

# Cross Media Publishing with TYPO3

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## Agenda

- "Web to Print" – nothing new?
- Key Challenges for Professional Usage
- Architecture and Implementation
- Live Preview
- The Road Ahead



## Cross Media Publishing (CMP)

- a.k.a Single Source Publishing, "Web to Print", etc.
- Create content inside a single system
- Publishing it to both print and online media
- Examples:
  - Customer (or employee) magazines
  - Business reports
  - Catalogs (from tt\_content, tt\_news, tt\_products, ...)
  - Printed magazines (T3N :-)
  - Conference proceedings :-)) etc.
- All of these may even be implemented for "print-only" output
- CMP is not new – but TYPO3 brings it closer to the users



## Status Quo

- Print from Browser
- PDF Generator
- Both are stylable (different Template + CSS), but...
- Limitations
  - Single page only
  - Head lines
  - Lack of flexible style selection
  - Lack of advanced functions
- Thus: Not suitable for serious print publishing

## Challenges for CMP with TYPO3

- ▶ HTML Content is lacking print-related information
  - ▶ Additional meta data
  - ▶ Additional formatting options
  - ▶ High resolution images
  - ▶ ...
- ▶ Structures are different
  - ▶ Print is linear
  - ▶ Links need to be transformed
  - ▶ Dynamic web content handling?
- ▶ Print data is typically large

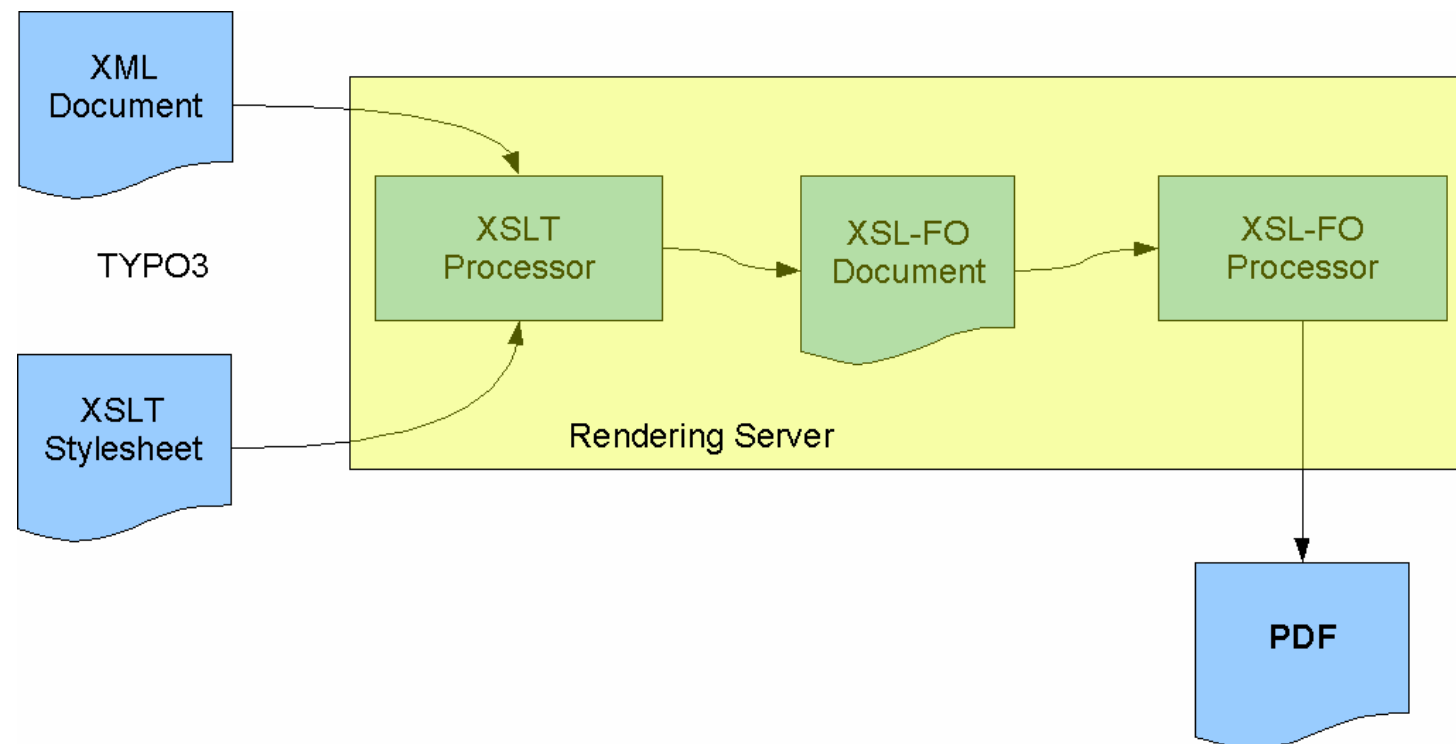


## Key Tasks

- Provide templating and rendering technology
- Enrich TYPO3 content  
(with data needed for print output)
- Prepare TYPO3 content for rendering
- Connect TYPO3 to rendering system
- Backend module

# Rendering Technology

- XSL-FO technology
- Apache FOP (<http://xmlgraphics.apache.org/fop/>)

