle documents from an FM book, close the book file before processing the documents independently.
- You can, however insert temporary citations into an arbitrary number of FM documents concurrently.

Of course, nothing is perfect – FMbiblio may not satisfy your demand.

Forms of citations handled

Any form of temporary citation (copied from the bibliographic application) can be handled by the current version of FMbiblio, for example, the following:

Characteristic	Example
Simple form	{Müller, 1925 #13}
With page range	{Neuman, 2003 #653, p. 53-54}
Combined citations	{Shone, 1998 #222; Rogers, 2003 #551; UNWTO, 2006 #608}
Special symbols in author names	{Wisconsin Dept. of Health & Family Services, 2004 #614} {Barnes-Ellerbe, 2004 #290}

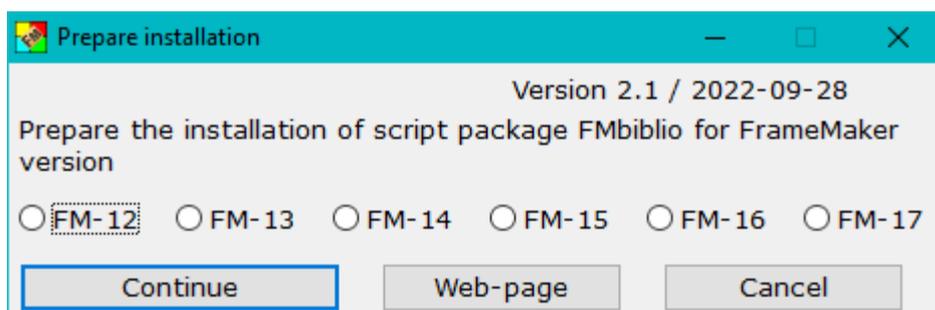
3 Keep in mind that the required form may vary between publishers and institutes of a university.

Script installation

- 1 Close FrameMaker if necessary.
- 2 Download the Inst-FMbiblio.zip from my [web-page](#)
- 3 UnZip the file to the desk top.
- 4 Execute the file PrepareInstallation.exe as Admin.

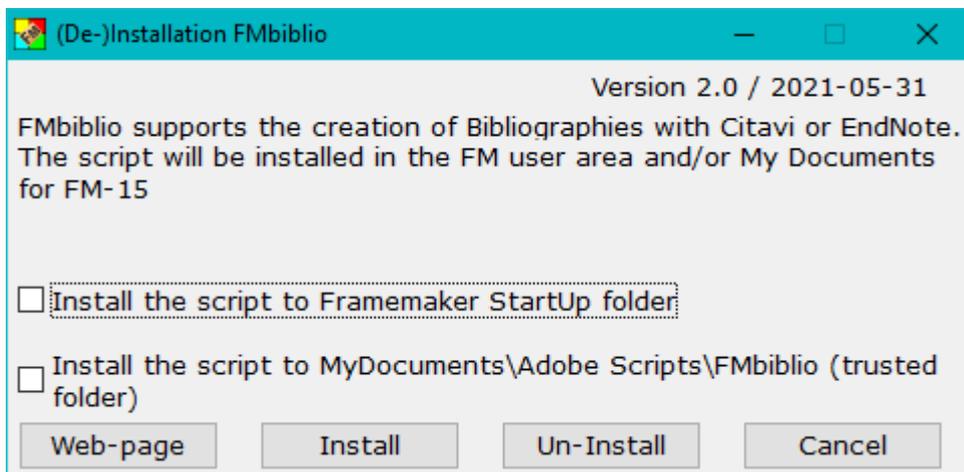
Note: *Windows Defender may react to this program with a virus warning. This is a false positive. You may check this with an [upload to Virustotal](#). See [Avoid Windows Defender intervention](#) on page 6.*

- 5 The last six FM-versions present in your %appdata%/Adobe/FrameMaker/ are listed in the dialogue (on your system there may be only one).



The language of the installation dialogues adapts to the UI language of your current FM installation (de, en, fr).

- 6 Select the appropriate FM installation and use **Continue** . This opens the installation program:



- 7 Select the appropriate option(s):
 - Use the first option to start the script automatically at FM-start.
 - Use the second option if you wish to start the script on demand from a trusted source. You can define the script in **File > Scripts ... > Catalog** (Script Library) as Favourite: use the **Add** button and navigate to My Documents\Adobe Scripts\FMbiblio\FMbiblio.jsx.
- 8 With **Install** the script and associated files will be transferred into the relevant locations.
- 9 A message indicates the end of the installation. The desktop icons will be removed.

10 Edit the file maker.ini according to [Setting up maker.ini](#) on page 6 hereafter.

FMbiblio-testfiles These are located on the [website](#) . See [Using the test files](#) on page 26.

Setting up maker.ini

There are a few values in the %appdata%\Adobe\FrameMaker\vv\maker.ini file which have to be modified by the user before the script can work correctly.

Note: *FrameMaker must be closed while you edit this file.*

Bibliographic application

Define the name (only Citavi or EndNote, no version!) and full program path of the bibliographic application:

```
FMbib_BibAppName = Citavi
FMbib_BibAppLoc  = H:\Science\Citavi\bin\Citavi.exe
```

Note: *Other entries concerning debugging are explained in [Enable statistical output](#) on page 27.*

Avoid Windows Defender intervention

- 1 In Windows settings navigate to **Windows Security > Virus & Threat protection settings > Manage Settings**
- 2 Go to **Exclusions**
- 3 Add the folder you need to exclude:
C:\Users\username\AppData\Roaming\D+DD

Details of the D+DD script installation

- Unpacking creates a program (Prepinstallation.exe) and a directory (InstallThis).
- Prepinstallation.exe should be executed with admin rights (right-click and select), otherwise a message will appear indicating this.
- Prepinstallation adds user specific information into the InstallThis\config.ini file.
- Then InstallThis\Inst-FMbiblio.exe is executed, which creates a directory D+DD\FMbiblio in the Windows Start directory and copies everything from InstallThis there. In addition, a short cut is created to this directory.
- This directory contains Inst-FMbiblio.exe, which is now executed and the unpacked files on the desktop) are deleted.
- Inst-FMbiblio.exe asks where the script should be copied to (Startup folder or MyDocuments\Adobe Scripts\FMbiblio). The selected option must also be selected during a de-installation in order to de-install at the correct location.
- The script consists of the main module FMmarkers.jsx and the modules in the FMbiblio directory.
- Write the follwong to maker.ini in the user area in the section [D+DD]:

```
FMbib_BibAppName= Citavi
FMbib_BibAppLoc= H:\Science\Citavi\bin\Citavi.exe
FMbib_CollectFile=FMbiblio-collected.rtf
FMbib_DoingBook = no
FMbib_Logging=0
FMbib_Template=FMbiblio-tpl.fm
```

See also [Setting up maker.ini](#) on page 6

Operating the script

Menu entries

The menu **Bibliography with Citavi/Endnote** is added to the end of the **Format** menu.

The individual steps reflected in the menu provide more control than a complete run at once.

Format	See
Bibliography with Citavi/Endnote...	Documentation
	1 Collect temp. citations page 28
	2 Call biblio application page 29
either	3a Resolve temp. citations page 29
or	3b Expand temp. citations in footnotes page 30

Documentation
Interrupting work

Display the PDF with this information.

If you plan to interrupt your work with FMbiblio between process steps (close FM), be careful to rebuild the situation (open documents or open book) you had for the first step.

Depending whether you have worked on a book or an individual document you may need to change a value in FM-biblio.ini:

`04_DoingBook = no` See [Enable statistical output](#) on page 27.

