Cross Media Publishing with TYPO3

Daniel Brün, *Saltation, dbruen@saltation.de*

Ekkehard Gümbel, *net&works GmbH, guembel@naw.de*

Please note: This article is only an overview. The full presentation is available for download on www.typo3partner.net/cmp .

Introduction: The Desire for Printed Paper (but Different Ideas all over the Place)

Single Source Publishing - a.k.a. Cross Media Publishing (CMP) - typically includes creating content inside a single system, while publishing it to both print and online media.

Since TYPO3 has become the market leader in Web Content Management, extending it to print output turns out to be an interesting "next step" for many users today: Customer as well as employee magazines, business reports, even catalogs, etc... all kinds of publications come to mind. The fact that yeebase's awesome "T3N Magazin für Open Source und TYPO3" is based on these principles has done the rest to boost the idea.

So what do we actually talk about? For some, the desired option is to "just" create proper XML output for post processing (e.g. with Adobe's InDesign). But in most cases the aim is a PDF file that is completely ready for production in a printing plant (or elsewhere). After all, existing extensions do provide means to create an on-the-fly PDF from a web site displayed online. They do not support neither serious templating and print-specific settings nor structures and intelligence different from the web site, though - no wonder, since these are highly complex issues. Therefore, our goal was to design a powerful solution flexible enough for small business or non-profit up to enterprise usage.

At this point, we also dare a side glance: Cross Media Publishing is not a new concept, there are numerous commercial solutions available, some rather old-fashioned, some using top-notch technology.

Rendering and Templating Technology

Professional quality PDF rendering is a highly complex issue that currently experiences lots of improvement in technology. Therefore, it doesn't make sense to create own technology; instead, an architecture was designed that includes an external rendering system based on XSL-FO with a modified Apache FOP.

Like any other serious rendering technology available, Apache FOP is no easy thing to run. Thus, for lower budgets an online rendering service may be an interesting option (while others may want to set up their own rendering server.)
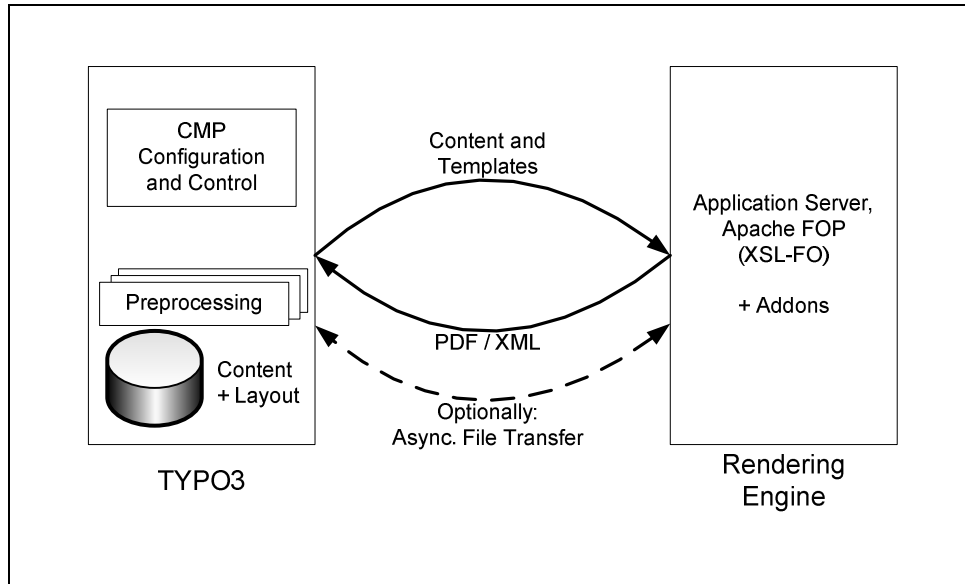
XSL-FO (a quick overview is given in the talk) is as powerful as complex, and a major focus has to be to reduce project-specific manual work to a minimum.

Implications of using TYPO3 Content and Meta Data for Print Output

Since in our scenario, TYPO3 serves as the central content repository, another major issue was to find a way to reflect the potential differences between online and print media data. On the one hand, multiple types of TYPO3 content needs to be "streamlined" and optionally restructured. On the other hand, content may require additional or modified meta data or even data, and the various layout options available for print need to be adopted. And of course, for print you will typically want high-res pictures (that you do not have in your web content.)

User Experience - "The Big Picture"

The aspects named above (and illustrated in the talk) have been merged into a powerful Cross Media Publishing architecture based on a modular technical infrastructure.

General CMP Architecture

A good approach to understand the resulting features is the discussion of the end user interface. It also makes clear where advanced and future options can be integrated.

About the authors:

Daniel Brün is the chief architect responsible for TYPO3partner.net 's Cross Media Publishing project. He is CEO of Saltation GmbH, Bielefeld (www.saltation.de) and did various customer-specific Cross Media Publishing projects lately.

Ekkehard Gümbel is current CEO of TYPO3partner.net . He founded net&works GmbH, Hannover (www.naw.de) in 1997, where he has been involved with TYPO3 since 2001, today doing hardly anything else. Also, he co-founded the Hannover TYPO3 User Group, and led the TYPO3 security team from 2004.