

FrameMaker Documents in MemoQ

Douglas McCarthy, Open Globe

Using the MemoQ environment to optimize translation of FrameMaker and Structured FrameMaker documents

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Introduction

AUTHOR: DOUGLAS MCCARTHY, OPEN GLOBE, 55 AV. MOZART 75016 PARIS FRANCE TEL. 33 1 45 25 16 89 CELL 33 6 77 55 41 97 E-MAIL DMY@YOUROPENGLOBE.COM

This brief guide to translating FrameMaker and Structured FrameMaker documents concentrates on handling multilingual translations of complex documents in the biopharmacy field. This industry and the entire medical and life sciences sector that it is part of, are highly regulated in terms of documentation and require exact translations into the official languages of all countries where the biopharmaceutical firm is established. Documentation must not only present required information, it must do this in a format that complies with industry-wide standards and regulation. Documents in this field include product notices, installation qualifications, safety precautions, operating qualifications, product marketing flyers and brochures, and have to be translated into twenty to thirty different languages, many of which pose particular problems such as character encoding, word length and writing direction.

In the biopharmacy field, you will find both SGML and XML although the former is becoming less common. In particular, there are fewer and fewer biopharmaceutical documents produced in classic, “unstructured” FrameMaker. With its capacity to define what an element must include, XML is an ideal medium for biopharmaceutical documents where regulations and standards require specific types of information. The use of XML and specifically FrameMaker structured applications in this sector is therefore bound to continue to increase.

FrameMaker is a powerful but complex tool Not mastering this complexity can make translation complicated and generate production overruns. Fortunately, MemoQ offers an environment in which you can master this complexity and avoid some of the inherent problems that might arise.

The complexity of FrameMaker can be summarized as follows:

- A structure of book (aggregating file) and chapter documents that allows you to create long documents with coherent numbering and pagination properties.
- Three types of page structure known as body pages, master pages and reference pages.
- Rich character and paragraph design palettes.
- Coherent cross-reference, indexing and table of content creation features.

The overall objective of this document is to help LSPs avoid traps and even generate new sources of revenue associated with translating Structured

FrameMaker documents. By constantly following a coherent workflow, the complexity can work for you rather than being an obstacle or source of problems.

Structured FrameMaker only adds an adjective to the product name, but represents a completely different type of document: well-defined SGML or XML documents.

Project management objectives

The objectives in preparing and processing FrameMaker documents are as follows:

- Translate only what is strictly required. (To save time and money, and also generate money on return business where the customer may use variables, Cross-Reference formats and Markers that he/she isn't using in the current project)
- Avoid any unnecessary last-minute editing in FrameMaker (time and resource-consuming)
- Eliminate potentially confusing, extraneous text for the translator (reduce questions and possible sources of translation error ... lack of context).

FrameMaker

Managing translation of non-XML FrameMaker documents

When translating classic FrameMaker documents, you encounter the following common workflows:

Source file	Format for MemoQ	Deliverable
Binary FM	MIF	Binary FM plus a published form such as PDF
MIF	MIF	MIF and publication as PDF

Source file	Format for MemoQ	Deliverable
Microsoft Word	MIF after inserting text into FM model and saving in the interchange format.	Binary FM plus a published form such as PDF

Some of the problems you may find include:

- Character encoding problems particularly with versions of FrameMaker prior to version 8, or workflows using other tools such as older versions of Microsoft Word, for example.
- Hyphenation problems when margin-based titles are used.
- Key text on master pages not translated. This could include document reference numbers that change with each language, or words like “page” not translated into the target language.
- Book-wide or document-wide variables that aren’t selected for translation.

Pre-preparation inspection

Because FrameMaker is a complex tool that can produce highly complex, long documents, you need to check documents that you receive for translation. There may be text to translate that is not accessible in the body page view, and variables that are not easy to access and that need not be translated.

TASK

1. If you receive a MIF file, open it in a text editor and check whether the author generated the MIF in FrameMaker 7, 8, 9 or 10.

ADDITIONAL INFORMATION: New file to add: Avoiding character encoding problems 1. Problem when FM 7 files are delivered ... If your client delivers a MIF, check heading and look for \xnn ... Save as FM 8, 9 or 10, export new MIF and check for UTF conversion (optional). If material is delivered as Word files (not recommended but preferred by some clients who think of Word as a tool to use to sketch out layout and/or changes to the layout). Warning. The translator may not be using a system or a Word installation operating with UTF-8, they may still be language-specific ASCII. Try re-saving the document in Word 2007 or Word 2010 (Can you select character-encoding this way?).

2. Preview the new document in FrameMaker.
 - a Click **View > Body pages**, **View > Master pages** and **View > Reference pages** to check all aspects of the document pages in order to see where translatable text is. Note: translatable text is not necessarily confined to body pages.
 - b Click **Find > Any Variable** to check for variables that requires translation.
 - c Click **Find > Any Cross-Reference** to check the Cross-reference formats for text that requires translation
 - d Click **Special > List of > Markers** to check markers for text that requires translation
 3. If you find translatable text in any of the searches outlined in 4. above, make sure you use the **Master pages** or **Reference pages** options presented in the Preparation procedure section to add your document.
-

Preparation procedure

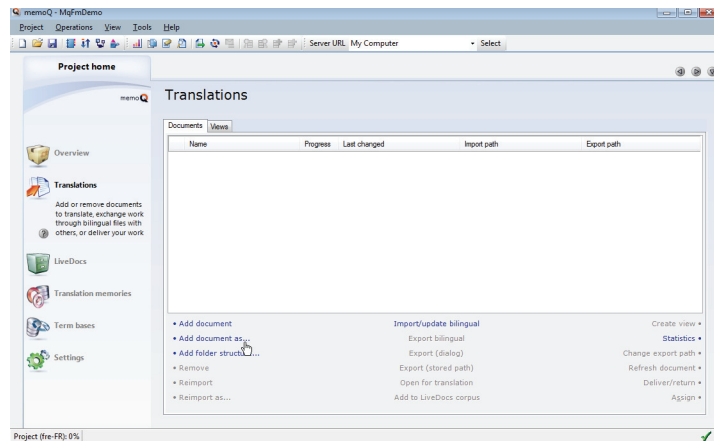
When you have identified all features that need to be translated in the source material, you are ready to prepare the material in a way that allows you to avoid random ad-hoc rectifications that add time and cost overruns to your project.

TASK

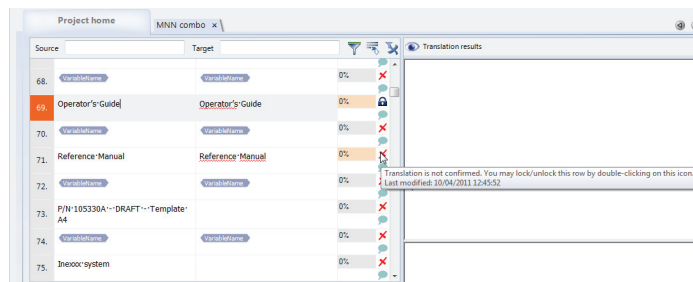
1. If you receive an FM source document, before you open it, click **File > Preferences > Remember Missing Font Names** just in case the customer's fonts are missing on your system.

ADDITIONAL INFORMATION: If the customer's fonts are in fact missing, FrameMaker will report which font is missing and which substitute font is being used in a message window when you open the file. You should note that the fonts will be different in any PDF output you produce because this could be a source of confusion for your customer. When your customer opens the FM file, the correct fonts will be used.
2. Click **File > Save as**. In the dialog box, click **MIF 9.0** or if you are using an older version, **MIF (*.mif)** to generate the MIF file for translation in MemoQ.
3. Click **Save as PDF** (FrameMaker 9.0 and higher) or **Print** and then select a PDF printer to generate a PDF version of the source document, so that the translator has a reference layout with the same fonts as you as opposed to those of your customer.

4. Click **Translations tab > Add document as** to add the MIF file created in 2. above.
 - If you have translatable text on the master page, e.g. in headers and footers, check the **Master pages** checkbox and leave the default selection **Body pages** as is.
 - If there is not translatable text on the master page or the reference page, leave the **Body pages** checkbox selected. This is the default setting.