Process citations

Time consumption

The three steps of the process are run in sequence. The third step has two *alternatives* depending on your bibliography desires. Follow the instructions provided by popup-messages. See more details at [Creating the bibliography](#) on page 12.

The time needed by the script (steps 1 one and 3) depends on the length of the documents and the number of temporary citations.

To avoid to much screen flicker, screen refresh is switched off during most time of the script. When processing a book, you will notice the change between the documents.

Stop the script

I have not found a safe method to stop the script. Pressing **ESC** (even multiple times) doesn't do anything. Let it run.

If the script runs havoc, you will need to kill FrameMaker.

Withdraw script work

The script does not save the changed documents. Hence You may withdraw the changes (replacing temporary citations). by simply closing without saving. After step 3 you may start again with **File > Revert to Saved**.

Checking the document files

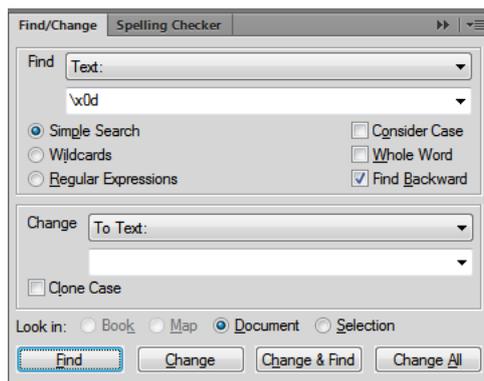
Source of error

FMbiblio will not work correctly if illegal characters – namely the infamous `x\0d` aka Carriage Return appears in the file.⁴⁾

The problem with this character appears with Find in forward direction (and hence is not only a problem for FMbiblio). The find stops there. While the script can find all temporary citations, the later process (replace the temporary with the formatted citations) stops there.

Check and correct files

You *cannot find* these characters with Find in forward direction. Hence You must start at the end (of the document or the end of the last document of a book) and search backwards.



At least since FM-12 you can change to nothing with **Change & Find**. **Change All** does *not* work for this!

MIF washing

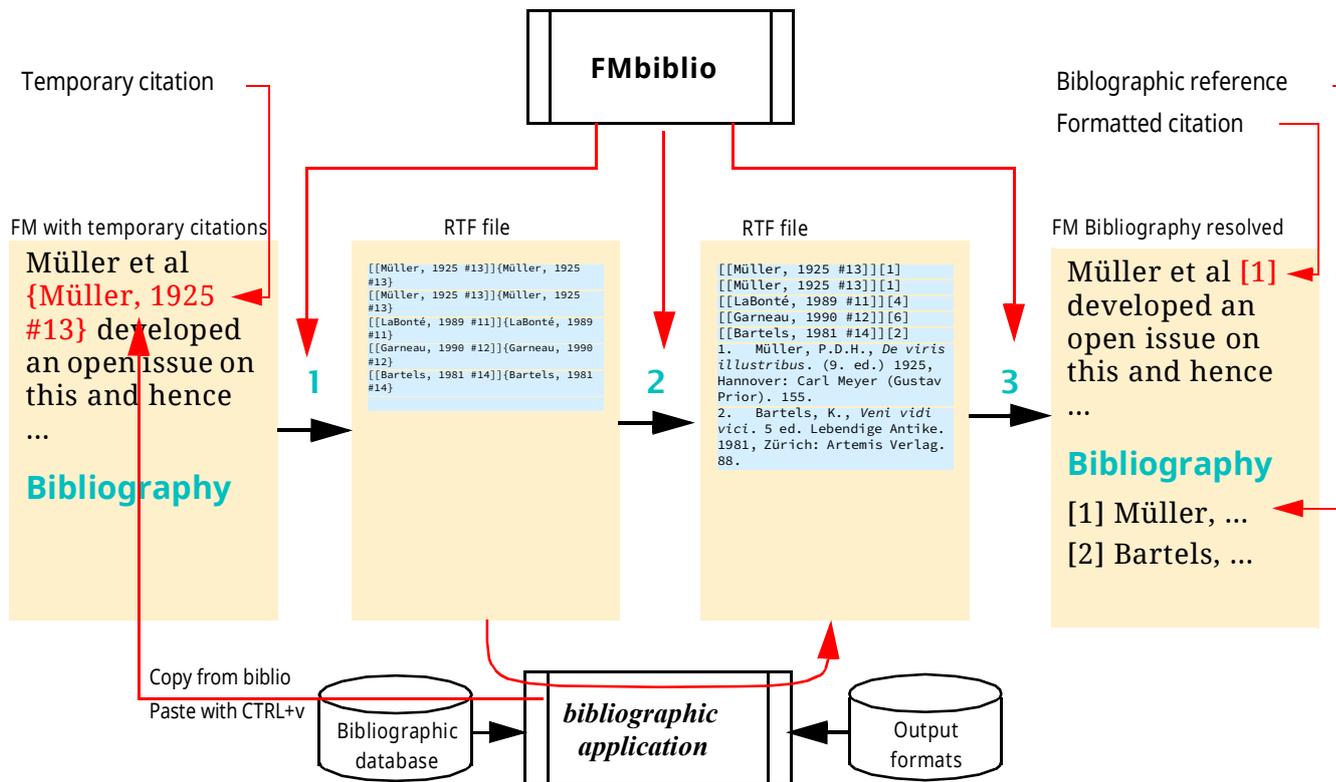
Another method to get rid of these disturbing characters is ‘MIF washing’:

- 1 Save the file(s) as MIF.
Do not save the current FM-version!
- 2 Open the MIF file(s)
- 3 Save the file(s) as ordinary FM documents thus overwriting the misbehaving files.

4 Common source of this are old Word imports.

Process overview

The script *FMbiblio* controls the data flow between the two involved programs:



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DDD

Prepare the document

During the text development temporary citations (place holders) are copied from the bibliographic application into the user document.

Step 1

The temporary citations are collected in FrameMaker and written into a new FM document. Two forms are written to avoid problems during resolving the references in the bibliographic application.

This new document is saved as RTF to allow the bibliographic application to handle it.

Step 2

The bibliographic application scans this RTF file based on the current bibliographic database and the selected output format. The result is a new rtf file containing both the formatted citations and the generated bibliography.

Step 3

The new rtf file is opened by FrameMaker and the temporary citations in the user document are searched and ...

either ... replaced by the formatted form of citations, In this case the user must copy the bibliography to an appropriate place in the FrameMaker document or book and format it.

or ... replaced by fully formed references (e.g. in footnotes).

Note: *The author recommends to save the processed FM documents in a different directory. This allows you to continue your textural work with files containing the temporary citations. This is also a safeguard against problems with the script.*

Specialities and restrictions

Note: *FMbiblio version 2.1 supports citations and/or references in Right-to-Left languages (Arabic, Hebrew). FrameMaker 13 and higher do so and newer versions of Citavi or EndNote do so. See [Testfiles](#) on page 26.*

Output formats

Empty citations FMbiblio can not work with output formats which replace the temporary citations with nothing. Some formats of this type are: Footnotes (EN 8), Amer Literature and GPA Verlag. Check your particular format — it must not be empty.

Citavi	EndNote
Citation > Citation Style > Edit Citation style (SHIFT+F11)	Citations > Templates
If the output format is empty, define:	
[Sequence Number]	[Bibliography Number]

Author-Date formats These formats do not provide a relationship between the formatted citation (1) and the bibliographic reference(2) in the resolved RTF file⁵:

{Bartels, 1981 #14]} (Bartels 1981)	1
{Müller, 1925 #13]} (Müller 1925)	
Bartels, K. (1981). <i>Veni vidi vici</i> . Zürich, Artemis Verlag.	2
Müller, P. D. H. (1925). <i>De viris illustribus</i> .	

