



# PDF Publishing Made Easy

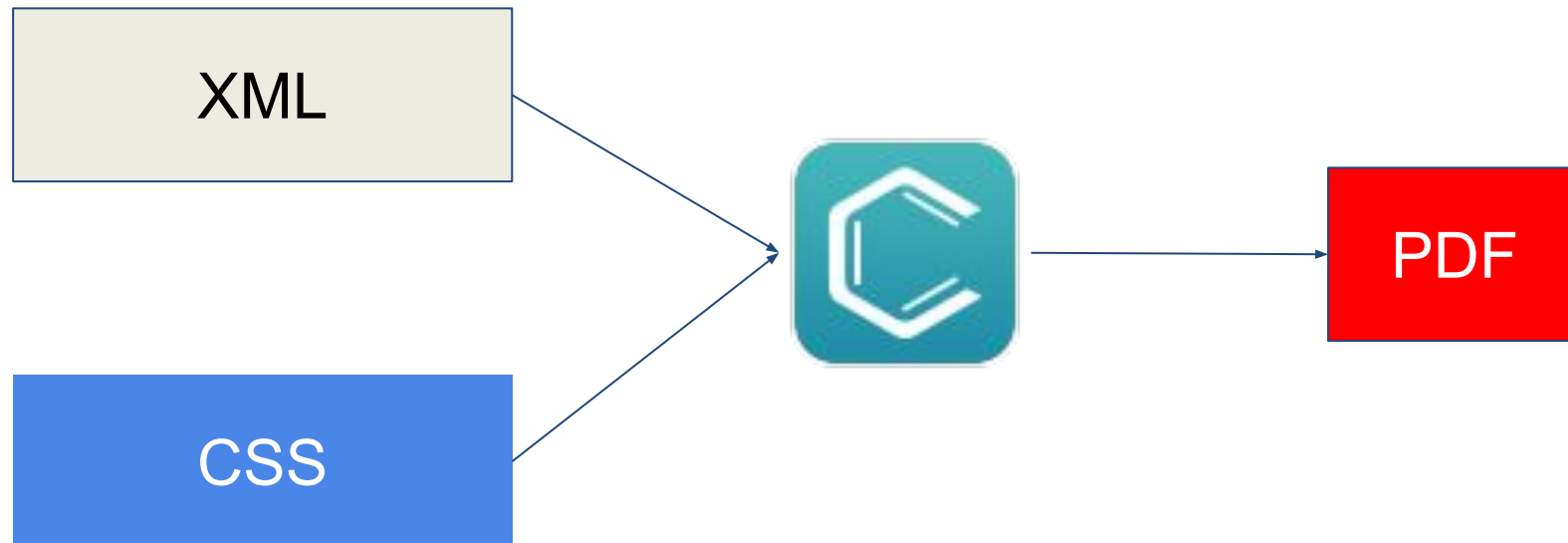
## Oxygen PDF Chemistry

Cristian Talau

[cristian\\_talau@oxygenxml.com](mailto:cristian_talau@oxygenxml.com)

<https://github.com/ctalau/>

# Oxygen PDF Chemistry



# Why CSS for print?

- [Larger talent base](#)
- Author page already uses CSS
- Reuse design on Web and PDF => Brand consistency
- Easier to customize
- Better tools
  - Oxygen's CSS Inspector
  - Browser's Dev Tools
- Proven publishing approach
  - Antenna House
  - Prince XML
  - DocRaptor

# Why Chemistry as a processor?

- Bundled and free to use from Oxygen XML Editor
  - Commercial license to use from a script
- Works on any OS
- Responsive support team
- Uses Oxygen CSS extensions you already know
  - oxy\_xpath, -oxy-link, :before(n)
- [Extensive documentation](#)

# Supported CSS

- Basic CSS
  - color, border, display, font, etc.
- CSS Paged Media Module
  - [TOC, Index page](#)
  - [Cover page, Copyright page, page format,](#)
  - [Columns, page margin boxes, numbering](#)
  - [Footnotes](#)
  - Bookmarks

# Supported CSS - cont

- Oxygen extensions
  - `oxy_xpath` expressions (like `calc`, but much better)
  - Pseudo-elements (`::before` and `::after`, but more of them)
  - Change tracking & Change bars
  - Accessibility tags
  - Hyphenation configuration
  - etc.

# Use-case: Generate a ToC

- In a browser you would use JS to create additional elements
- But we have more powerful tools
  - XSLT
- Multi-stage publishing pipeline
  - Generate ToC with XSLT
  - Layout the doc w/ Chemistry

```
<xsl:template match="/*">2
  <xsl:variable name="with-ids">3
    <xsl:apply-templates mode="gen-id" select="."/>4
  </xsl:variable> 5
  <pdf>6
    <xsl:apply-templates mode="toc" select="$with-ids" />7
    <xsl:copy-of select="$with-ids" />8
  </pdf>9
</xsl:template>
```

# Scaling up publishing

- Small teams can publish from Oxygen XML Editor
- Automated publishing
  - **Speed up** by running jobs in parallel
  - Gain **visibility** with the rest of the company
  - Notice publishing errors **faster**
  - **Save work-hours**



[Original image](#) created by Randall Munroe from XKCD.