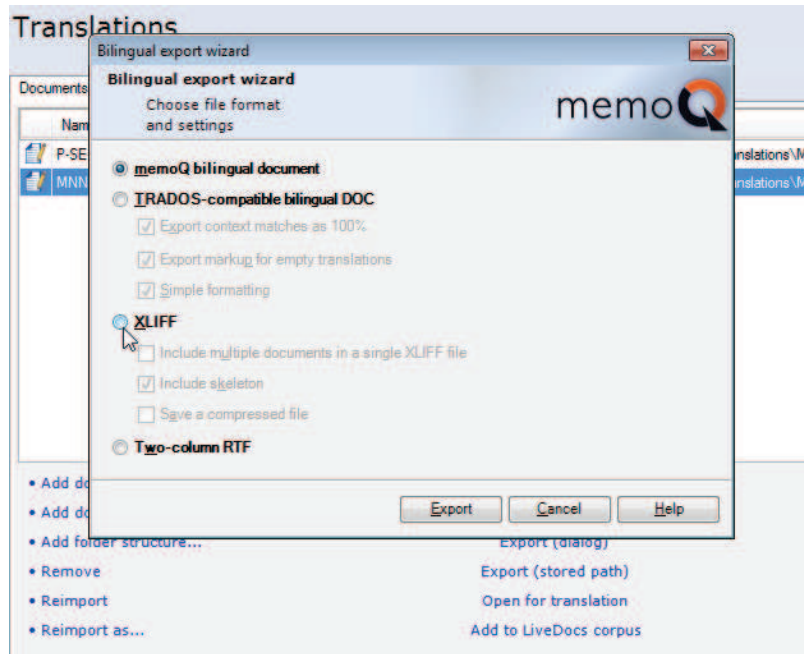


5. Open the document you have just added, find any segments containing unused Cross-reference formats, variables and markers (on basis of what you found in the Pre-preparation inspection section above), click **Edit > Copy source to target** and double-click the transformation status icon (a red X or a green checkmark) to lock each of these segments.



6. Click **Edit > Copy source to target** and double-click the transformation status icon to lock any segments containing only non-translatable text e.g. product reference number, manual reference number, product name, e.g. in footers.
7. Calculate the document statistics.
8. Click **Translations tab > Export bilingual as > MemoQ Bilingual Document** to export the bilingual document as an MBD or **Transla-**

tions tab > Export bilingual as > XLIFF to export the bilingual document as an XLIFF file.

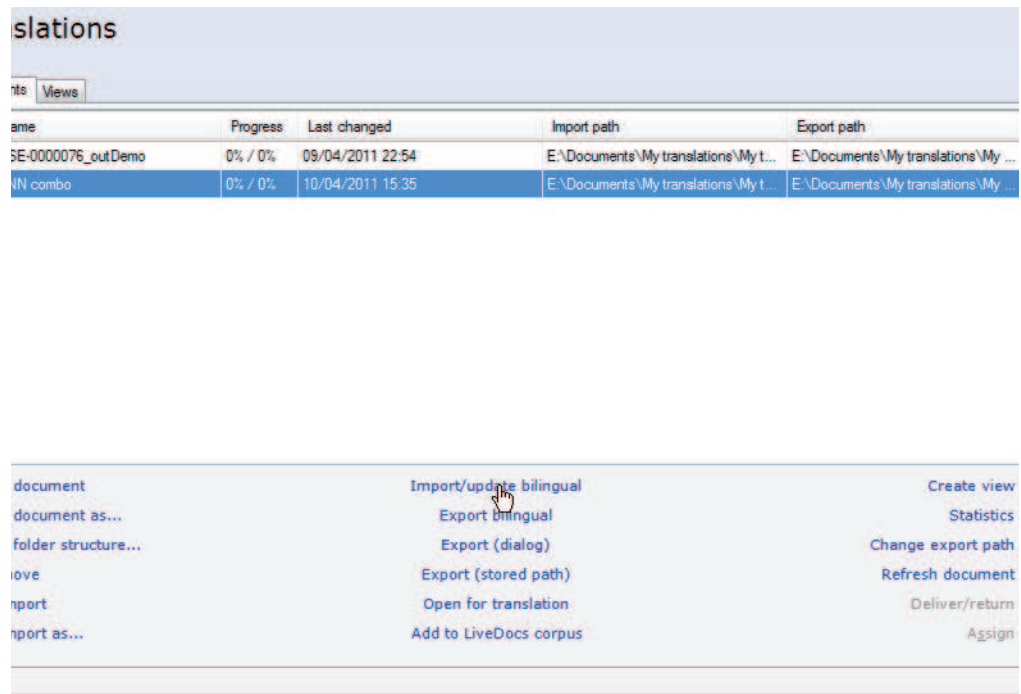


Translation procedure

Your files are now ready for translation. You can send them to the translator.

TASK

1. Send the bilingual document and PDF of source document to translators.
2. When the translator returns the finished work, click **Translation tab > Import/Update bilingual** to import the bilingual document to MemoQ.

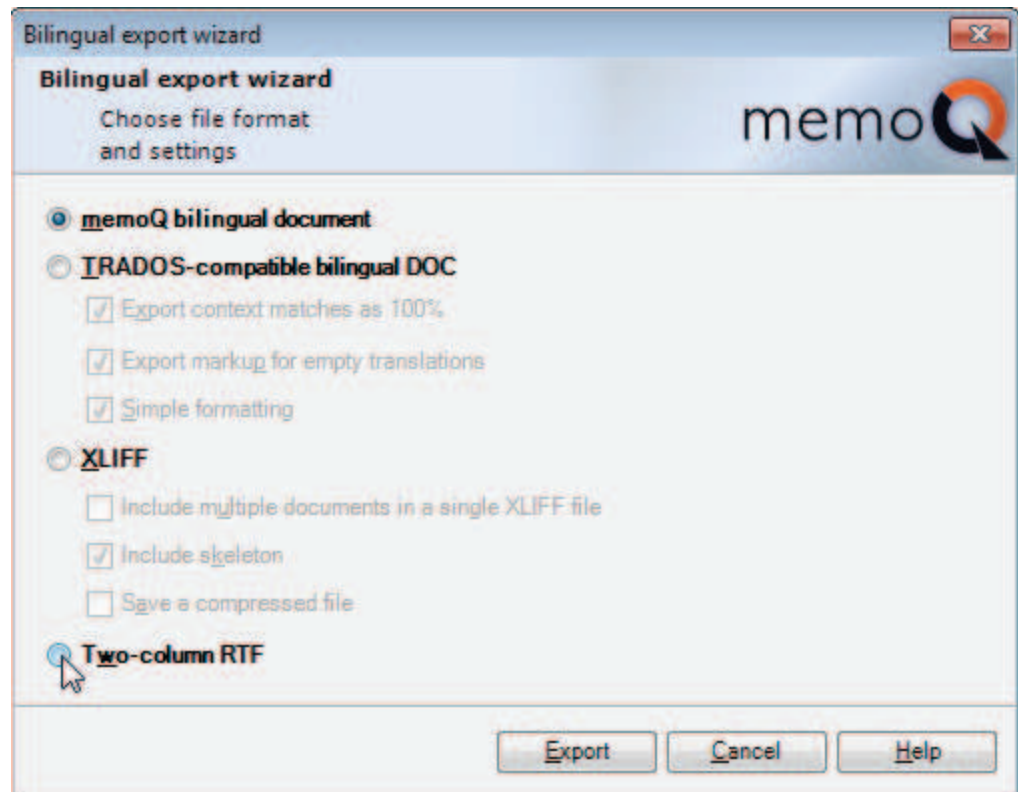


3. Click **Project > Export document** to generate a MIF file in the target language.
4. Open the translated MIF in FrameMaker and check the compliance of translated document formatting with the formatting in the model as well as no double spaces, missing punctuation etc.
5. Generate another PDF file and if you made changes in 4. above, export a bilingual RTF, MBD or XLIFF version and send it to the translator for translator proofreading / double-checking compared to the source PDF.
6. If translator makes changes, import the new bilingual document to MemoQ and repeat steps 3. and 4. above.

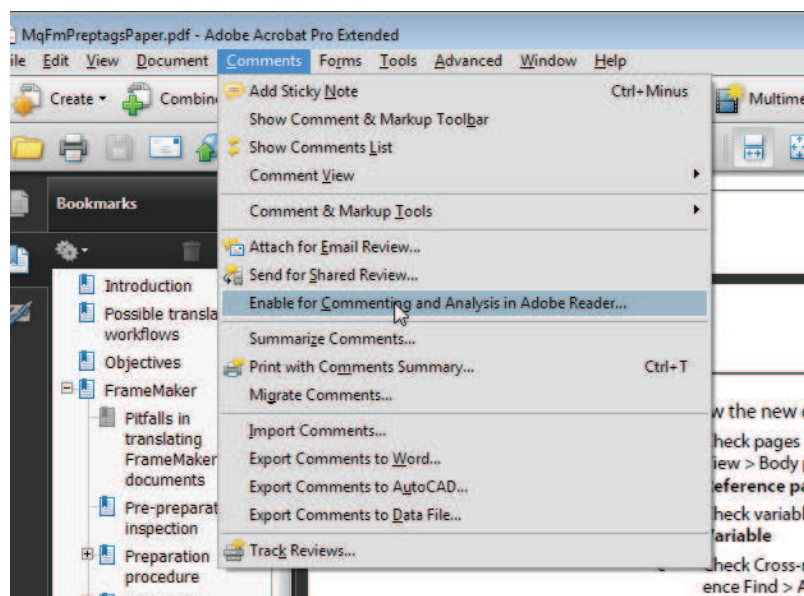
Proofreading procedure

TASK

1. Click **Translations tab > Export bilingual as** and select the **RTF Bilingual Document** radio button to export a bilingual RTF file.