Hence these formats can not be expanded automatically.

In addition the Author-Date formats do not distinguish between the works of an author from the same year.

Output formats with in-line formatting These are only handled for references. A citation currently can **not** receive special formatting such as superscripting. See [3 Resolve / expand temporary citations](#) on page 14.

Collecting and resolving temporary citations

Temporary citations are collected and resolved in these places:

- Standard text flow.
- Footnotes.
- Table title, heading cells, body cells, table footnotes.
- Text frames within anchored frames.
- Cross references (to citations). The citation is not expanded by FMbiblio, but by the update of the reference by FrameMaker.

Temporary citations are **not found** in the following places:

- Text lines (graphic object).

Expanding temporary citations

It is not very meaningful to expand temporary citations to bibliographic references anywhere in the text. This function is intended for footnotes and table footnotes.

Note: *The expanding process does not check where the temporary citations have been place!*

⁵ How to find the reference corresponding to the citation? It can not be guaranteed that the 3rd reference corresponds to the 3rd citation.

Author names with quotes

Accents in names

Be aware of the FM setting Smart Quotes in **Format > Document > Text options**. Do not type over inserted temporary or formatted inserted citations with apostrophes!

Although not typographically correct various forms of quotation marks may appear in the database (only the Right Single Quotation Mark ' =x92) is correct): D'Alembert (correct) – D' Alembert (not correct).

Hawaiian names may contain another character: Kaho'olawe (x91).

A single accent grave (x60) is copied twice to the clipboard in EndNote (D`Alembert is copied as D``Alembert) and hence inserted incorrectly into the temporary citation.

Creating the bibliography

Check file(s) ...

Independently of using FMbiblio it is advisable to get rid of illegal characters . see [Checking the document files](#) on page 8.

Note: *Save your document before starting FMbiblio. You can not UnDo⁶⁾ the replacement of the temporary citations performed in step 3. But since FMbiblio does not save the processed file you may «revert to saved» for undoing all actions of FMbiblio.*

Inserting temporary citations

- 1 In the bibliographic application select the Citation in the Database view and copy it to the clipboard:

Citavi	EndNote
ALT+CTRL+c	CTRL+c
Citation > Quote > Copy to clipboard	Edit > Copy

Daube	1989	Implementation of Swiss Character Set
Daube	1989	Aufbau des OBRZ Runtime Systems
LaBonté	1989	A New Data Type for National Language?
Reinsch	1989	Is there still an Alphabet in 2002?
Garneau	1990	National Language Support Reference Manual

- 2 Switch to FrameMaker and place the cursor in the document where you want to place the citation.
- 3 Paste the temporary citation from the clipboard (**CTRL+v**). The inserted temporary citation has the format ⁷⁾ {LaBonté, 1989 #11}.

Selecting multiple entries in the data base

You may select multiple entries by **CTRL+click** to combine citations. FMbiblio can handle these also. However, the result of pasting into FM depends:

Citavi	EndNote
Series of temp citations	Combined temp citation
{Ball, 2001 #642}{Neuman, 2003 #653, p. 22-23}	{Ball, 2001 #642; Neuman, 2003 #653, p. 22-23}
Both cases lead to a combined formatted citation [27; 45]	

Note: *Combined citations can not be handled in the process of expanding (menu “3b Expand temp. citations in footnotes”). Of these only the first item is handled:*

Temp citation	What will be used in expansion
{Ball, 2001 #642}{Neuman, 2003 #653, p. 22-23}	{Ball, 2001 #642}
{Ball, 2001 #642; Neuman, 2003 #653, p. 22-23}	{Ball, 2001 #642}

1 Collect temporary citations

Start the script⁸⁾ FMbiblio. You will get an additional menu item at the bottom of the Format menu.

- To collect citations from a single document and process them later, activate your document.

6 Well, you have more than 1 Undo step, but some 100 Undo's might not be reasonable.

7 This assumes that the default template for temporary citations is used.

8 Of course you may have started the script already, because initially it only sets up the menus.

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2 Call bibliographic application

- To collect citations from all documents of an FM-book and process them later, activate the book. For ‘safety reasons’ you should not have another book open.

The temporary citations are collected into memory and then written to a new FM document, which is saved in RTF format and then it is closed.

Two forms are written to avoid problems during resolving the references in the bibliographic application:

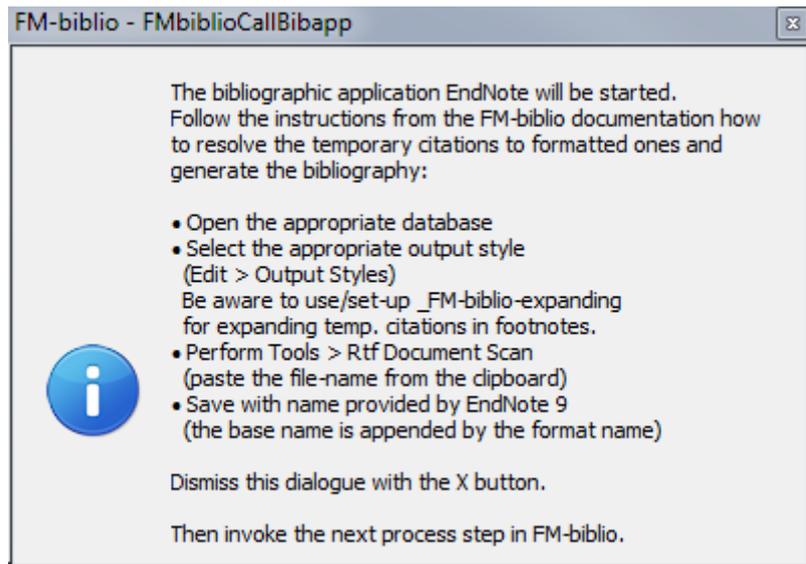
- 1 A bracketed form which is derived from the braced form , for example `[[Müller, 1925 #13]]`.
- 2 The form with braces as used in the user document for the bibliographic application to resolve the reference, for example `{Müller, 1925 #13}`.

```
[[Müller, 1925 #13]]      )      {Müller, 1925 #13}¶
```

This new document is saved as rtf to allow the bibliographic application to handle it.

A message is issued at the end of the step.

Now the bibliographic application comes into play. This dialogue reminds you about the tasks. It is kept open until you close it by clicking the **X** button in the top right corner:



Note: Be aware that for the function of menu “3b Expand temp. citations in footnotes” you need the special output-format `_FM-biblio-expanding`!

Citavi	EndNote
- Select the appropriate output style - (Edit > Output Styles)	
- Perform Citation > Format publications... > Choose documents (Shift+F7)	- Perform Tools > Rtf Document Scan.
- Select the RTF file to be handled (paste the file-name provided by FMbiblio from the clipboard) - Save with name provided by the bibliographic application (the base name is appended by the format name). - Dismiss this dialogue with the X button. - Then invoke the next process step in FM-biblio.	

LD+D D

Follow the instructions in

- [Setting up and using Citavi](#) on page 20 or
- [Setting up and using EndNote](#) on page 22.

The bibliographic application works on the generated rtf file and creates a new one which is saved with a name containing the output format, for example:

fm-biblio.rtf → fm-biblio-**Numbered**.rtf

After the save the bibliographic application can be closed.

The modified rtf file is opened by FrameMaker and the temporary citations are either replaced by the formatted citations (see [3a Resolve temp. citations](#) on page 14) or to formatted references (see [3b Expand temp. citations in footnotes](#) on page 15).

If you had collected in a book and the book is not active now, you get a message to correct the situation.

Dismiss the message and activate the book before you initiate Step 3 again.

