StruSoft
Structural Design Software

Save to .docx - FAQ

Why, how?

1. Why should I save to docx? Why does it provide more and what are its drawbacks compared to direct printing?

FEM-Design's main function is not word processing; its possibilities are strongly limited. The docx format and Microsoft Word have the most advanced formatting functions, such as

- full use of Unicode characters and fonts
- pictures and figures can be wrapped around with text
- company- and project-specific headers and footers
- comprehensive formatting and editing of formulas and texts
- precise text layout (paragraphs always fit to the margins or table cells.)
- colourful and adjustable tables.

It is also important that docx documents are portable and editable, and they are not depending on FEM-Design and its actual file format.

Drawbacks: as with all new features, changes related to saving to docx should be learned.

Let's think in "Word"! Once we decide to use "Save to docx" function, it's worth to compile our project documentation as it will be finalized in Word. Instead of adding not FEM-Design specific information, like photos, descriptions to the Documentation model, let's insert them into the final Word documents.

2. What version of MS Word do I need to save to docx from FEM-Design?

Word is not necessary; FEM-Design creates docx documents by itself.

3. What version of MS Word do I need to read and edit docx documents?

Fully comprehensive use of docx documents is supported since the release of Microsoft Office 2007. It is possible to open docx documents in former Office versions, but in order to do that a compatibility plugin should be installed that could have been originally downloaded from Microsoft. However, we have never tested the latter therefore we don't support the use of it.

4. Docx format has been standardized. Can I open and edit my documents originating from FEM-Design in other programs?

The Office Open XML format – docx also belongs here – was standardized as ISO-29500. For this reason many other programs are able to read and edit docx documents. However, due to the immensity of the standard – roughly 6000 pages – perfect implementation of it does not exist besides MS Office versions.

We have tested the LibreOffice/OpenOffice.org programs and it was found that the editing of tables and formulas are regularly faulty, and many times it comes with apparent data loss. In these programs *currently* we don't recommend the use of docx documents!

The world is changing; the different word processor programs are continuously developing. For the developers of the LibreOffice/OpenOffice.org systems the continuous improvement of docx compatibility is one of the most important priorities. Therefore, after release of a new version, it is worth to check if the previous errors have been corrected or not.

In this case the following checklist can be followed:

- Are the formulas correct?
- Are formulas longer than the width of the page paginated correctly? Does the green and red highlight of the formulas appear?
- Do all of the data appear in the tables and are the equations placed in the tables in their right place?
- Do the embedded tables –e.g. Detailed Results displacement figures – appear correctly?

How will all this become docx?

5. How long will be my docx document and on which page will be the different figures and tables?

These things cannot be foretold. Page rendering of MS Word is much more sophisticated than that of FEM-Design, thus page ranking visible in Document module will not be the same as the page ranking of the docx file. In the latter usually fewer pages is necessary for the formulas and texts, but tables can be slightly larger.

Use page break! If we would like to have a particular figure, table or chapter heading on top of a page, it is worth to insert a page break before them already in FEM-Design. It is also worth to open the finished document in Word to make sure if the important parts are in their place.

6. When will be the text bold or italic in the docx document?

In FEM-Design the width and inclination of letters can be precisely set. In MS Word only the given fonts' bold and italic characters can be used. When saving to docx, conversion is done based on the following points:

- characters with at least 1,2 width in FEM-Design are **bold** in MS Word
- characters of which inclination reaches 15° in FEM-Design are *italic* in MS Word

Of course, it is possible to combine these two features. By using particular headings it is possible that the exporting routine, in order to ensure uniform look, doesn't take this settings into account.

7. What type of fonts can I use in the formulas?

The docx document is able to apply all of the fonts used in FEM-Design moreover, when saving to docx an important conversion also takes place: mathematical signs and Greek letters in the formulas will appear well even if they don't exist in that given font. Formulas will appear in Cambria Math font, which was developed specially for the visualization of mathematical formulas.

8. How large images can I use to docx documents?

This is strongly hardware and application dependent. At the development of the new docx output our aim was to prepare documents in printing quality, thus the resolution of the images is 300 DPI – linearly even twice as large as the former figures. On the other hand it had a cost: the pictures should fit entirely in the memory of the graphics card during processing. Based on our experience the memory of different graphics cards allows the following:

- 1 gigabyte: slightly less that is required for the creation of an A0 size image
- 512 megabyte: slightly less that is required for the creation of an A1 size image
- 256 megabyte: slightly less that is required for the creation of an A2 size image

From the part of Word it is version dependent: version 2010 is not able to work with figures larger than A3 in this resolution; version 2013 is able to deal with images in almost unlimited size, but quick processing cannot be expected when using large pictures.

Think about portability! The documents are not only prepared for us and documents compiled in our computer may be needed to save into files on another computer. Therefore, the size of the pictures does matter. In this case, we recommend the use of maximum A3 size images.

9. I cannot create heading level 10, and the table of content is missing from the finished document. What should I do?

Word only supports 9 heading levels in the table of content therefore, we have removed heading level 10 in FEM-Design. Previous projects' heading levels 10, of course, will not be lost, but they will also appear as heading level 9.