2. Generate a new PDF. Open the new PDF in Adobe Acrobat Pro (any version higher than 7) and click **Comments > Enable for Commenting and Analysis in Adobe Reader**. This is in the likely event that your customer has Adobe Reader rather than Adobe Acrobat Pro. Your customer will now be able to make corrections directly in the PDF file, if desired



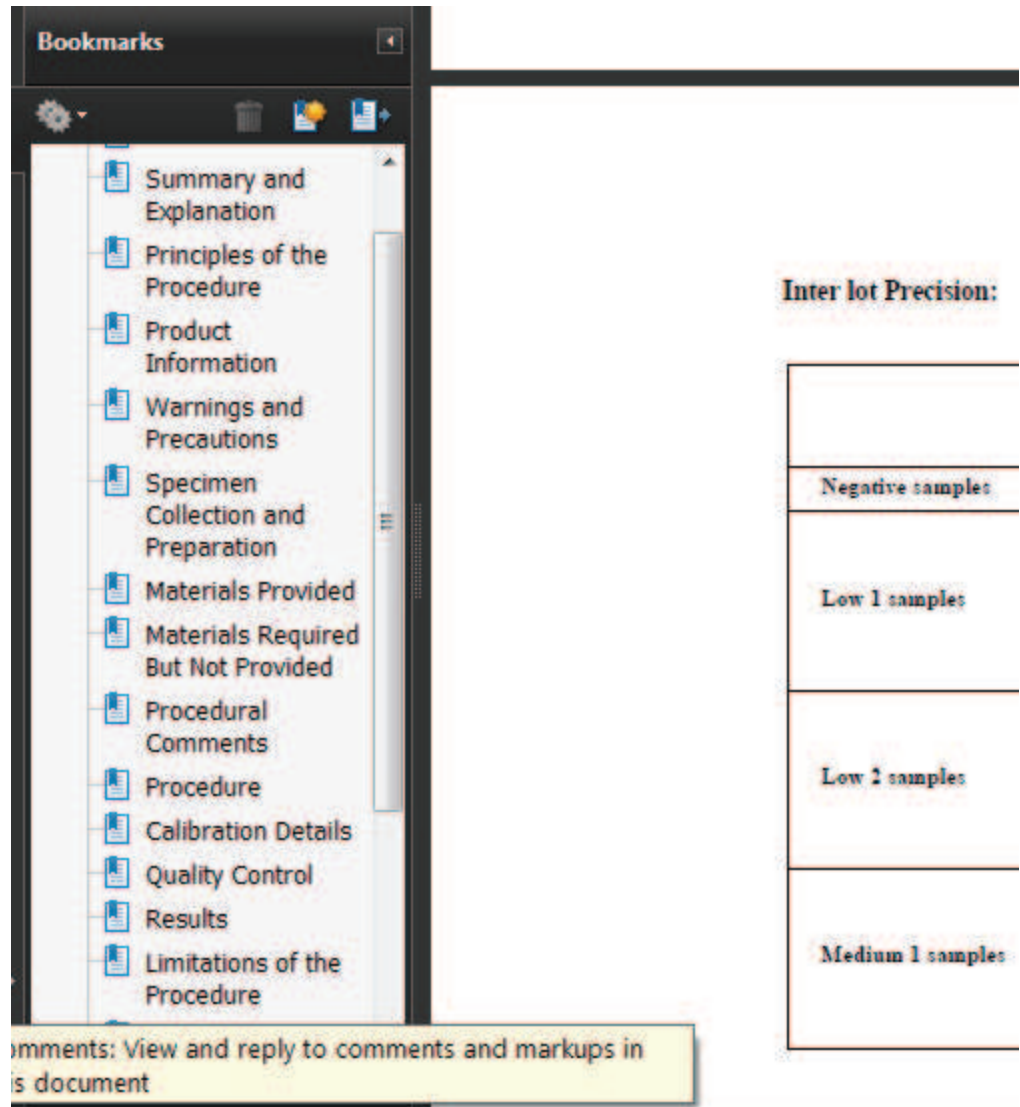
3. Send PDF and bilingual RTF versions of translation to customer.
4. Encourage corrections in the form of Post-its/comments OR Corrections and/or comments in bilingual RTF.

ADDITIONAL INFORMATION: Choice is important: some customers are uncomfortable working outside the layout, especially if it is complex.

5. Integrate customer corrections to MemoQ MIF file using the customer-commented PDF file OR the customer-commented bilingual RTF file.
 - If the customer has used comments in the PDF file to correct the translation, open the Comments view and copy the changes to the transla-

tion document in MemoQ, indicating the changed status in each PDF comment.

- If the customer has used the bilingual RTF file to correct the translation, click **Translations tab > Import/update bilingual** to import the changes in this file.



Translations

Views

name	Progress	Last changed	Import path	Export path
SE-0000076_outDemo	0% / 0%	09/04/2011 22:54	E:\Documents\My translations\My t...	E:\Documents\My translations\My ...
IN combo	0% / 0%	10/04/2011 15:35	E:\Documents\My translations\My t...	E:\Documents\My translations\My ...

document	Import/update bilingual	Create view
document as...	Export bilingual	Statistics
folder structure...	Export (dialog)	Change export path
love	Export (stored path)	Refresh document
report	Open for translation	Deliver/return
report as...	Add to LiveDocs corpus	Assign

6. Regenerate a target language MIF file.
 7. Open the MIF file and click **Save as PDF** or **Print** and select your PDF printer to regenerate an updated PDF file of the translated work.
-

Structured FrameMaker

Managing translation of Structured FrameMaker documents

In both SGML and XML in FrameMaker, you can work in a purely SGML or XML production process, or use binary structured FrameMaker files as an intermediary format. Binary structured FrameMaker documents have a copy of the FrameMaker template and EDD (Element Definition Document) embedded in each binary file. This means that you don't need the DTD, read/write rules or templates to view and edit the files. You will not, however, be able to save them as XML files, which, as shown in the table below, is the required file format to add this type of document to a MemoQ project.

Consequently, the optimal start to translation of Structured FrameMaker documents is for your customer to provide you with XML files and the corresponding DTD. If you want to open the document in FrameMaker for inspection, editing and generating PDF versions, you will need to define the full structured application. In this scenario, you need the read/write rules and template files as well as the DTD. In fact, it is a good idea to ask for the extra structured application files, particularly if you are going to be working with your customer on a long-term basis. Defining the structured application gives you flexibility to optimize your production process.

Source file	Format for MemoQ	Deliverable
Binary Structured FrameMaker	XML	Binary Structured FrameMaker plus a published form such as PDF
XML	XML	XML plus a published form such as PDF

In both SGML and XML in FrameMaker, you can work in a purely SGML or XML production process, or use binary structured FrameMaker files as an intermediary format. Binary structured FrameMaker documents have a copy of the FrameMaker template and EDD (Element Definition Document) embedded in each binary file.

As we noted above, MemoQ does not support MIF exports of binary structured FrameMaker files though. So you have to use the XML files in your translation projects. Now, Structured FrameMaker allows you to use traditional paragraph designer and character designer menus to perform format overrides, e.g. reduce a point size or change a font on the paragraph or character level. However, all such non-structured format overrides are stripped away when the document is "saved as XML" in preparation for translation. So you have to engineer your production process carefully to avoid accidents.

Pre-preparation inspection

TASK

1. Make sure that along with the file for the document to be translated, you get the DTD, read-write rules, and any template file that the DTD references.

2. Set up the structured application for this document type as outlined in the Defining a structured application section.