The first part of the rtf file from step 2 contains formatted citations to the right according to the output format selected in the bibliographic application:

To the left the lines contain the bracketed form, to the right the formatted citations are present. *The example shows the IEEE format:*

[[Müller, 1925 #13]]	[1]
[[Bartels, 1981 #14]]	[2]

The second part of the new RTF file contains the generated bibliography:

1. Müller, P.D.H., <i>De viris illustribus</i> . 9 ed. 1925...
2. Bartels, K., <i>Veni vidi vici</i> . 5 ed. Lebendige...

For expanding the temporary citations to references (case 3b) a special form of formatted citations is needed (see [Expanding temporary citations](#) on page 16).

This method replaces the temporary citation by the formatted ones. The in-line-formatting of the citations is lost. Hence an output format **[10]** will become [10] in the FM document⁹.

Copy the generated bibliography from the rtf file to the appropriate place in your document. Use **Paste Special** with **RTF** to keep the formatting from the bibliographic application.

The bibliographic application applies local formatting to the text (not Character formats) and puts the numbering in the text. For different formatting (e.g. automatic numbering by FrameMaker) you need to edit the text in FrameMaker.

1. Bartels, K., *Veni vidi vici*. 5 ed. Lebendige Antike. 1981, Zürich: Artemis Verlag.
2. Daube, K. *Text and Code - A Dragons Pond*. in G.U.I.D.E. Conference. 1989. Basel, Switzerland: GUIDE.

3 Resolve / expand temporary citations

Details of the rtf processing

3a Resolve temp. citations

Handle the bibliography

⁹ Preserving the format may be subject of a later version [my health permitting].

3b Expand temp. citations in footnotes

With this method formatted citations will not be used, because the temporary citations in footnotes (or elsewhere!) will directly be expanded to bibliographic references.

As a consequence of this presentation a document section bibliography is not set up.

For details see [Expanding temporary citations](#) on page 16.

Completion message

The completion of FMbiblio is displayed by a dialogue summarising the work done.

Adding bibliography incrementally

When extending the document after inserting the bibliography you might need to sort in the added bibliography paragraphs manually and also adapt any numbering.

Therefore you are recommended to keep the file(s) with temporary citations and use the file(s) with the formatted references only to create an intermediate (or final) “state of the work”.

Bibliography of a FrameMaker book

FMbiblio may be started in a FrameMaker book with no open files. One book file after the other will be opened and processed. Only *.fm files are opened though.

Common Open Errors, such as **missing fonts**, **unresolved cross references** or **old FM version** are handled (accepted by the script). You may still get prompts for rare situations which I could not foresee.

If there are missing graphics, you will get the message **Some graphics could not be displayed, ... grey boxes ...** as soon as you come to such a page. But this is not during the open of the files.

Expanding temporary citations

A special form of bibliography places the bibliographic references in footnotes¹⁰. In this case, the citation in the text is just the footnote reference as here¹¹. For example:

Before processing Hecate est Iovis et Latonae filia, soror Apollinis ¹⁾. Est tricopor et triceps, magicarum artium magistra ac fascinationum praeses, cinctra latrantium canum turma ²⁾; noctu stans in triviis vel prope sepulcra et ubi loca sunt.

- 1 {LaBonté, 1989 #11}
- 2 {Garneau, 1990 #12}

After processing Hecate est Iovis et Latonae filia, soror Apollinis ¹⁾. Est tricopor et triceps, magicarum artium magistra ac fascinationum praeses, cinctra latrantium canum turma ²⁾; noctu stans in triviis vel prope sepulcra et ubi loca sunt.

- 1 LaBonté, A. *A New Data Type for National Language?* in *SEAS Anniversary Meeting*. 1989. Amsterdam, The Netherlands: SHARE European Association.
- 2 Garneau, D., ed. *National Language Support Reference Manual*. January 10, 1990 ed. National language Information Design Guide, ed. IBM. Vol. 2. 1990, IBM National Language Technical Centre: Toronto, CDN.

To achieve this, the following steps are required:

- 1 For each reference you create a footnote and insert the temporary citation in the footnote.
- 2 In the bibliographic application use the output format `_FM-biblio-expanding`. See hereafter for the procedure to define this.
- 3 In *FMbiblio* use menu **3b Expand temp. citations in footnotes**.

Note: *Combined citations can not be handled in the process of expanding:*

Temp citation	What will be used in expansion
{Ball, 2001 #642}{Neuman, 2003 #653, p. 22-23}	{Ball, 2001 #642}

Note: *Depending of the existence of individual temp. citations some of these may be expanded. This depends on the order the bibliographic application finds them in the data base.*

Reference output format

To convert citations into references, *FMbiblio* expects the bibliographic application output format `_FM-biblio-expanding` (the underscore at the beginning of the name helps you to find it in the huge list). This must be created as follows:

- 1 Create a copy of your favourite output format and save it with the name `_FM-biblio-expanding`. See “What Should I Do if My Style Is Not Included?” in the bibliographic application Help

¹⁰ They may, however, also appear in the text or as side notes.

¹¹ See also *Expanded citations, second method* on page 25-18

- 2 Edit the format `_FM-biblio-expanding` to get the desired properties:

Citavi	EndNote
<ul style="list-style-type: none"> • Open Citation > Citation Style > Edit Citatidialogueon Style • Select <code>_FM-biblio-expanding</code>. • Now You are in the Style Editor • In the right half of the main pane select the last entry <i>Unknown</i> and in the main pane edit the Rule set <i>In-text citation</i>: <ul style="list-style-type: none"> - Scroll the left pane down to find <i>Index in bibliography</i> (with no brackets around it). - Drag this item to the Rule set <i>In-text citation</i> and drop the item. You get it in addition to the bracketed form. - Click on the bracketed form to select it and delete it. • Open menu File > Citation Style Properties (takes some time). • In the left pane select ... <ul style="list-style-type: none"> - Help text: precede the heading with <i>Based on</i> ; click OK. - Bibliography: > Reference numbers: clear the fields <i>Text before ...</i> and <i>Text after...</i>, thus removing the brackets; click OK. 	<ul style="list-style-type: none"> • Open dialogue Edit > Output Style > Edit _FM-biblio-expanding • In the left pane select: <ul style="list-style-type: none"> - About this Style check the field <i>Based on</i> - Citations > Templates: Bibliography Number (no brackets etc around it) - Bibliography > Layout: Bibliography Number → (→ is the TAB-field)

- 3 Save the modified output format `_FM-biblio-expanding`.

Note: For Citavi you find `_FM-biblio-expanding.css` in the folder `FM-biblio-testfiles\DB-for-Citavi5`. You can copy it to `C:\Users\username\Documents\Citavi 5\Custom Citation Styles` to become available in *Citation > Citation Styles*.

Successive similar references

You may have the same reference on one page in succession. Before You start FMbiblio you should replace the second to last same reference by the word *ibid*¹²⁾:

48. {Müller, 1925 #13}		48. {Müller, 1925 #13}
49. {Müller, 1925 #13}	→	49. <i>ibid.</i>
50. {LaBonté, 1989 #11}		50. {LaBonté, 1989 #11}

Then this reference will not be resolved by the process - as it is just ordinary text:

- [1]48.Müller, P. D. H. 1925. *De viris illustribus* (9 ed.). Hannover: Carl Meyer (Gustav Prior).
- [2]49. *ibid.*
- [3]50. LaBonté, a. *A New Data Type for national Language? in SEAS Anniversary Meeting*. 1989 Amsterdam, The Netherlands: SHARE European Association.

¹² The word *ibid* stands for *ibidem* (aforementioned).