Possibilities of Word in the creation of table of content are much broader than that of FEM-Design. Heading can be structured in 9 levels, own filling character can be chosen or page numbers can be substituted for hyperlinks. Because of these, FD does not export the table of content in the docx file, only a notification will appear indicating its original place. User can compile a personalized table of content in the Word clicking on the *Table of Content* menu within *References* tab. It is only a few clicks, but definitely worth it.

10. What should I use instead of drawing frames, title blocks, text fields and other notations?

Word, specifically docx doesn't use frames, title blocks or notations, which are common in technical drawings, in such way as FEM-Design. Therefore, this information cannot be saved to docx files. However, recurring information can be organized into headers and footers. Headers with company logo and project dependent footers can be made, where all of the important things can be included.

Use templates! Templates with .dotx extension allow the personalization of our document's text and table styles and also the preparation of reusable headers and footers.

Our own templates can be selected in the dialog box of docx saving. Two templates can be found there initially. The first one is the *Project Babel:* this shows the use of company specific headers and text field footers. The second one is the *Template for FEM-Design document templates*, which is apparently an empty template, from which we can create new templates (it is important to start from these two templates, because these contain the style, which is required for the documents exported from FEM-Design). When saving our new template, please, pay attention to save it as a template file, not as a document. Avoid overwriting the initial template, and always pace the new one next to the previous ones. It is not a serious problem if the initial templates are overwritten incautiously, just rename them, and FEM-Design will create the missing files to their place at the next opening of the Save as… dialog box.

What should I do with the docx file in MS Word?

11. Spell check of Word underlines almost everything, what should I do?

The default language of the documents created in FEM-Design is English. Therefore, it is possible that Word will inspect texts written in our own language according to English grammar and spelling rules. The solution is to select the text in issue – even the entire document – and then select our own language in the dialog box of *Set Proofing Language* in the *Language* menu of *Review* tab.

12. There are too many or too few columns of multi-column tables. How can I change the number of columns?

FEM-Design breaks long but narrow tables into more columns to have more efficient utilization of the pages. This practice was kept in docx saving, too. As it was mentioned previously, dimensions of paragraphs and tables in Word unfortunately cannot be determined beforehand. Therefore, it can occur that a table is cut to more or less columns than the ideal. However, the number of columns and the distance between them can be set anytime. For that, the following should be done: the blinking text cursor should be placed in the left cell of the top row, so in the first cell, and then click on *Columns* button within *Page Layout* tab. The top elements of the list

can be neglected – they refer for the entire document, not only the selected table – and after clicking on *More Columns* in the bottom, everything can be set based on our preference.

13. How can I print documents containing pages with different sizes?

In the Document module of FEM-Design it is possible to select suitable printer and plotter for document sections with different page sizes. If a docx document contains different sized pages, instead of printing the entire document as one, we should select the different sized sections and send them separately to a suitable printer.

Mark the sections! In the "*Save as Office Open XML (docx) document"* dialog it can be set to mark the beginning of the sections of the documentation with review comments in the final docx file. Watching these can easily identify the beginning and end of different sized page sections. It is important to hide or delete the comments before the actual printing otherwise, they will be printed on the hardcopy, too.

Error messages

14. During saving, an error message indicating a missing image is received, however in FEM-Design I can see all of the images.

That image is indeed missing. FEM-Design doesn't store images imported from an outer source, only a link to their original place. The Document module only displays a compressed preview of the image, which is not suitable for printing quality documents.

Find the original file! If that image is important, it must be found somewhere. Maybe it was just moved to another folder, or if the documentation was created on another computer, the image will be likely there. If the image is found, it is unnecessary to insert it into FEM-Design again. Instead of risking "losing" it again, it is simpler to insert it into the exported docx document, where a cyclamen (magenta) coloured figure and caption will indicate its place.

15. "The document template is corrupted or does not originate from FEM-Design!"

Document templates of FEM-Design contain many essential text and table styles, which cannot be found in the original styles of Word. If we make a new template from the original templates of FEM-Design, that will contain all the necessary components. However, styles seeming unnecessary can be deleted from a good template also, this may have happened in this case, too.

16. "I can't write into the temporary folder! Maybe the temporary files' volume is full."

There is not enough space on the drive containing the temporary files of FEM-Design in order to create the document, or another application – e.g. another running FEM-Design project – blocks the accessibility of working directory.

Make sure to have enough free space, and ensure that only one program uses the working directory at a time.

17. "I can't (over)write destination file! Maybe it is write-protected, or the destination volume is full."

There is not enough space on the destination drive for the final document, or a document currently in use by Word was tried to overwrite.

Make sure to have enough free space, or close the given document in Word.

18. "The default document template is missing!"

FEM-Design's own default document template is missing or damaged.

Try to reinstall FEM-Design. If this doesn't help, please contact StruSoft support!

19. "Internal error: Zip compressor failure!"

FEM-Design's own file compression program is missing or damaged.

Try to reinstall FEM-Design. If this doesn't help, please contact StruSoft support!

20. "Internal error: Table file is missing or corrupted!"

Please contact StruSoft support!

21. „Internal error: PNG encoder not found!"

One of the important graphics components of Windows, the GDI+ is damaged.

Please find the administrator and show him this description!