
The **xxeconvert** command-line utility

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March 22, 2024

Abstract

This document is the reference manual of the **xxeconvert** command-line utility. This tool is based on the XMLmind XML Editor desktop application, but without a graphical user interface (**GUI**). It can be used to convert XML documents to other formats (HTML, PDF, RTF, etc) from within a script or a makefile.

This utility, like all the other command-line utilities, is found in `XXE_install_dir/bin/`.

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1. Why use the **xxeconvert** command-line utility?

This tool is based on the XMLmind XML Editor (**XXE** for short) desktop application, but without a graphical user interface (**GUI**). It can be used to convert XML documents to other formats (HTML, PDF, RTF, etc) from within a script or a makefile.

Because **xxeconvert** shares a lot of code with **XXE**, this command-line utility will automatically make use of most the installed add-ons (e.g. "Apache FOP 1.x XSL-FO processor plug-in", "Apache Batik image toolkit plug-in", etc) and also of some of the last specified user preferences (e.g. conditional processing profiles).

This utility, like all the other command-line utilities, is found in `XXE_install_dir/bin/`.



Mac users

If you install **XXE** on the Mac using the recommended `.dmg` distribution, you'll not find `XXE_install_dir/bin/`. The **xxeconvert** command-line utility, like all the other command-line utilities, is found in `XMLmind.app/Contents/Resources/xxe/bin/`.

If you plan to use **xxeconvert** a lot, may be you'll prefer to install the `.zip` distribution on your Mac rather the recommended `.dmg` distribution. Installing the `.zip` distribution on your Mac requires also installing a Java 1.8+ runtime.

2. Using **xxeconvert**

2.1. The online documentation of **xxeconvert**

xxeconvert is fully auto-documented:

- Run "xxeconvert" or "xxeconvert -?" to list its command-line options:

```
$ xxeconvert

usage: xxeconvert [Advanced option]* [Special option]*
  [-t XSLT_stylesheet_file_or_URL]?
  [-r|-ru resource_name resource_value]*
  [-p XSLT_stylesheet_param_name XSLT_stylesheet_param_value]*
  process_command_name doc_file_or_URL
  [-s|-u process_command_arg]*
...

```

- Run "xxeconvert whatever" to list all available process commands:

```
$ xxeconvert foo

xxeconvert: *** ERROR *** 'foo', not a documented process command.
asm.toEclipseHelp
asm.toEpub
asm.toHTML
asm.toHTML1
asm.toHTMLHelp
asm.toPSfile
asm.toRTF
asm.toWebHelp
db5.toEclipseHelp
db5.toEpub
...

```

- Run "xxeconvert dita.toEPUB" to print how to use the "dita.toEPUB" process command:

```
$ xxeconvert dita.toEPUB

xxeconvert [options] dita.toEPUB map_or_topic_file_or_URL \
  -u epub_file_or_URL

Convert DITA map or topic map_or_topic_file_or_URL to
EPUB file epub_file_or_URL.

Example:
xxeconvert convert dita.toEPUB doc.ditamap -u out/doc.epub

```

2.2. Using xxeconvert to convert documents

Usage:

```
xxeconvert [Advanced Option]* [Special Option]*
  [-t XSLT_stylesheet_file_or_URL]?
  [-r|-ru resource_name resource_value]*

```

```
[ -p | -pu XSLT_stylesheet_param_name XSLT_stylesheet_param_value ] *
process_command_name doc_file_or_URL
[ -s | -u process_command_arg ] *
```

Converts XML document *doc_file_or_URL* using process command in *XMLmind XML Editor - Commands* called *process_command_name*, found in any of the **XXE** configuration files scanned during the startup of **xxeconvert** (see *XMLmind XML Editor - Configuration and Deployment*).

Common options:

-t *XSLT_stylesheet_file_or_URL*

Use this alternate XSLT style sheet instead of the one specified in the first `transform` child element of the process command.

If specified process command has no `transform` child element but has `subProcess` child elements, these sub-processes are searched recursively for a `transform` child element.

-r | **-ru** *resource_name resource_value*

Copy specified resource rather than the one specified in the `<copyProcessResources name="resource_name">` child element of the process command.

-ru is useful when the resource value is a relative filename that needs to be converted to an absolute "file:" URL.