Final work

Since Footnotes in FrameMaker may end up on the following page of their reference, the *ibid* may be placed wrongly. Hence you need to check this and probably replace some *ibid* by the original citations, which you will find in the footnote before the one with the *ibid*.

Additional use of expanded citations

You may set up your bibliography with cross references to temporary citations in a special chapter and then expand those to full references. With this method you get the most elegant bibliography: uncluttered text and live cross references to the bibliography.

Reference to temp citation

Here we just demonstrate the setting of a cross-reference to a temporary citation [1] and another one [2]. In this example it is just hereafter - but in real life it will exist in a chapter or at the end of some document.

The cross reference format used in this example is `bib-ref-number` with the content `<hypertext><$paranum></>`. The character format `hypertext` sets the text to blue.

Temporary citation

This is assumed to be in chapter Bibliography. Use a special ¶-format for these entries (e.g. `bibliography`) for easy creating the cross references. Key is the autonumbering here: `Z: [<n+>]` For the first paragraph you set it manually (Apply) to `Z: [<n=1>]`.

[1] {Barnes-Ellerbe, 2004 #48}

[2] {Bartels, 1981 #14}

You may have set up these temporary citations in advance and then insert the cross reference in the text.

The cross reference markers will be placed at the end of the autonumber.

If you need to re-arrange these paragraphs later, apply the standard numbering `n+` to the first ¶ before you move it somewhere else. Then again set the numbering for the first P to `n=1`. Of course you must update your cross references afterwards.

Expanding the temporary citations

If you have set up the temporary citations in a separate document you need only process this with FMbiblio (steps 1, 2, 3b). The cross reference markers stay intact. The

[1] Barnes-Ellerbe, S., Knudsen, K. E., and Puga, A. (2004). "2,3,7,8-Tetrachlorodibenzo-p-dioxin blocks androgen-dependent cell proliferation of LNCaP cells through modulation of pRB phosphorylation." *Mol Pharmacol*, 66(3), 502-11.

[2] Bartels, K. (1981). *Veni vidi vici*, Artemis Verlag, Zürich.

Expanded citations, second method

If you know right from the beginning that this is the format of choice, you may use a simple copy and paste from the bibliographic application. The format of the references must be set in the output format of the bibliographic application.

To insert the bibliographic reference:

Since the footnotes themselves are numbered you should use an output format **not containing numbering**, such as (in the examples here) Academic Management Review.
For best appearance you may need to set up an own output format which fits to your FM document appearance (see [Reference output format](#) on page 16)

- 1 Place a footnote reference in your text like this: ¹³).
- 2 In the bibliographic application find the desired bibliographic reference.
- 3 Copy the formatted reference to the clipboard. Citavi: **CTRL+SHIFT+C**; EndNote: **CTRL+k**.
- 4 In the footnote (see bottom of page here) paste the text from the clipboard.

Note: *Depending on your settings in maker.ini for ClipboardFormatsPriorities you will either use ordinary paste (CTRL+v) or paste special (with RTF) by SHIFT+CTRL+v get the formatted text (see footnote ¹³) or the unformatted text as with this footnote¹⁴.*

If you are tired of using **SHIFT+CTRL+v**, selecting **RTF** and then **Enter** you may wish to set in maker.ini [Preferences]:
ClipboardFormatsPriorities=RTF, UNICODE TEXT, TEXT, FILE, OLE 2, EMF, META, DIB, BMP, MIFW, MIF

13 Müller, P. D. H. 1925. *De viris illustribus* (9 ed.). Hannover: Carl Meyer (Gustav Prior).

14 Müller, P. D. H. 1925. *De viris illustribus* (9 ed.). Hannover: Carl Meyer (Gustav Prior).

Setting up and using Citavi

Legal issue in the US

Statement in the Citavi manual [1]

Reading the generated RTF file and resolving the temporary citations is the fundamental function of the bibliographic application for FMbiblio.

In Citavi 3 it was possible to insert references into a document using place holders. These place holders were then converted to formatted citations in a second step. At the same time, a bibliography was created. This option worked with all programs that support rich text format (rtf), including OpenOffice Writer, LibreOffice Writer and Scrivener.

Recently this place holder conversion process was protected by a patent. As long as this patent is valid, we are unable to offer the option to convert place holders in the United States.

What does this mean for you?

- When you download and install Citavi 4 in the United States, this feature is not available.
- If you download and install Citavi outside the United States, this feature is available. However, it will be deactivated if you are using Citavi in the United States based on your IP address.

What implications does this have in Citavi 4?

- If you use Citavi with the Add-In for Microsoft Word or with a LaTeX-Editor or if you do not use Citavi to create publications, this restriction will not affect you.
- If you want to use Citavi with other word processors, you cannot do so in the United States.

Consequences for FMbiblio

You can not use FMbiblio with Citavi in the US due to patent «System and method for citation processing, presentation and transport and for validating references, [US020120072422A1](#)»

Citavi version > 5

As a consequence of this patent-quarrel and the increased use of cloud based solutions Citavi 6 and above does no more support place holders as they are used in FMbiblio.

Set-up for temporary citations

The default format of the temporary citations - called quote - is defined as `{author year db-record}`, for example:

```
{Daube 2013 #1119}
{Sonderegger 2015 #1117}
```

This can be modified with **Citation > Quote > copy or Insert with Options**. This influences however only the final format.

Define the reference data base

You may specify the reference data base with **File > Open Project** before you start *FMbiblio* or on demand of the script.

Specifying the output format

In **Citation > Citation Style > Browse Citation Styles** you select an already defined style. Styles can be modified and stored with an adequate name (e.g. IEEE-D+DD, my personal variant).

Note: *To handle menu option 3b (Expand temp. citations in footnotes) you need to set up a special output format. See [Reference output format](#) on page 16*

Formatting the collected temporary citations

In the second step of the FMbiblio process you are requested to open the RTF file with the collected temporary citations and apply the output formatting to it.

The path or the RTF file is already in the clipboard to be able to paste it directly to the open dialogue of Citavi:

Citation > Format publications... > Choose documents (Shift+F7) ...

Opens the last used directory - it may already be the correct one.

Paste the path of the RTF file into the input field.

After clicking on **Open** you get the dialogue which shows whether the references have been resolved or not (**a**):

Green icon Reference could be resolved

Red icon Reference could not be resolved.

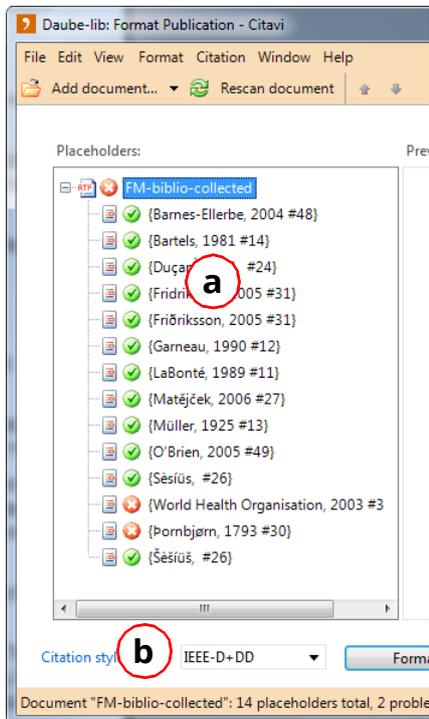
The output style (**b**) is that you have selected in **Citation > Citation style**.

After clicking on **Format ...** a new file is generated and you are requested to **Save** it. The proposed name is the original name, appended by the name of the output format (e.g. BibFM-collected.rtf → BibFM-collected-IEEE-D+DD.rtf).

You get notice that you may open the generated file in Word. Inspect the file, but **do not change/save it!**

The dialogue shown at left is then dismissed. You may now leave Citavi.