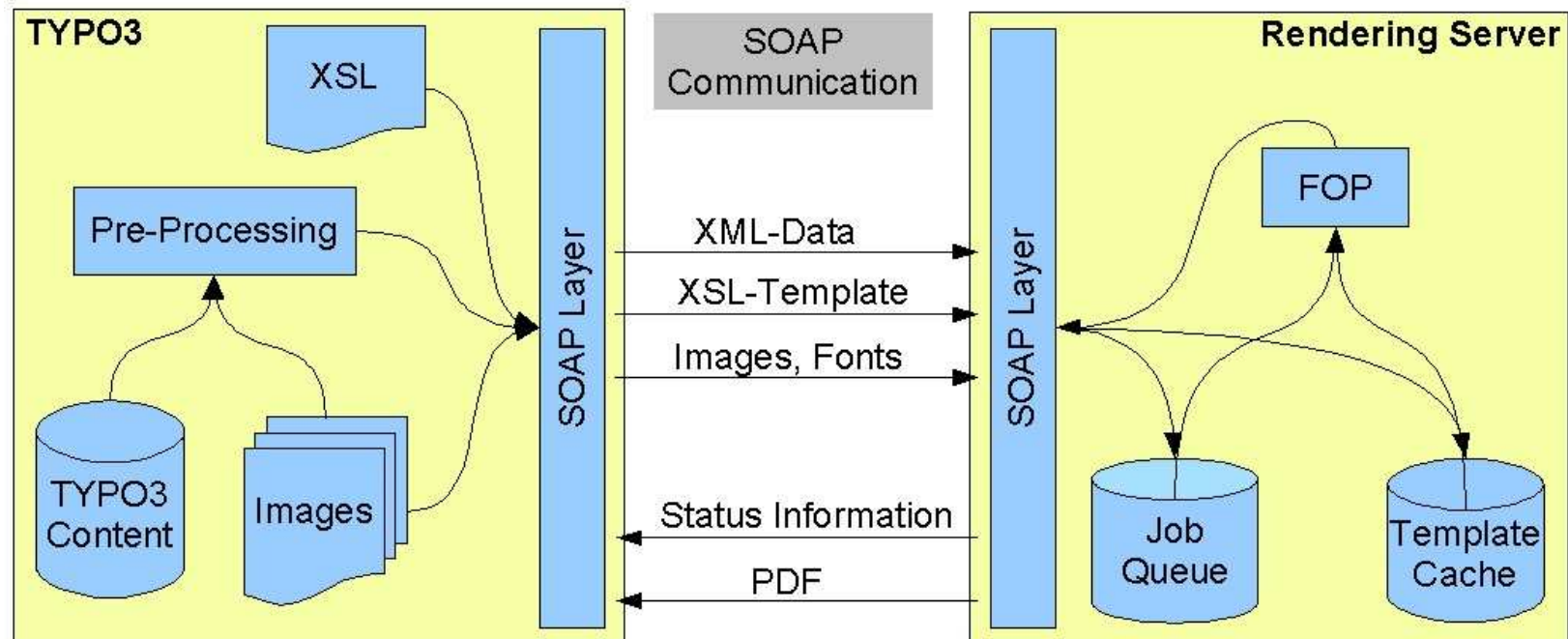




## Rendering Server

- J2EE environment
- SOAP interface for all actions
- Extended Features
  - Job-Queuing
  - Template-Caching
  - Authentication
  - Encryption
- More than just PDF
- Can be provided as ASP service – no need for own FOP

# Overview





## Enrich TYPO3 Content

- Print-specific formatting options for pages and content elements
  - serialization options and chapter arrangement – crucial!
  - columns
  - picture positioning
  - sub template selection, etc.
- Alternative content data
  - different texts
  - hi-res images
- Implemented by CE-specific FlexForm fields

## Prepare TYPO3 Content for Rendering

- Use database content (no TSFE)
- Traverse selected sub-trees
- Possible Re-Arrangement
- Collect content data including binaries
- Transform to DocBook-based XML
- Implemented by CE-specific collector modules
- Smooth interaction with TYPO3 5.0

## Connect TYPO3 to Rendering System (1)

- Select XSL-template for PDF generation (template may contain images or fonts!)
- Connect to RS (multiple servers configurable) via SOAP
- Authenticate on RS
- Lookup template cache
- Transfer template for this rendering (XSL plus binaries)

## Connect TYPO3 to Rendering System (2)

- Transfer XML data to be rendered, get JOB-ID in return. RS has a job-queue to be able to handle many requests sequentially.
- Transfer binaries (images) for this content
- Start rendering job
- Query job status
- Request PDF after rendering job ended



## Backend Module

- Setup Rendering Server properties
- Select XSL template
- Select content for Rendering
- Initiate Rendering process (asynchronous!)
- Provide PDF link when finished
- Additional Options (send to print office, ...)



# Preview



## The Road Ahead

- Rendering part is already used in live sites
- first TYPO3 implementations scheduled for end of 2006
- Upcoming features
  - Easier Templating
  - Indesign, Quark, ...
  - More formatting options
  - Lightweight preview function for large documents; document splitting
- Future options
  - personalized "Information on Demand"



## Suggestions or Questions?