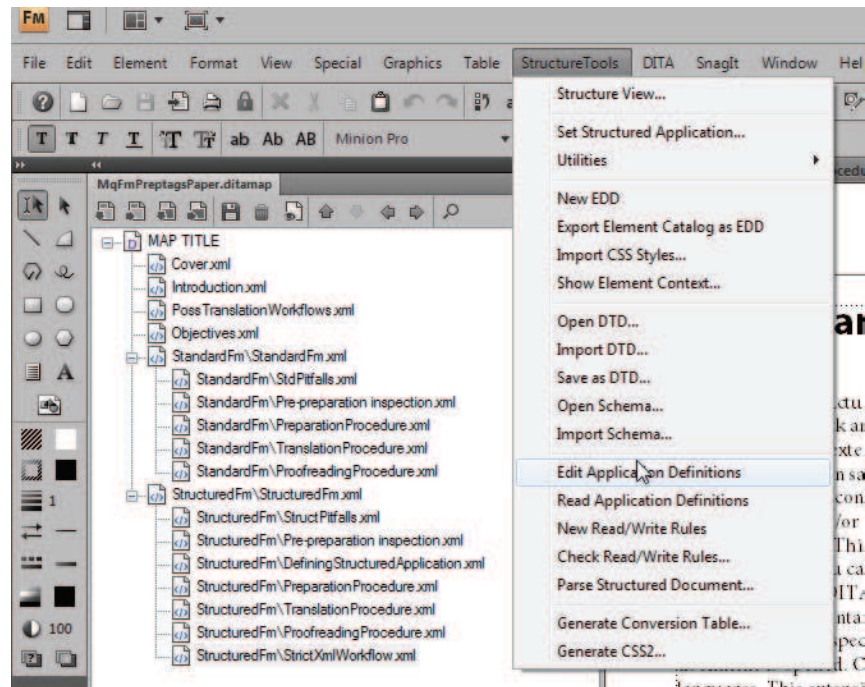
ADDITIONAL INFORMATION: Note that this step is optional and/or dependent on whether your customer supplies you with the read-write rules and templates. It is, however, preferable because it allows you to produce PDF files of the translation to return to the translator for review. This is highly advisable because complex layouts affect how we interpret the text.

Defining a structured application

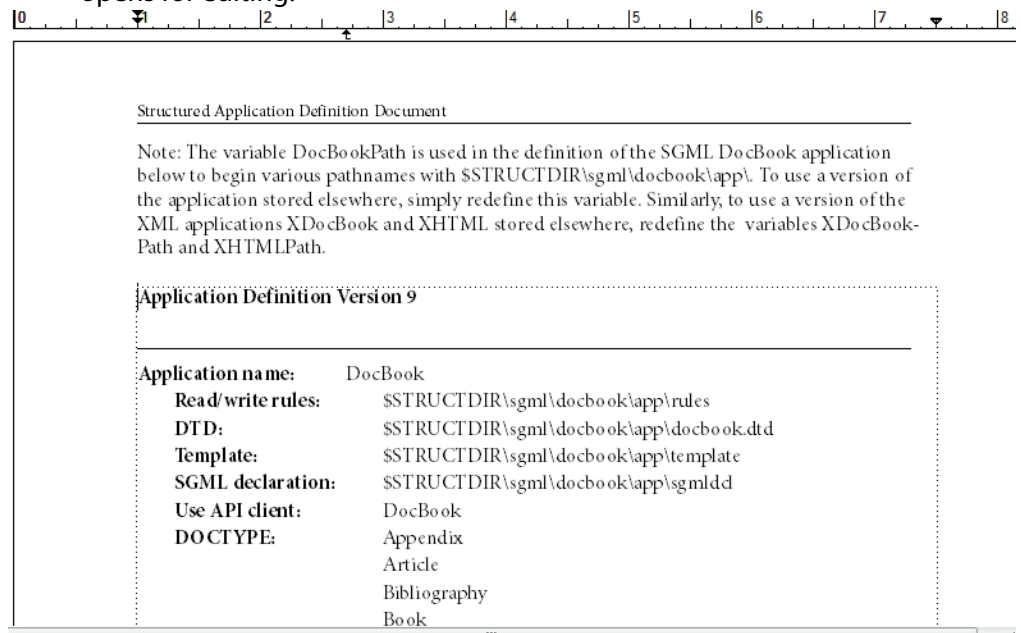
If your customer provides you with binary Structured FrameMaker files, you must define the corresponding structured application in order to save the binary files as XML files. This is because MemoQ only supports XML files in Structured FrameMake translation, not Structured FrameMaker files saved as MIF files. A better solution is for your customer to provide you with XML files. In both cases, the customer must supply you with the DTD. In the structured application scenario, you also need the read/write rules and template files. Even if you receive XML files, you should ask for the extra structured application files, particularly if you are developing a long-term relation with your customer. Defining the structured application gives you flexibility to optimize your production process.

TASK

1. Copy the DTD, read-write rules and template files into the structure directory of your FrameMaker installation: C:\Programs\Adobe\Adobe FrameMaker 9\Structure\xml or C:\Programs\Adobe\Adobe Technical Communication Suite 2\Adobe FrameMaker 9\Structure\xml
2. Click **StructureTools > Edit Application Definitions** to add the definition of the new structured application to your FrameMaker installation.

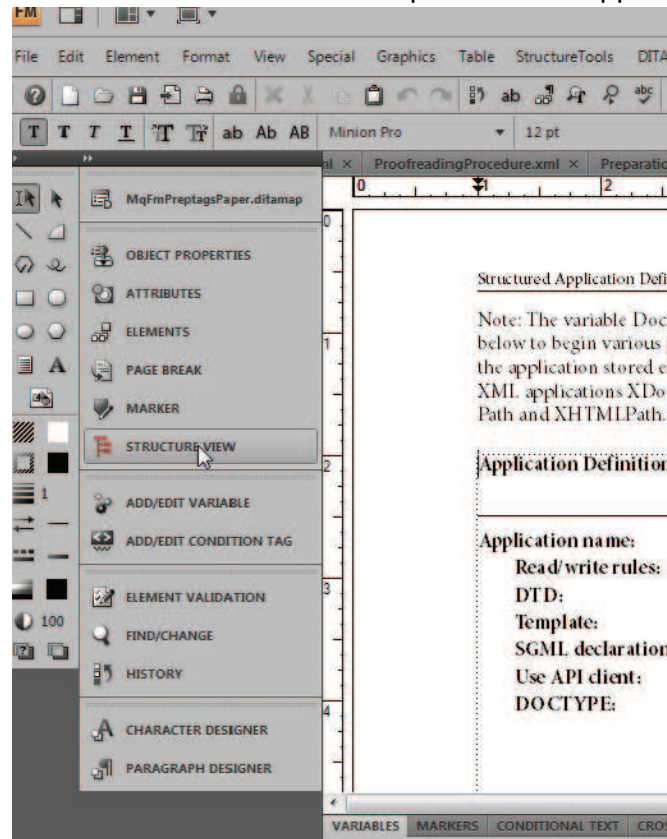


STEP RESULT: The Structured Application Definition Document **structapps.fm** opens for editing.