Everything is now ready for step 3a or 3b in FMbiblio.



2022-09-28

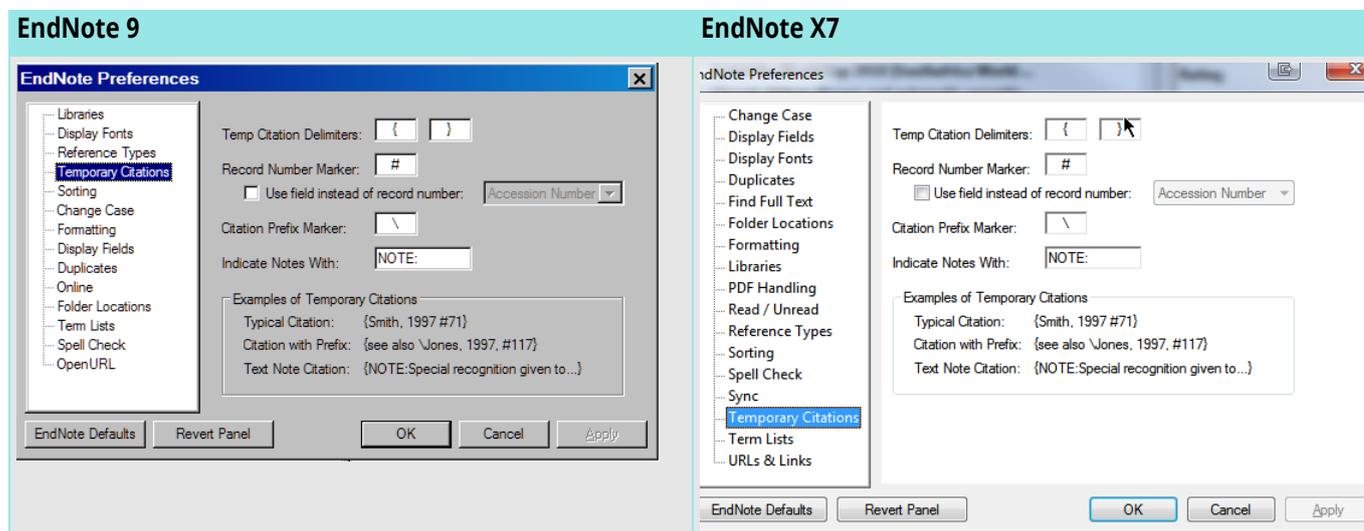
E:_DDDprojects\FM-Biblio\Docu\FMbiblio.fm

Setting up and using EndNote

The relevant dialogues for the work with FMbiblio have not changed much over the development of EndNote.

Set-up for temporary citations

The *FMbiblio* process assumes a certain setup of **EndNote**: In EndNote (**Edit > Preferences > Temporary Citations**) assure curly braces for Citation Markers to handle the short citations.



Define the reference data base

You may specify the reference data base with **File > Open** before you start *FMbiblio* or on demand of the script.

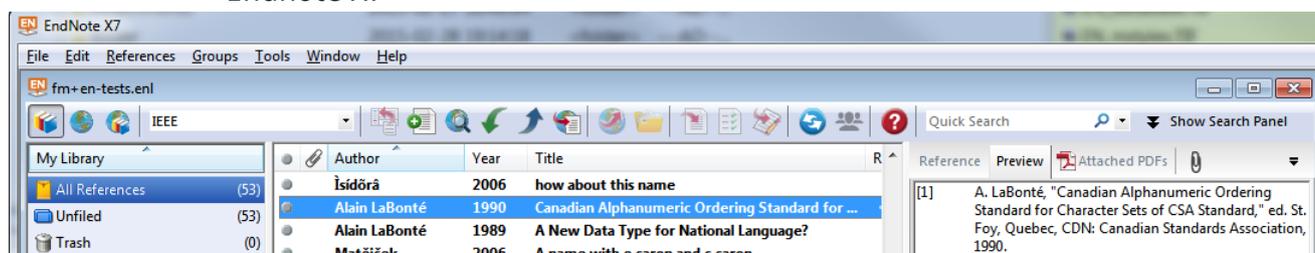
For your work you might have a specific data base where you collect all references from various sources.

Endnote 9

Author	Year	Title
Müller	1925	De viris illustribus
Bartels	1981	Veni vidi vici
Ulrich	1988	National Language Support Cookbooks
Daube	1989	Text and Code - A Dragons Pond
Daube	1989	Implementation of Swiss Character Set
Daube	1989	Aufbau des OBRZ Runtime Systems
LaBonté	1989	A New Data Type for National Language?
Reinsch	1989	Is there still an Alphabet in 2002?
Gameau	1990	National Language Support Reference Manual
LaBonté	1990	Canadian Alphanumeric Ordering Standard for Cha...
Daube	2005	Special characters in FrameMaker

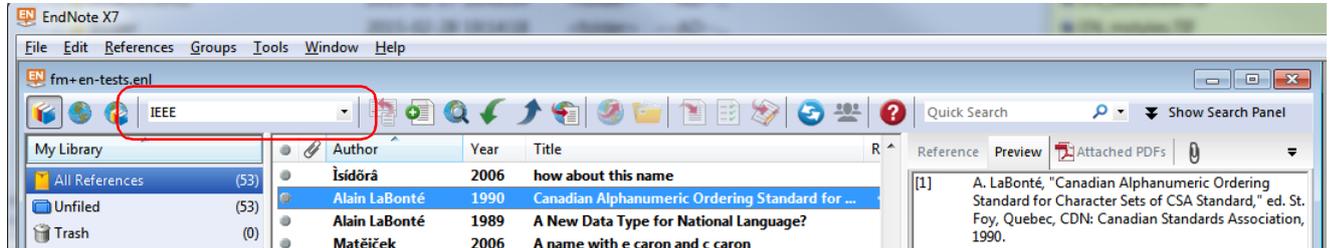
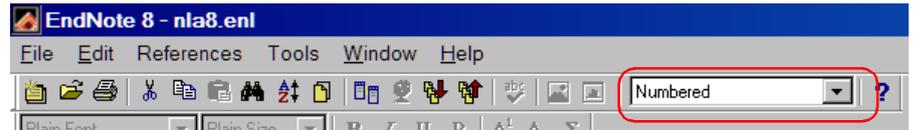
1. LaBonté, A., *Canadian Alphanumeric Ordering Standard for Character Sets* o Standards Association: St. Foy, Quebec, CDN.

Endnote X7



Specifying the output format

You may specify the output format (e.g. Numbered or IEEE) before you start *FMbiblio* or on demand of the script.



Output format for references in footnotes

When producing numbered output, the initial number is set to the value from the Program setup of *FMbiblio*.

If you want to replace the temporary citations in the text by the fully formatted references (most like in footnotes), you will need a special output format. See [Expanding temporary citations](#) on page 16 for details.

Formatting the collected temporary citations

In the second step of the *FMbiblio* process you are requested to open the RTF file with the collected temporary citations and apply the output formatting to it.

The path or the RTF file is already in the clipboard buffer to be able to paste it directly to the open dialogue of EndNote:

Tools > RTF document > Scan ... Opens the last used directory - it may already be the correct one.

Paste the path of the RTF file into the input field.

After clicking on **Open** you get the dialogue which shows whether the references have been resolved or not:

Since the temporary citations have been reduced to ‘unique’ occurrences, there is only 1 match reported (a). A zero indicates that this reference could not be resolved.

The output style (b) is the same as that in the main dialogue (see [Specifying the output format](#) on page 23).

You may select another output style here. It will not be reflected in the main dialogue.

