CMP3 - Cross Media Publishing

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1 Introduction

CMP3 is a system for data and content processing and transformation. In other words: it can produce PDF files from your data. But that's not the whole truth because producing PDF is just one example of the possibilities.

So what mean "cross media publishing"? The idea is to use your content produced and stored at one location and feed different channels to publish on several target platforms and media. CMP3 with it's modular design can be configured to retrieve content from any source, modify the data with processors using XSLT or PHP and finally transform the content in any target format.

The target format is not necessarily a print format like PDF, but could also be XML, HTML, Text, and many other.

For more information look at `http://www.cross-media.net`.

2 Installation

Install the extension as usual. Please read the following sections for needed dependencies.

2.1 Dependencies

2.1.1 TYPO3

While this is currently a TYPO3 extension, CMP3 itself is (or should be) independent from TYPO3.

2.1.2 Tidy

Tidy is used for HTML processing and needs to be available as cli or as PHP module.

In Debian you can install the PHP module as follow:

```
# sudo apt-get install php5-tidy
```

2.1.3 XSLT

It is very likely that XSLT is needed in your CMP3 project, so this is a dependency.

In Debian you can install the PHP module as follow:

```
# sudo apt-get install php5-xsl
```

This will give you XSLT 1 support.

2.2 Optional dependencies

Following tools are not needed as long as none of the processors are used.

2.2.1 FOP

FOP is a XSL-FO processor which is used to process PDF files from XML data.

There are other (commercial) processors out there which could be easily integrated in CMP3 but that isn't available yet.

2.2.1.1 Installation In Debian you can install the fop package. Version 1.0 or newer is recommended.

Download fop eg. https://launchpad.net/ubuntu/+source/fop/

install:

```
# sudo dpkg -i fop_1.0.dfsg2-6_all.deb libfop-java_1.0.dfsg2-6_all.deb
# sudo apt-get install -f
# sudo apt-get install libservlet2.4-java
```

You might need an updated version of libxmlgraphics-commons-java too.

2.2.1.2 Font install With FOP version prior to 1.0 you need to create font metrics with

```
# fop-ttfreader FranklinITCBQ-Demi.ttf FranklinITCBQ-Demi.xml
```

add font in fop.xconf

HINT: Maybe the step with fop-ttfreader is no longer needed with FOP 1.0.

2.2.1.3 Hyphenation CMP3 itself provides the hyphenation pattern for fop. Please have a look in the example fop.xconf how to use that.

2.2.2 PoDoFo Impose

This is used for imposition of PDF files. If you do not know what imposition is you might want to have a look here: `http://en.wikipedia.org/wiki/Imposition`.

Unfortunately the current Debian package lacks lua support for podofoimpose which means you have to build the package by yourself and enable lua.

#TODO more details

The tested version 0.9.1.

2.2.3 SAXON (XSLT 2)

Saxon is a XSLT processor which is needed when XSLT 2 is used.

#TODO

3 Overview

4 Application How To

Every CMP3 project is very specific so there is no predefined application to convert data x to output y. You can see CMP3 as a toolbox to create your own application.

Therefore any CMP3 application is encapsulated inside it's own TYPO3 extension (or folder). All files (except the cmp3 php files) that are needed for processing should be placed inside of that extension - even if the same files are available inside of the cmp3 extension. This includes xsl, configuration, fonts, templates and so on.

5 Tips and Tricks

5.1 PDF with XSL-FO and FOP

5.1.1 Hyphenation

```
<fo:page-sequence master-reference="text-plain" id="rc_ucd"> <fo:flow flow-name="xsl-
```

5.1.2 Bleedbox (Margin)

TypoScript setup:

```
// cli parameter
engine.fop.parameter = -param bleed '3mm'
```

Add to you stylesheet:

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet
    xmlns:fo="http://www.w3.org/1999/XSL/Format"
    xmlns:fox="http://xmlgraphics.apache.org/fop/extensions"
    xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
    xmlns:cmp3="http://www.bitmotion.de/cmp3/cmp3document"
    version="1.0">

    <xsl:param name="bleed"/>
```

```
<fo:root xmlns:fo="http://www.w3.org/1999/XSL/Format">

    <fo:layout-master-set>

        <fo:simple-page-master
            page-height="841.889763778pt"
            page-width="595.275590551pt"
            master-name="regular-odd">
            <xsl:attribute name="fox:bleed">
              <xsl:value-of select="$bleed" />
            </xsl:attribute>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet
xmlns:fo="http://www.w3.org/1999/XSL/Format"
xmlns:fox="http://xmlgraphics.apache.org/fop/extensions"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
xmlns:cmp3="http://www.bitmotion.de/cmp3/cmp3document"
version="1.0">
<xsl:param name="bleed"/>
<fo:root xmlns:fo="http://www.w3.org/1999/XSL/Format">
<fo:layout-master-set>
<fo:simple-page-master
page-height="841.889763778pt"
page-width="595.275590551pt"
master-name="regular-odd">
<xsl:attribute name="fox:bleed">
       <xsl:value-of select="$bleed" />
     </xsl:attribute>
```

5.1.3 PDF-X

TypoScript setup:

```
// cli parameter
engine.fop.parameter = -pdfprofile PDF/X-3:2003
```

5.1.4 output device profile (icc)

fop.xconf:

```
<renderers>
    <renderer mime="application/pdf">
        <output-profile>./CoatedFOGRA27.icc</output-profile>
```

5.1.5 Meta data

```
</fo:layout-master-set>
<fo:declarations> <x:xmpmeta xmlns:x="adobe:ns:meta/"> <rdf:RDF xmlns:rdf="http://www
```

6 Links

http://wiki.scribus.net/canvas/PDF,_PostScript_and_Imposition_tools