# Converting a file to a PDF/A compliant version

# **PDF/A** -document format

PDF/A is the ISO-standardized version of the Portable Document Format (PDF) specialized for the digital preservation of electronic documents. The extension in the file name is pdf. PDF/A differs from "normal" PDF in that features ill-suited for long-term archiving are omitted. A PDF/A file has all the fonts used in the document embedded within the PDF file, so that the user of the file need not have the same fonts used to create the file installed on their computer in order to read it. The valid and acceptable versions for archiving your thesis are PDF/A-1a, -1b, -2a and -2b. The 'a', meaning accessible, has more stringent requirements than 'b', meaning basic. '1' refers to the older standard, and it forbids the use of transparency in images, whereas '2' refers to the newer one and allows transparency in images. Thus, if you have images with transparencies in your thesis, which is usually the case, use PDF/A-2b.

#### **Conversion tools**

PDF-XChange pro/Editor is installed on all Windows workstations managed by Aalto IT. PDF-XChange is also available for home use at <u>https://download.aalto.fi</u>. Alternatively, use the virtual desktop environment, <u>https://www.aalto.fi/en/services/vdiaaltofi-how-to-use-aalto-virtual-desktop-infrastructure</u>, to use PDF-XChange.

To make the conversion, use the PDF-XChange printer:

```
File \rightarrow Print \rightarrow PDF-XChange Standard \rightarrow Properties \rightarrow General \rightarrow Choose: <u>PDF/A-2b</u>
```

Ensure first in the Print dialog box that Name is set to PDF-XChange Standard from the drop-down menu and only then push the Properties button.

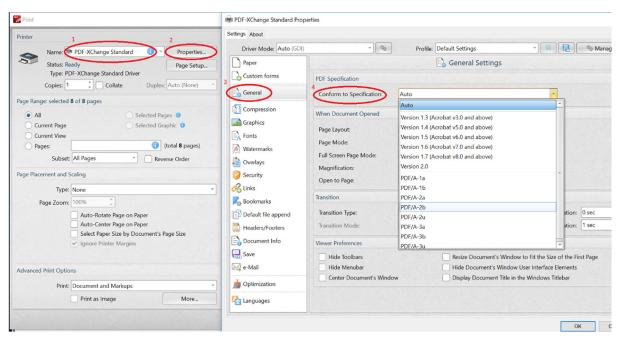


Figure 1: First set the printer name to PDF-XChange (1) and then pushing the Properties button (2) will open a new dialog box. Choose General (3) in order to be able to specify the desired PDF format (4).

# Create PDF/A with Word:

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### LaTeX (this is not a conversion tool)

A LaTeX thesis template and class file, developed at the School of Electrical Engineering, which directly produces a PDF/A file is available at <a href="https://wiki.aalto.fi/display/Aaltothesis/Aaltothesis+LaTeX+Template">https://wiki.aalto.fi/display/Aaltothesis/Aaltothesis+LaTeX+Template</a>

The template, which supports text in Finnish, Swedish and English, is self-documentary. If the generated PDF/A is not a valid PDF/A, see the guide at

<u>https://aaltodoc.aalto.fi/doc\_public/ohjeet/pdfa\_thesis\_guide.pdf</u> for help. If that does not help you, you can try to fix the PDF file and convert it into a valid PDF/A -format by using the PDF-XChange program, as described above.

#### **PDF/A** validation

Go to the site https://www.pdf-online.com/osa/validate.aspx Select file to validate If your pdf is in right format, result should look like this (pdfa-1b is also ok file type)

#### **3-HEIGHTS™ PDF VALIDATOR ONLINE TOOL**

You can use the form below to validate PDF files for PDF and PDF/A compliance.

File	PDFA-converting.pdf
Compliance	pdfa-2b
Result	Document validated successfully.
Result Details	Document validated successfully. Validating file "PDFA-converting.pdf" for conformance level pdfa-2b The document does conform to the PDF/A-2b standard. Done.

#### **Troubleshooting tips**

- Favour the pdf format for images in LaTeX. Ensure that all fonts used in the image are embedded in the file.
- Use the jpg or png format for image files you add to your Word or LibreOffice publication.
- Use the Insert image function in the word-processing program: Microsoft Word: Insert-menu > Picture > Choose file
   LibreOffice: Insert > Image > From file > Choose file
- Do not use Copy–Paste or drag-and-drop -functions for inserting images.
- Do not use images with a transparent background or other transparent elements.

If you have a problem with converting or validating file, contact: IT Service Desk: <u>servicedesk@aalto.fi</u>

#### **External links**

https://en.wikipedia.org/wiki/PDF/A

Kansalliset pitkäaikaissäilytyspalvelut (CSC): Säilytys- ja siirtokelpoiset tiedostomuodot

Petersen-Jessen, Jari, 2009, PDF-tiedostomuodon hyödyntäminen eduskunnassa

PDF/A in a Nutshell 2.0