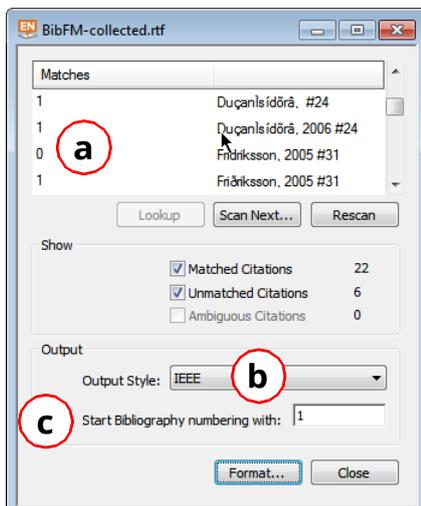
Depending on your working method you may wish to set the starting value for numbered references (c).

After clicking on **Format ...** you may get notice that “unmatched citations have been found”. Click **OK** to format anyway.

In the **Save As** dialogue the new file name is already inserted. It is the file name of the input file, appended by the name of the output style. For example `BibFM-collected.rtf` → `BibFM-collected-IEEE.rtf`.

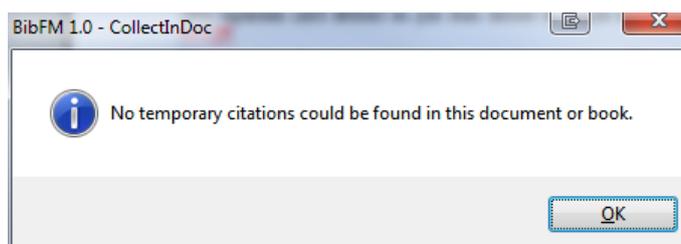
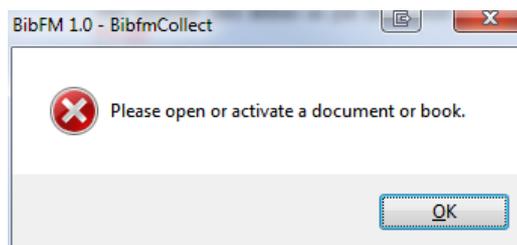
Do not change the directory for saving the file! The directory is the same as where your FM-files are located.

After the save you are back in the dialogue shown here. You could select another output format to find a form which best fits your demand. Inspect the generated RTF files with Word, but **do not change/save them!**



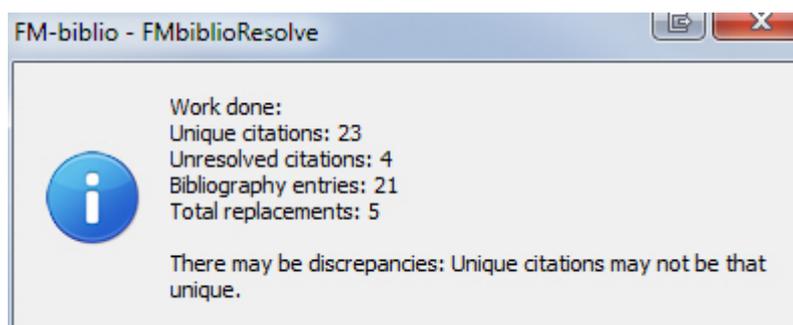
Messages

Error messages use the X icon, while information messages use the i icon.



Message “Work done”

This message provides some statistics about the work done by the script:



Why discrepancies?

The figures except the last one are derived from the RTF file delivered by the bibliographic application and processed in step 3a or 3b. You may use an RTF file from step 1 which was collected in a book also for replacing/expanding in a single file of that book.

Independently of that the bibliographic application may find the same entry in its data base for multiple “unique” citations:

{Duçanİsídörâ, ¯#24}, {Duçanİsídörâ, ¯#24} and {Duçanİsídörâ, ¯2006.¯#24} are all leading to the same DB record 24 (the ¯ denotes a blank).

These differences may have their root in manual insertion or copying of temp. citations.

Messages of FMbiblio

#	Message	Reason/Remedy
10	Please open or activate a document or book	Do so.
11		This message is currently not used.
12	Current document probably "Untitled"; The active doc needs to have been saved.	You have a new document active, which has not yet been saved. Accidentally wrong document active.

#	Message	Reason/Remedy
13	No temporary citations could be found in this document or book. Further steps with FMbiblio are not reasonable.	Information. Collect function invoked too early. Wrong document active.
14	The bibliographic application Citavi will be started. ...	Information what the user shall do in the bibliographic application..
15	The bibliographic application EndNote will be started. ...	
16	The bibliographic application xxx could not be found at yyy	Wrong path to bibliographic application in FMbiblio.ini? See Setting up maker.ini on page 6.
17	You collected citations from a book, but no book is active now Please reactivate the book	Do so. See also Interrupting work on page 7.
18	After processing by <i>bibliographic application</i> there are nnn unresolved citations	Information. User must probably correct some temp. citations or amend the bibliographic database.
19	Select the RTF file with the formatted citations:	Do so
20	Selection of an input-file has been cancelled The current step will be terminated	Information.
21	Work done ...	Some statistics.
22	Book xxx ready for processing	Information.
23	Document xxx ready for processing	Information.
24	Temporary citations replaced by yyy formatted citations	Information.
25	Collection of temp. citations completed. RTF file is saved.	

Using the test files

The script comes with a set of test files. They are useful to explore the script even before you install Citavi or EndNote.

ZIP The ZIP file contains the following subdirectories:

FMbiblio See [Script installation](#) on page 5.

Testfiles These are located on the [website](#).

Testfiles These files are intended for experiments. Keep in mind that the script does not save your changed documents and you hence can safely resort to the initial state – if you *close them without save* after processing with FMbiblio.

All FM-files are from version 10, which can be opened by any successor. Do not save processed files!

DB-forCitavi5 Directory containing database and specification of output-format `_FM-biblio-` expanding for the tests. Certain items in the DB refer to Citavi Attachments.

DB-for-EndNote Directory containing databases for EN-9 and EN-X7.

The following directories contain FM-10 files and [Derived RTF files](#) (see hereafter).

Short+special Document with all cases of temp. citations (in ordinary text flow, tables, text frame in anchored frame).
FM-13 file `Short-bidi-chapter` with Hebrew and Arabic citations. Use the Citavi DB for this.

Book FM book with 3 files. Use this to test function [3a Resolve temp. citations](#) on page 14.

BookFootnotes FM book with 4 files using footnotes. Use this to test function [Expanding temporary citations](#) on page 16.

Derived RTF files `FMbiblio-collected.rtf`
Result from step 1 (collection).

The following can be directly used in steps 3a or 3b respectively.

`FMbiblio-collected-IEEE.rtf`
Result from step 2 with output format IEEE.

`FMbiblio-collected-_BibFM-expanding.rtf`
Result from step 2 with output format `_BibFM-expanding`.

- If you test with a *book*, `FMbib_DoingBook` in `maker.ini` section `[D+DD]` must be yes.
- If you test with a *document*, `FMbib_DoingBook` in `maker.ini` section `[D+DD]` must be no.

Results from test files

The test files contain (by purpose) some badly formed temporary citations, which are not resolved in step 2. Hence the application of steps 3a or 3b yield unresolved citations.

Help – it does not work!

To ease problem handling the process steps are run individually with the menu items 1, 2 and 3 (3a or 3b).

Running the same process step repeatedly requires that you re-establish the mandatory initial state of the FM documents:

For step 1 (collecting citations)

FMbiblio does not change anything in your document or book documents. The book documents are just opened. Hence you may run this step as often as required – e.g. to get a list of the temporary citations found (the generated RTF file).

For step 3 (replace temp. citations in FM)

The FM document or book must be open. For a book FMbiblio opens the document files one by one and processes them.