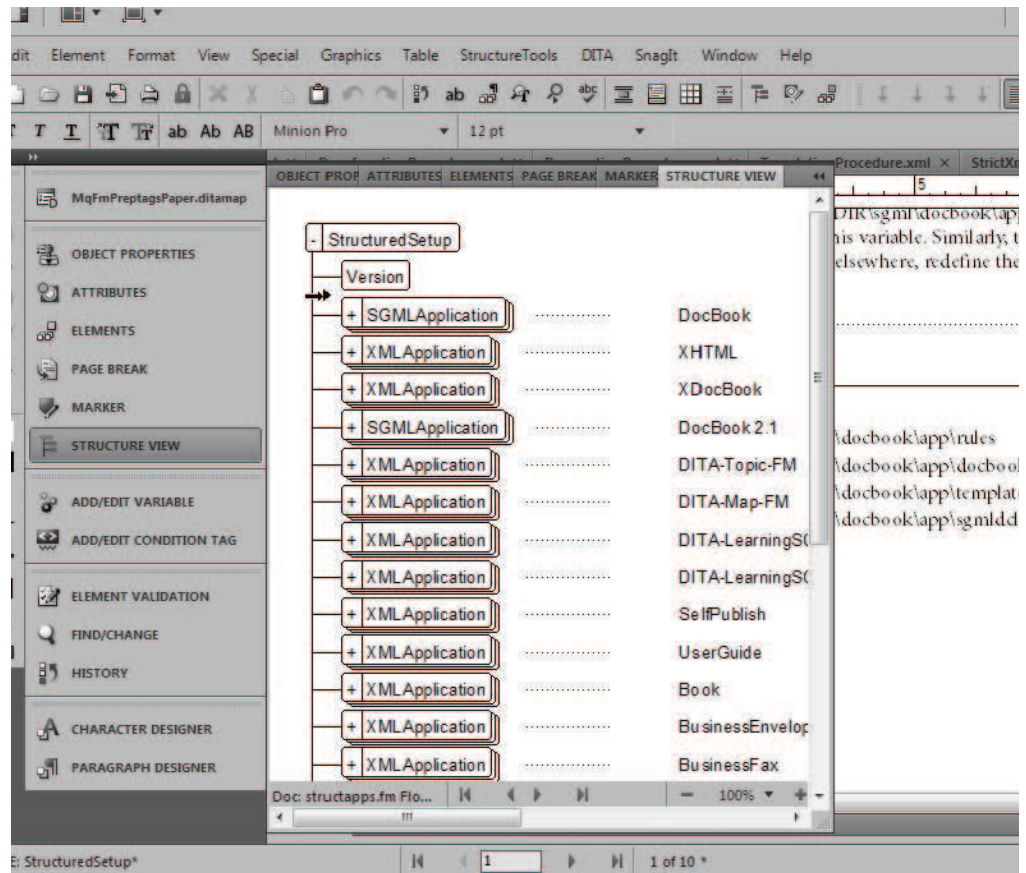


3. Click the **STRUCTURE VIEW** icon in the structure tool pod (by default located or “docked” on the right hand side of your FrameMaker window, or click **StructureTools > Structure View**.

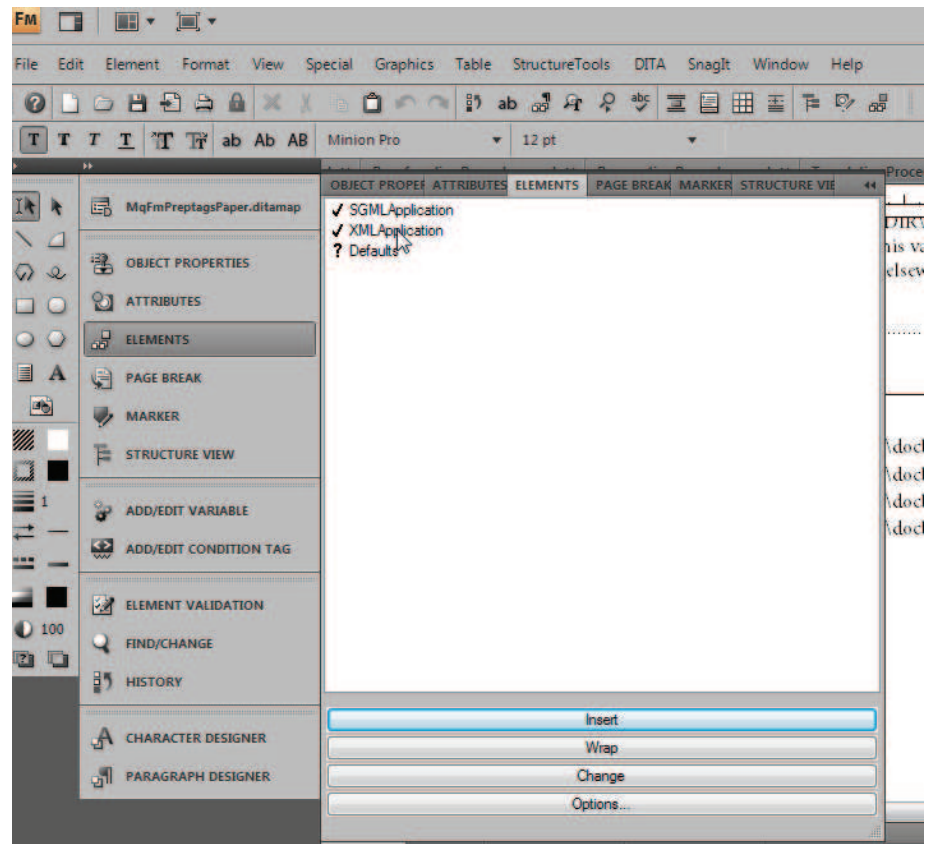
STEP RESULT: The structure view window opens for structapps.fm.



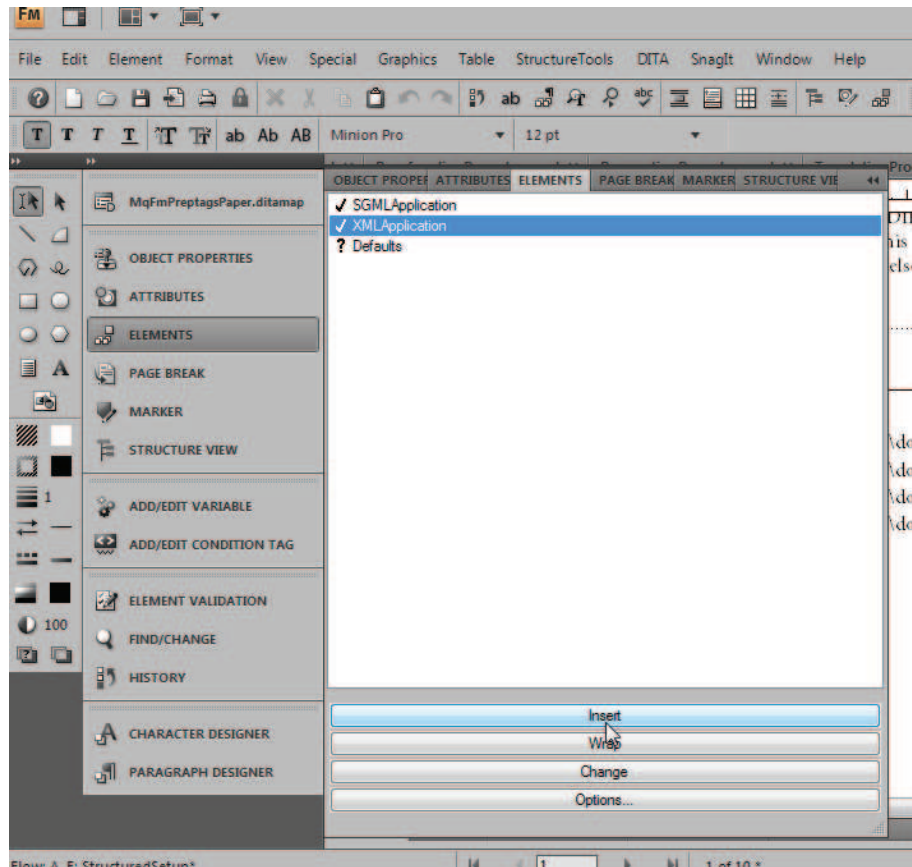
4. Place the cursor on the vertical trunk line that represents the first level of the XML document.



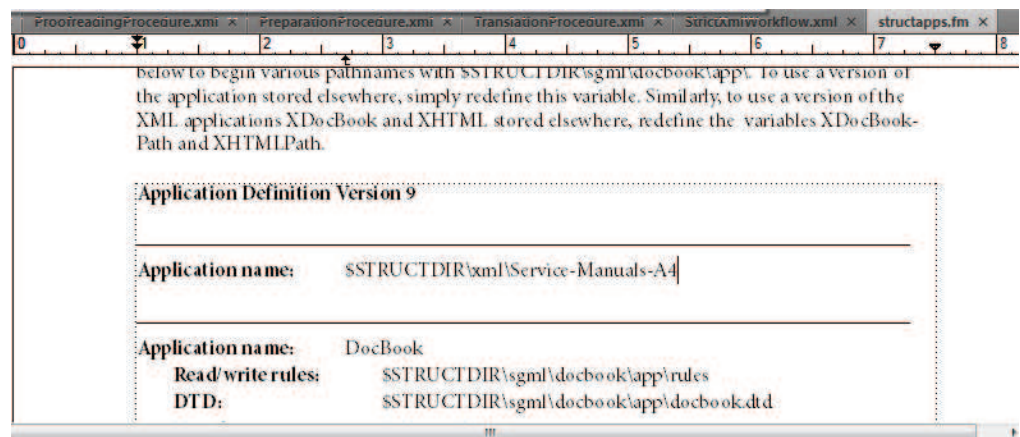
5. Click the **Elements** icon in the same pod and then click **XMLApplication**.