-p | **-pu** *XSLT_stylesheet_param_name XSLT_stylesheet_param_value*

Add/replace corresponding XSLT style sheet parameter in the first `transform` child element of the process command.

-pu is useful when the parameter value is a relative filename that needs to be converted to an absolute "file:" URL.

If specified process command has no `transform` child element but has `subProcess` child elements, these sub-processes are searched recursively for a `transform` child element.

-p | **-pu** *param_group_name/param_name param_value*

Add/replace specified parameter to parameter group called *param_group_name*.

-pu is useful when the parameter value is a relative filename that needs to be converted to an absolute "file:" URL.

DocBook example: `-p docb.toRTF.XFCParameters/docx.variant 151`, where parameter group `docb.toRTF.XFCParameters` is declared as follows in `XXE_install_dir/addon/config/docbook/xslMenu.incl`:

```
<command name="docb.toRTF">
  <process>
    ...
    <processFO processor="XFC" file="__doc.fo" to="__doc.%0">
      <parameter name="outputFormat">%0</parameter>
      <parameter name="outputEncoding">%1</parameter>
      <parameter name="imageResolution">120</parameter>
```

¹This XMLmind XSL-FO Converter option marks generated DOCX file as being compatible with MS-Word 2013.

```

    <parameter name="prescaleImages">false</parameter>
    <parameterGroup name="docb.toRTF.XFCParameters" />
  </processFO>
  ...
</process>
</command>

```

`-s` | `-u` *process_command_arg*

Pass these arguments to the process command as the values of process variables %0, %1, ..., %9.

If `-s` (String) is specified, the argument is passed as is.

If `-u` (URL) is specified, the argument, a file or directory name, is first converted to an URL.

Special options:

`-profile` *|file_or_URL*

Apply this conditional processing (profiling) file to the document being converted.

This file may be

- a ".ditaval" file optionally ending with "?media=screen" (default media) or "?media=print"
- OR a ".profiles" file ending with a fragment (e.g. "#my_profile") specifying the ID of the selected profile.

Specify "-" to suppress profiling.

`-fop`

Make sure to use Apache FOP to generate PDF (*just for this document conversion*; sometimes useful because Apache FOP has MathML support).

`-d`

Sets the `debug` attribute of the process command to value `true` (no matter what has been specified in the `process` element).

This prevents the process command from deleting its work directory (`/tmp/xxeNNNN/`) at the end of the processing.

`-v`|`-vv`|`-vvv`

Turn verbosity on. The more Vs, the more verbose.

Advanced options:

`-auth` *credentials*

This option can be used to specify authentication credentials for a given server. This allows to connect to the specified server without interactively asking the user to enter a username and a password.

String *credentials* consists in 6 fields: *host*, *port*, *prompt*, *scheme*, *username*, *password*, in that order, separated by a newline character ('\n'). Fields *host*, *port*, *prompt*, *scheme* can be left empty, which means: match any. The UTF-8 bytes of the string are then encoded in base-64.

Command-line utility `xxe_install_dir/bin/authvalue` allows to generate such encoded string. Example: encode string "\n\nDocument Store\n\nvictoria\n\nsecret":

```

/opt/xxe/bin$ authvalue victoria secret - "Document Store"
CgpEb2N1bWVudCBTdG9yZQoKanZpY3RvcmlhCnNlY3JldA==

/opt/xxe/bin$ xxeconvert convert -auth CgpEb2N1bWVudCBTdG9yZQoKanZpY3RvcmlhCnNlY3JldA== \
docb.toHTML http://www.acme.com/docstore/push_up.xml -u docs/

```

Command-line utility **authvalue** is auto-documented. Type **authvalue**, then press Enter to display a short documentation explaining how to use this utility.

See also Appendix A, *About **xxeconvert** and user authentication* [7] for an alternative way to let the user of **xxeconvert** authenticate to a server.

-putpref *key value*

Adds or replace preference specified by *key/value* to the set of the user's preferences.

Note that the **-putpref**, **-putprefs**, **-delprefs** options change the user's preferences only during this invocation of **xxeconvert**. **xxeconvert** reads, but never writes the contents of file `XXE_user_preferences_dir/preferences.properties`.

-putprefs *property_file_or_URL*

Similar to **-putpref** except that several *key/value* pairs may be read from specified property file.

-delpref *key*

Removes preference specified by *key* from the set of the user's preferences.