FMbiblio does not save your document and book files. If something went wrong, you may *close them without saving* or **Revert to Saved**.

It would be good practice to save the processed FM documents (including the book file) in a new directory. See [Adding bibliography incrementally](#) on page 15.

Changing bibliographic application

EndNote expects a comma after the author's name in the temporary citation. This is not produced if you insert with Citavi! Hence you may start with EndNote and continue with Citavi, but not vice versa. Be aware that you need to import your End-Note data base into Citavi before continuing your work with this bibliographic application.

Enable statistical output

A switch in maker.ini section [D+DD] allows to produce statistical output about the handled citation (collected), unique and formatted citations; additional messages)::

```
FMbib_Logging = 0.
```

You may use the following words for true: true, on, yes, ein, ja, oui, 1. For false: false, off, no, aus, nein, non, 0

Some program internals

Knowledge and information sources

- [1] Citavi 4: Manual. Available: <http://www.citavi.com/sub/manual4/en/index.html> (2015-04-0202).
- [2] Community: FrameMaker Scripting | Adobe Community. Available: <https://forums.adobe.com/community/framemaker/extendscript> (2015-04-02).
- [3] Adobe Systems Inc, “JavaScript Tools Guide,”: Adobe Scripts folder: On first launch, the Toolkit creates a folder named Adobe Scripts in the user's Documents folder. The Default favorite in the Scripts panel displays the contents of this folder. When double-clicking a JSX file, the Toolkit normally acts as an invisible security filter. Before actually launching the file, a security dialog asks if it is OK to execute the script. The Toolkit treats the user's Documents/Adobe Scripts folder, however, as a trusted location; when you double-click a JSX file in that folder, the Toolkit does not display the security alert. {Adobe Systems Inc. #73D}
- [4] <http://www.ieee.org/documents/ieeecitationref.pdf> (2016-02-10).
- [5] **FrameMaker ≥8** supports Unicode and hence supports nearly any language with left-to-right script. The correct glyphs are only visible if an appropriate font is used for the text¹⁵.

Programming quirks

The script is provided in source form - hence You can look at it and even may (of course on Your own risk) modify it. If you are a programmer You might have some questions about my programming style though.

Localisation

The script issues menu and messages in English, German or French depending on the UI language of FrameMaker.

Localisation does not use the ExtendScript method, because I want to have all language dependent strings in an external file. Since version 2.0 these are xml files.

Collect temp. citations (1)

Hierarchy of function calls (reduced)

The reference numbers (n) are used in the text.

FMbiblioCollect	
..CollectInBook	
...CollectInDoc	(1)
.....CollectInTables	
.....CollectInFootnotes	(2)

15 If your bibliographic references only use ‘western’ languages, nearly any TrueType or OpenType font is OK.

```

.....GetTempCitations (3)
..CreateBibDoc
...SortUnique (4)
...OpenTemplate (5)
..Message "RTF file is saved"

```

- 1 In ordinary paragraphs and in table paragraphs.
- 2 Both in ordinary footnotes and in table footnotes.
- 3 Function performing the analysis of the various paragraph types: look for the temporary citations by means of a regular expression.
- 4 Since put in an array the temp. citations can easily be sorted and duplicates be eliminated. So the generated RTF can serve as an overview for the author.
- 5 A FrameMaker document is used to create the RTF for the handling by the bibliographic application.

Since storage is no more an issue in computers, the temporary citations are collected into arrays. The same is done for the formatted citations and the bibliography created by the bibliographic application.

However I could not yet test, how many citations/references can be handled by this approach. My system has 8GB RAM. On the other side bibliographic references may become quite long and numerous. In scholarly publications I have seen such items spanning 4 lines.

Why an RTF intermediate?

Over the time the various **EndNote** releases have changed their behaviour, in particular with relation to FrameMaker.

Only **EndNote** versions 1 ... 5 provided the function **Scan Document** in *mif*¹⁶). Version 6 did not support any scan at all and starting with version 7 scanning RTF is back. Hence RTF is the only format acting as a bridge between EndNote and FrameMaker.

Citavi allowed to scan RTF right from the beginning, because it not only supports MS Word. There is, however a problem with US patents. See [Legal issue in the US](#) on page 20.

Call Bibliographic Application (2)

This step consists merrily only of a message to guide the user and the invocation of the program.

Resolve process (3a)

Hierarchy of function calls (reduced)

```

FmbiblioResolve
..ReadFileRTF (1)
...Message "# unresolves found" (2)
..IsBookRequiredQ
..ExpandInBook
...ReplaceInDoc
.....FindAndReplaceString (3)
.....Message "temp cits replaced by formatted cits"
Message "Work done"

```

¹⁶ *mif* (Maker Interchange Format) is a format widely used by utilities for special FrameMaker functions.

- 1 Read and interpret the RTF file issued by the bibliographic application according to the chosen output-format.
- 2 Unresolved citations still contain the {..}.
- 3 For each line in RTF starting with [[, but not containing { = resolved citations.

Note: [2018-09-26] Function FindAndReplaceString randomly did not handle the first item from ReplaceInDoc. The brute force method to solve this was to append the first item to the list of items.

Expanding process (3b)

Hierarchy of function calls (reduced)

The reference numbers (n) are used in the text.

FMbiblioExpand	
..GetBiblioFromRTF	(1)
...GetTabRange	
...Message (analysing the read RTF)	
..IsBookRequiredQ	
..ExpandInBook	
...ExpandInDoc	
.....GetOpenParams	
.....FindAndReplacePara	
.....GetFindParams	
.....ReApplyFontAndSize	(2)
Message "Work done"	

Contents of RTF

(1) The RTF as delivered by the bibliographic application contains 3 areas which are read into arrays for use in other functions:

[[Friðriksson, 2005 #31]]4	A		B
[[Friðriksson, 2005 #31; Daube, 1989 #6]]2; 4			
[[Kaho'olawe x91]]{Kaho'olawe x91}			
...			
2 Daube, K. <i>Text and Code - A Dragons Pond</i> . G.U.I.D.E. Conference, Basel, Switzerland.			
3 Daube, K. (2005). <i>Special characters in FrameMaker</i>	C		
4 Friðriksson, F. ó. (2005). <i>Þar sem djöflaeyjan rís</i> ('Where the Devils' Island Rises'), a film based on a book by Kárason.			

A The temporary citation as collected in step 1. Read into array gasFmtCitsRaw.

B The resolved citations as provided by the bibliographic application. Due to the special output format _FMbiblio-expanding these are simply numbered for easy handling. These are read into array gasFmtCitsFmt.

C The corresponding bibliographic references read into array gaoBibliography.

Combined citations

From the arrows in the picture you can see that the formatted citations may become a list of numbers corresponding to the paragraphs in the bibliography.

In FM it is not possible to *collect* items in the clipboard. Hence it is not possible to get paragraphs 2 and 4 together into the buffer for later use in the replacement process.

→ Only the first item in such a list will be processed.

Re-apply ¶-format

(2) The ¶-format of the bibliography in the RTF normally does not match the format in the user document. Hence the replacement process creates an unwanted formatting:

- a) LaBonté, A. "A New Data Type for National Language?" *SEAS Anniversary Meeting*, Amsterdam, The Netherlands, 1519-1523.
- b) Table footnote in its original appearance

It is however not correct to just re-apply the original ¶-format of the document - this would remove the special formatting of the bibliographic reference (e.g. italic). Hence only the font-family and the font-size is re-applied:

- a) LaBonté, A. "A New Data Type for National Language?" *SEAS Anniversary Meeting*, Amsterdam, The Netherlands, 1519-1523.
- b) Table footnote in its original appearance