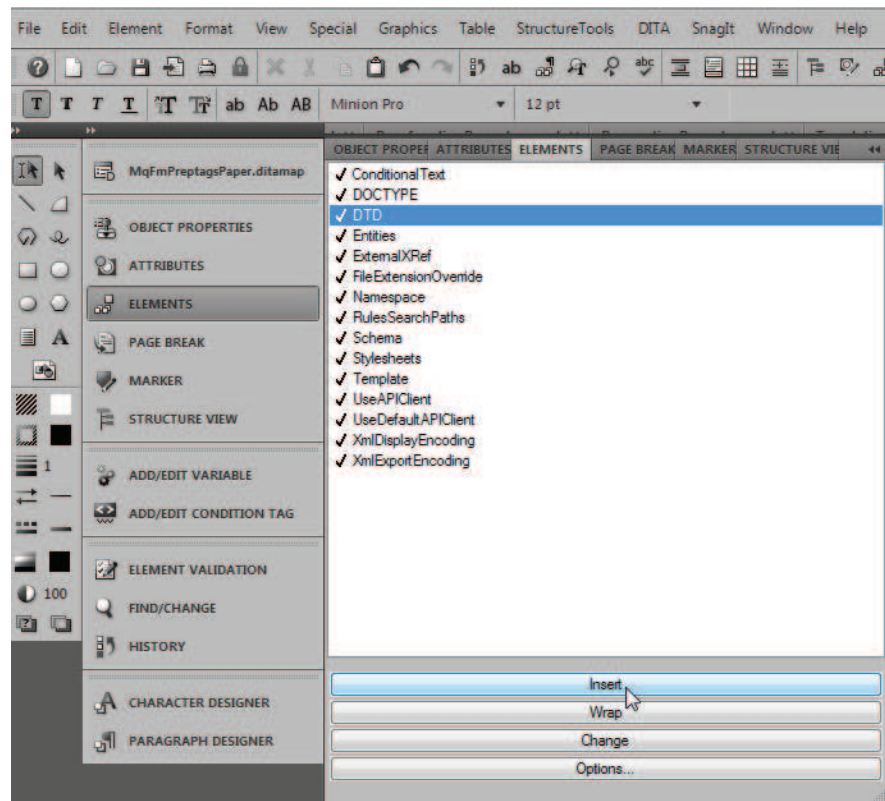
6. Click the **Insert** bar at the bottom of the pane.



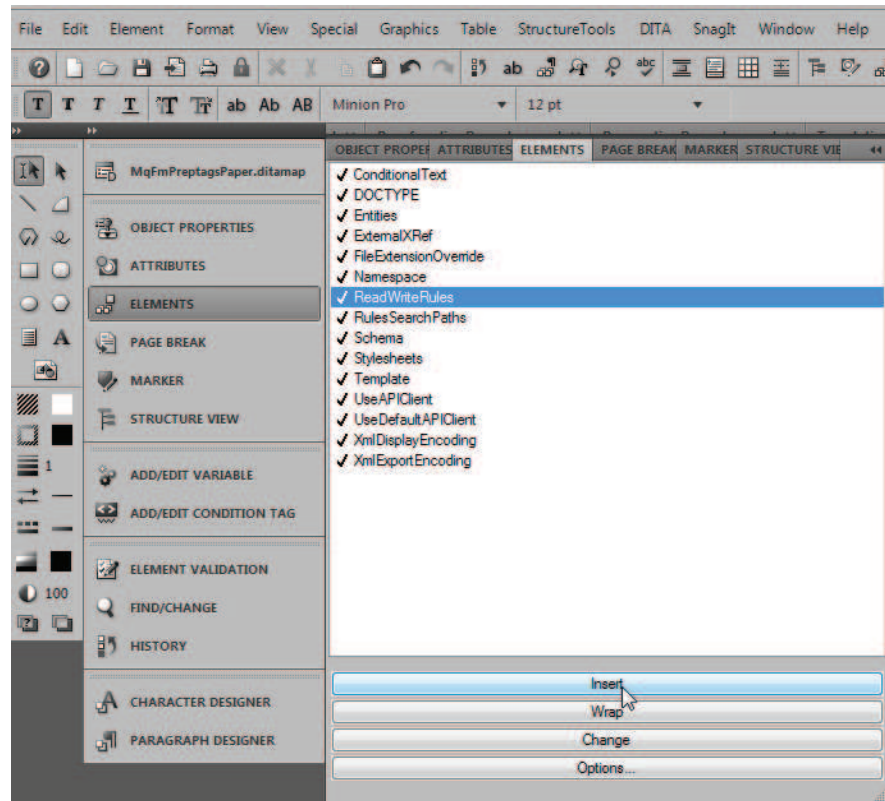
7. Enter the name of the structured application. You will find this in the root element declaration in the DTD file: `<!ELEMENT element_name content_specification>`, where `content_name` is the name of the application and `content_specification` is the list of the names of the content elements in the application. If in doubt, check with your customer.



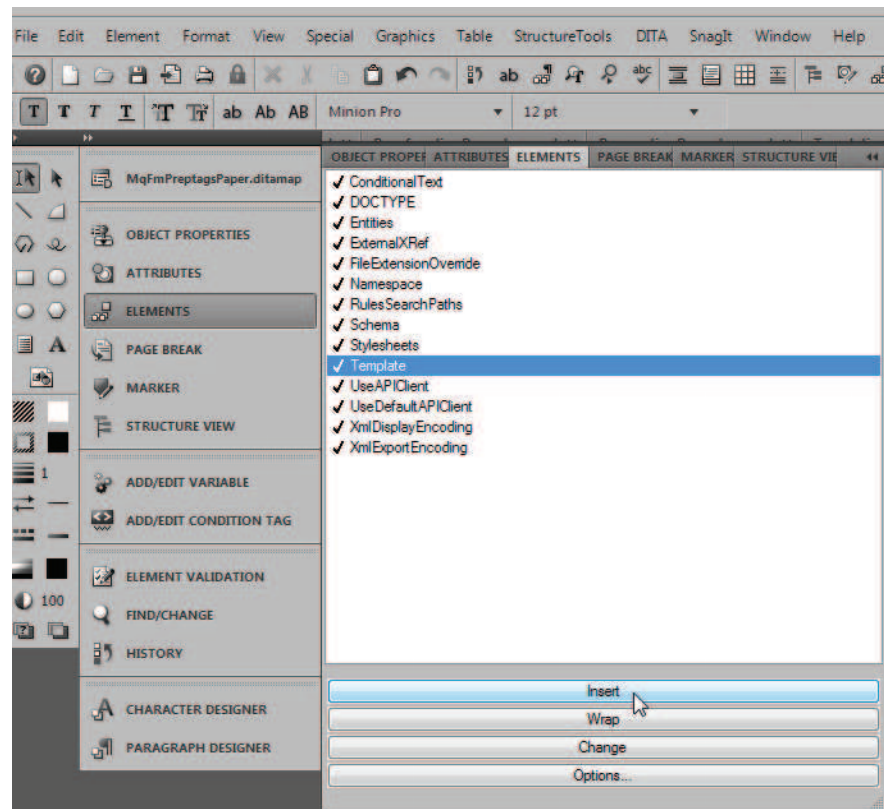
8. In the Structure View, place the cursor below the **Application Name** element. Click the **Elements** icon and then click **DTD**.



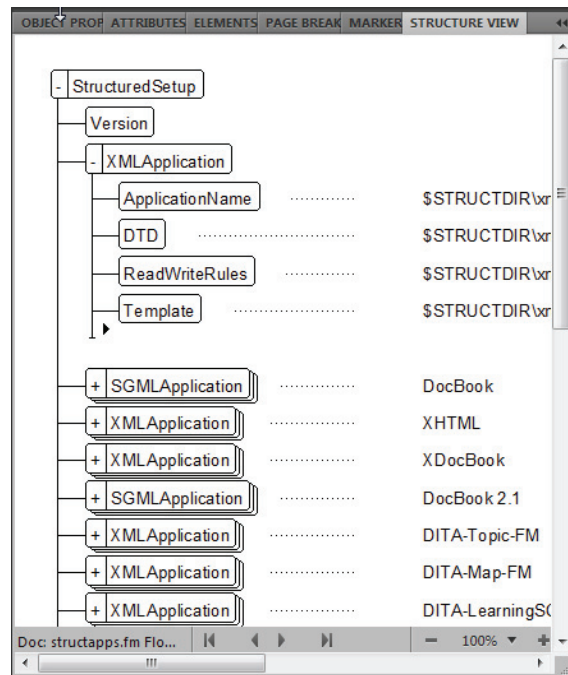
9. Enter
\$STRUCTDIR\xml\application_name\DTDfileName.dtdas
the path to the DTD file.
10. In the Structure View window, place the cursor below the **DTD** element.
Click the **Elements** icon and then click **ReadWriteRules**.



11. Enter
`$STRUCTDIR\application_name\ReadWritefileName.rw`
as the path to the ReadWrite rules file.
12. In the Structure View window, place the cursor below the **ReadWriteRules** element. Click the **Elements** icon and then click **Template**.