Examples:

Example 1. Convert a DocBook document to multi-page HTML

1. First run "**xxeconvert convert**" to list all available process commands:

```

$ xxeconvert dontknow

...
db5.toEclipseHelp
db5.toEpub
...
docb.toHTML
...

```

2. Process command `docb.toHTML`² looks good. Run "**xxeconvert docb.toHTML**" to print its online help:

```

$ xxeconvert docb.toHTML

xxeconvert [options] docb.toHTML docbook_file_or_URL \
-u output_dir_filename_or_URL

Convert DocBook document docbook_file_or_URL to multi-page HTML.

```

²The `docb.toHTML` process command is defined in `xxe_install_dir/addon/config/docbook/xslMenu.incl`.

Create the HTML pages in directory `output_dir_filename_or_URL`.

Example:

```
xxeconvert convert docb.toHTML doc.xml -u out/
```

3. Use process command `docb.toHTML` to convert DocBook document `help.xml` to multi-page HTML created in directory `docs/help/`.

```
$ xxeconvert -p toc.section.depth 4 -p chunk.section.depth 2 \
  docb.toHTML help.xml \
  -u docs/help
```

IMPORTANT: If file `help.xml` is a DocBook 5.0 document and not a DocBook 4 document, please make sure to invoke command **db5.toHTML** and not command **docb.toHTML**. If you make this mistake, you'll get the following error:

```
xxeconvert: *** error: did not find command 'docb.toHTML' in configuration 'DocBook 5.0'
```

Example 2. Convert a DocBook document to PDF

1. First run "`xxeconvert convert`" to list all availables process commands:

```
$ xxeconvert whichone
...
db5.toEclipseHelp
db5.toEpub
...
docb.toPSFile
...
```

2. Process command `docb.toPSFile`³ looks good. Run "`xxeconvert convert docb.toPSFile`" to print its online help:

```
$ xxeconvert docb.toPSFile

xxeconvert convert [options] docb.toPSfile docbook_file_or_URL \
  -s pdf -s "|pdf" -u pdf_file_or_URL

Convert DocBook document docbook_file_or_URL to PDF file pdf_file_or_URL.

Example:
xxeconvert convert docb.toPSFile doc.xml -s pdf -s "|pdf" -u out/doc.pdf
...
```

³The `docb.toPSFile` process command is defined in `xxe_install_dir/addon/config/docbook/xslMenu.incl`.

3. Use process command `docb.toPSFile` to convert DocBook document `doc.xml` to `commands.pdf`.

```
$ xxeconvert -t fo_docbook.xsl \  
  -p toc.section.depth 4 -p callout.graphics 0 -p variablelist.as.blocks 1 \  
  docb.toPSFile doc.xml \  
  -s pdf -s "|pdf" -u docs/commands/commands.pdf
```

Notice that an alternate, customized, XSLT style sheet, `fo_docbook.xsl`, is used instead of the stock `docbook.xsl`.

IMPORTANT: If file `help.xml` is a DocBook 5.0 document and not a DocBook 4 document, please make sure to invoke command **db5.toPSFile** and not command **docb.toPSFile**. If you make this mistake, you'll get the following error:

```
xxeconvert: *** error: did not find command 'docb.toPSFile' in configuration 'DocBook 5.0'
```

A. About **xxeconvert** and user authentication

Most remote document repositories (e.g. WebDAV servers) will require the user of **xxeconvert** to authenticate herself/himself.

xxeconvert being a command-line tool designed to be used in makefiles, batch files, shell scripts, etc, authentication by the means of an interactive dialog with the user is not a solution. That's why **xxeconvert** automatically uses the credentials stored by XMLmind XML Editor in the preferences file of the user.

Example:

User john needs to run **xxeconvert** to convert `http://www.acme.com/docs/foo.xml` to HTML.

Server `http://www.acme.com/docs/` requires user john to authenticate himself.

User john starts XMLmind XML Editor and opens `http://www.acme.com/docs/foo.xml`.

A dialog box is displayed prompting user john for his credentials.

User john types his user name and password and, by checking the "**Remember these user name and password**" checkbox, allows XMLmind XML Editor to store the credentials in `XXE_user_preferences_dir/preferences.properties`.

From then, user john may run **xxeconvert** to convert any document stored on `http://www.acme.com/docs/`.

See also the `-auth` command-line option [4] for an alternative way to let the user of **xxeconvert** authenticate to a server.