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# Oxygen Publishing Engine

- If it works from Oxygen, it should work on the build server
- It contains:
  - DITA Open Toolkit
  - Plugins
    - Oxygen WebHelp
    - Oxygen PDF Chemistry

```
bin/dita.bat
--input=map/test.ditamap
-Dpdf.publishing.template=my_template.opt
--format=pdf-css-html5
```

# Oxygen Publishing Engine

- Extra plugins to generate:
  - DITA Metrics Report
  - Edit Links that open Web Author
  - Embed Video, Audio, iframe
  - Syntax Highlight in Code Blocks
  - Floating images to the left/right

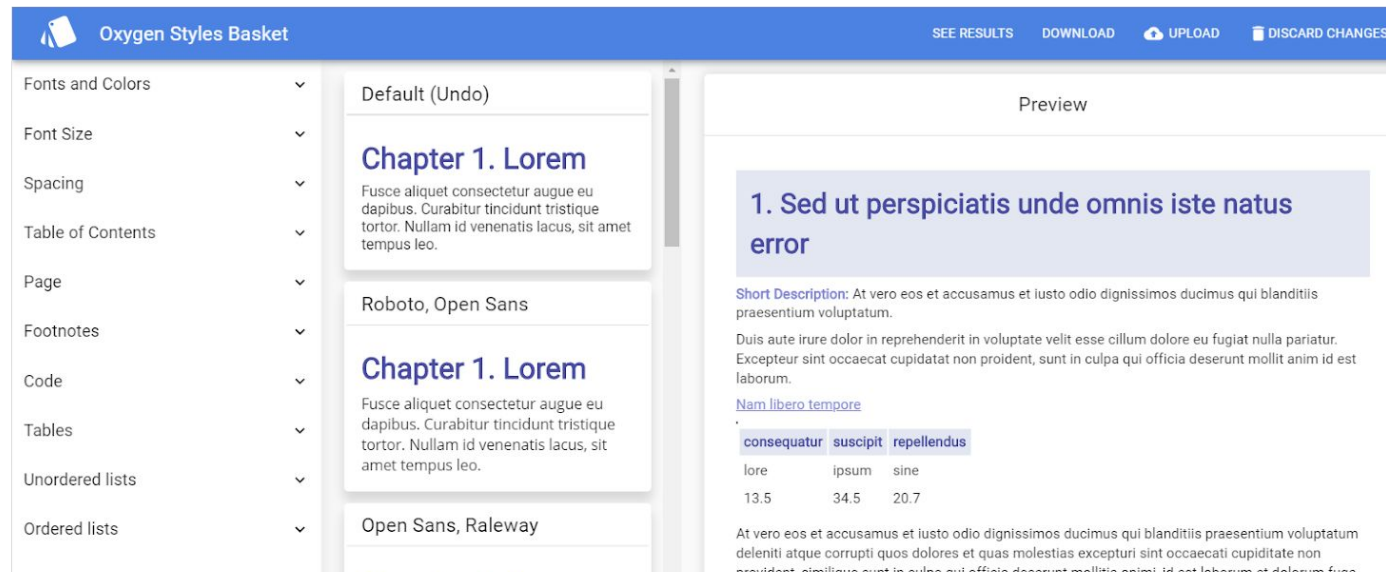
# Oxygen Publishing Template

- Publishing customization in a single XML file
- Contains
  - CSS files
  - Parameters
    - show.changes.and.comments
    - args.css.param.show-onpage-lbl
    - etc.
  - XSLT extensions
  - HTML templates (WebHelp only)

```
<publishing-template>
<pdf>
  <name>User Manual</name>
  <resources>
    <css file="custom.css"/>
  </resources>
  <parameters>
    <parameter name="figure.title.placement"
      value="top"/>
  </parameters>
  <xslt>
    <extension
      id="com....pdf.css.xsl.merged2html5"
      file="xslt/merged2html5Extension.xsl"/>
  </xslt>
</pdf>
</publishing-template>
```

# Oxygen Styles Basket

- Simple UI to get you started customizing PDF and WebHelp
- Built for DITA, but configurable



The screenshot shows the Oxygen Styles Basket interface. On the left is a sidebar with a list of style categories: Fonts and Colors, Font Size, Spacing, Table of Contents, Page, Footnotes, Code, Tables, Unordered lists, and Ordered lists. The main area is divided into two columns. The left column shows a list of styles: 'Default (Undo)', 'Chapter 1. Lorem' (with a preview of the text 'Fusce aliquet consectetur augue eu dapibus...'), 'Roboto, Open Sans', another 'Chapter 1. Lorem' (with a preview), and 'Open Sans, Raleway'. The right column is a 'Preview' window showing a rendered page with a blue header, a main heading '1. Sed ut perspiciatis unde omnis iste natus error', a short description, a paragraph of text, a link 'Nam libero tempore', a table with three columns and two rows, and another paragraph of text.

consequatur	suscipit	repellendus
lore	ipsum	sine
13.5	34.5	20.7

# Oxygen Publishing Engine plans

- Not only DITA
- Run Transformation Scenarios from command line
  - Intuitive configuration UI
  - The same execution core as in Oxygen

# THANK YOU!

**Any questions?**

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