13. Enter
\$STRUCTDIR\xml\application_name\TemplateFileName
.tpl as the path to the template file.
14. In the Structure View window, place the cursor below the **Template** element. Click the **Elements** tab and then click **DOCTYPE**.



15. Enter `applicationName` as the document type.
16. Save **structapps.fm**.

STEP RESULT: Your new application is now available. When you open your customer's XML files that use this definition, FrameMaker finds the appropriate application and displays the files correctly. It also allows you to save Structured FrameMaker binary files defined by this application as definition-compliant XML files.

Preparation procedure

When you have identified all features that need to be translated in the source material, you are ready to prepare the material in a way that allows you to avoid random ad-hoc rectifications that add time and cost overruns to your project

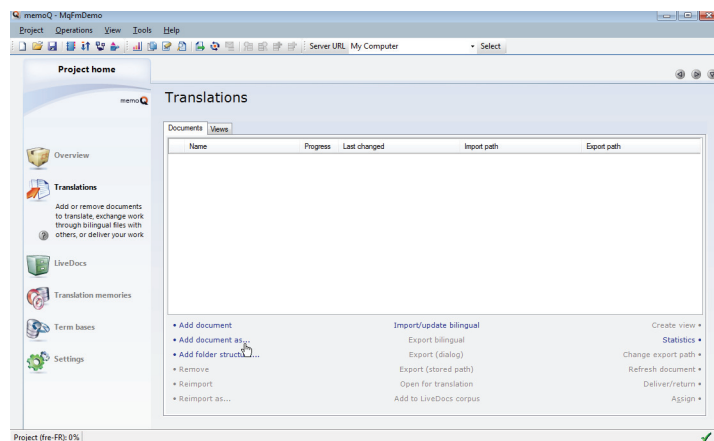
TASK

1. If you receive a binary Structured FM source document, before you open it, click **File > Preferences > Remember Missing Font Names** just in case the customer's fonts are missing on your system.

ADDITIONAL INFORMATION: If the customer's fonts are in fact missing, FrameMaker will report which font is missing and which substitute font is being used in a message window when you open the file. You should note that the fonts will be different in any PDF output you produce because this could be a source of

confusion for your customer. When your customer opens the FM file, the correct fonts will be used.

2. Again, if you receive a binary Structured FM source document, follow the procedure outlined in the Defining a structured application section. This allows you to save the binary Structured FM files as XML files, which will be the basis of your translation project.
3. Click **Save as PDF** (FrameMaker 9.0 and higher) or **Print** and then select a PDF printer to generate a PDF version of the source document, so that the translator has a reference layout with the same fonts as you as opposed to those of your customer.
4. Click **Translations tab > Add document as** to add the XML file.



ADDITIONAL INFORMATION: With XML files from Structured FrameMaker applications, you can ignore the MemoQ element and attribute discovery functionality: the DTD contains everything you need for a safe translation of the XML files in the MemoQ environment.

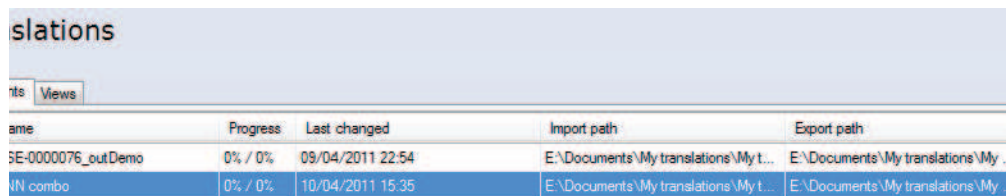
5. Open the document you have just added, find any segments containing any non-translatable text e.g. product reference number, manual reference number, product name (alone, e.g. in footer). Click **Edit > Copy source to target** and double-click the transformation status icon (a red X or a green checkmark) to lock each of these segments.
6. Calculate the document statistics.
7. Click **Translations tab > Export bilingual as** and select the **MemoQ bilingual document** radio button to export the bilingual document as MBD, or select the **XLIFF** radio button to export the bilingual document as XLIFF.

Translation procedure

Your files are now ready to be translated. You can send them to the translator.

TASK

1. Send bilingual document and PDF of source document to translators.
2. When you receive the translated bilingual document from the translator, click **Translations tab > Import/Update bilingual** to import it into MemoQ.



The screenshot shows the 'Translations' tab in MemoQ. It features a table with columns for 'Name', 'Progress', 'Last changed', 'Import path', and 'Export path'. Two rows are visible, both with 0% progress. The first row is for 'SE-0000076_outDemo' and the second for 'IN combo'. A 'Views' button is located above the table.

Name	Progress	Last changed	Import path	Export path
SE-0000076_outDemo	0% / 0%	09/04/2011 22:54	E:\Documents\My translations\My t...	E:\Documents\My translations\My ...
IN combo	0% / 0%	10/04/2011 15:35	E:\Documents\My translations\My t...	E:\Documents\My translations\My ...



The screenshot shows a context menu for a translation project. The menu items are: 'document', 'document as...', 'folder structure...', 'love', 'nport', and 'nport as...'. On the right side, there are three columns of actions: 'Import/update bilingual', 'Export bilingual', 'Export (dialog)', 'Export (stored path)', 'Open for translation', and 'Add to LiveDocs corpus' in the first column; 'Create view', 'Statistics', 'Change export path', 'Refresh document', 'Deliver/return', and 'Assign' in the second column.

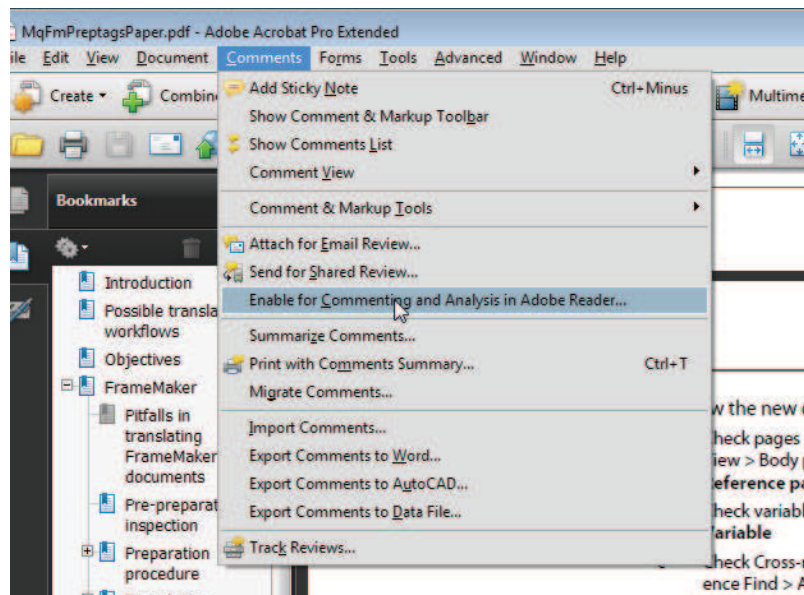
document	Import/update bilingual	Create view
document as...	Export bilingual	Statistics
folder structure...	Export (dialog)	Change export path
love	Export (stored path)	Refresh document
nport	Open for translation	Deliver/return
nport as...	Add to LiveDocs corpus	Assign

3. Click **Project > Export document** to generate the translated XML file.
 4. Open the translated XML file in FrameMaker and check the compliance of translated document formatting with the formatting in the model as well as no double spaces, missing punctuation etc.
 5. Generate another PDF file and if you made changes in 4. above, export a bilingual RTF, MBD or XLIFF version and send it to the translator for translator proofreading / double-checking compared to the source PDF.
 6. If translator makes changes, import the new bilingual document to MemoQ and repeat steps 3. and 4. above.
-

Proofreading procedure

TASK

1. Click Translations tab > Export bilingual as > RTF Bilingual Document to generate a bilingual RTF file. The bilingual RTF format has several arguments in its favour in proofreading. The most significant one is that it is the only way to transfer comments if different TEnts are in use in the project.
2. Click **File** > to generate an updated target language MIF file. Generate a new PDF.
3. Open the new PDF in Adobe Acrobat Pro (any version higher than 7) and click **Comments > Enable for Commenting and Analysis in Adobe Reader**. This is in the likely event that your customer has Adobe Reader rather than Adobe Acrobat Pro. Your customer will not be able to make corrections directly in the PDF file, if desired.



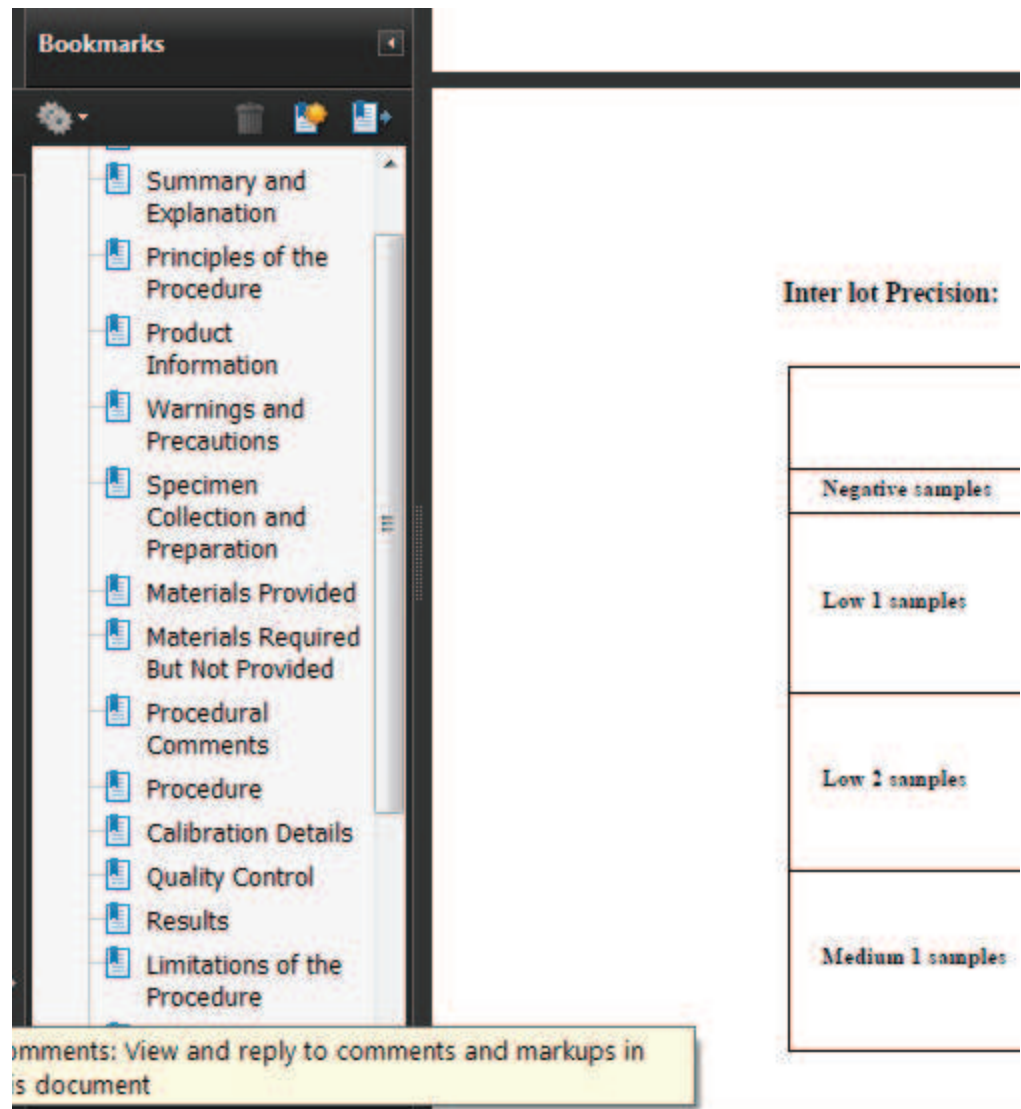
4. Send PDF and bilingual RTF versions of translation to customer
5. Encourage corrections in the form of Post-its/comments OR Corrections and/or comments in bilingual RTF.

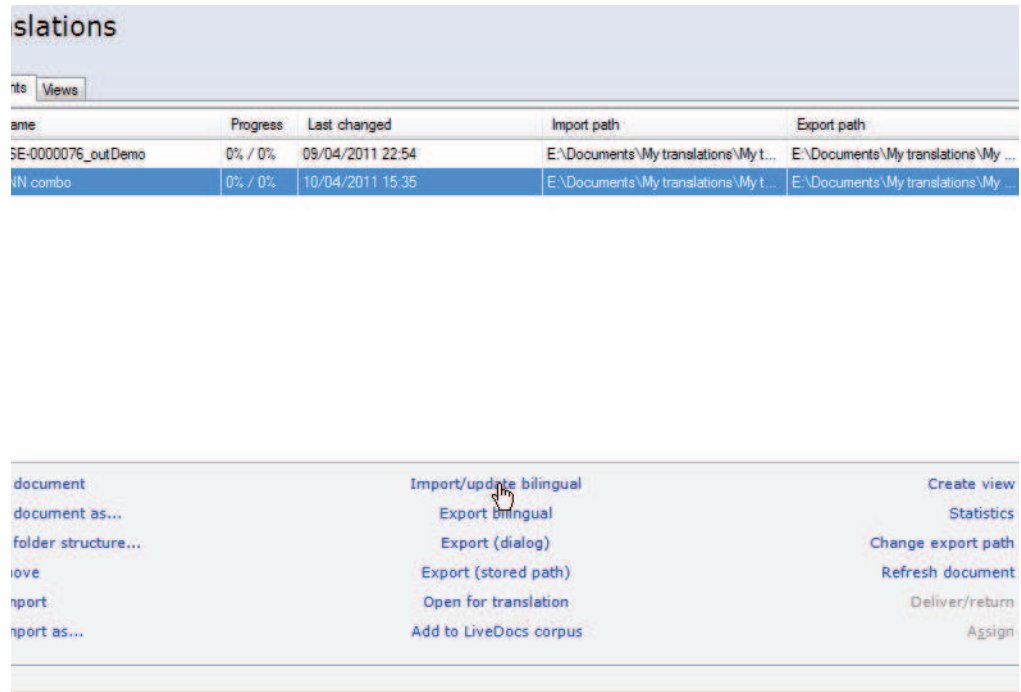
ADDITIONAL INFORMATION: Choice is important: some customers are uncomfortable working outside the layout, especially if it is complex.

6. Integrate customer corrections to MemoQ MIF file using the customer-commented PDF file OR the customer-commented bilingual RTF file.
 - If the customer has used comments in the PDF file to correct the translation, open the Comments view and copy the changes to the transla-

tion document in MemoQ, indicating the changed status in each PDF comment.

- If the customer has used the bilingual RTF file to correct the translation, click **Translations tab > Import/update bilingual** to import the changes in this file.





7. Regenerate the target language XML file.
8. Open the XML file and click **Save as PDF** or **Print** and select your PDF printer to regenerate an updated PDF file of the translated work.

ADDITIONAL INFORMATION: If the XML file is part of a book-like collection of files, as is probably the case, select the aggregating tree structure, for example, the DITA map if the structured application is a DITA (Darwin Information Typing Architecture) one, and click the same command as above.

Why you should use an all XML workflow

To publish any structured application using Adobe FrameMaker, you don't need to convert back and forth XML to FM to XML. As long as your structured application allows extensions and processing instructions, which DITA does, for example, you can save book chapters directly in native XML file format, and use external files to control all formatting. Any unauthorized (i.e. not defined in the DTD) style and/or format overrides are eliminated whenever a chapter or document is saved. This way, you avoid unnecessary post-translation document reconstruction. You can control language-specific formatting with a single template and one DITA attribute. The language specified in the attribute invokes a supplementary style sheet through DITA processing instructions that modifies language specific formatting from a single template when the XML document is opened. Only one structured template is required for multiple languages. This extension can be replicated in any structured application that

allows extensions. It works by specifying a series of conditions for each language in a list.

The following are cases where you could use a single template to advantage:

- Header and footer changes, e.g. Page 12 of 24 > Seite 12 von 24> Page 12 de 24 ...
- Paragraph initial elements with a hanging indentation, e.g. Note: > Hinweis: > Note : > Megjegyzés: ..., Table n: > Tabell n: > Tableau n: ...
- Fonts and font sizes

In Structured FrameMaker, you can make any changes necessary in the EDD (Element Definition Document). And this is the subject of another paper.

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For Further Information

For further information on services that Open Globe can provide LSPs around FrameMaker and MemoQ, please complete this form.

First Name _____

Family Name _____

Position/Title _____

Company _____

Company address _____

City _____ Postal Code _____

Country _____

Telephone _____

E-mail _____

What types of consulting are you interested in?

- Optimizing FrameMaker Translation workflows for MemoQ
- XML structured application development (addons) for translation
- Training on translating FrameMaker documents in the MemoQ environment