

USING A MIX OF CSS AND XPATH TO PRODUCE HIGH QUALITY PDF OUTPUT

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Agenda

- XPath in CSS rules:
 - The oxy_xpath() function
- Non-standard pseudo-elements:
 - :before(n) and :after(n)
- Production use-cases:
 - Display additional metadata
 - Customize displayed text
 - Add/Remove watermark

Introduction – The power of XPath

- Can point to any location in an XML document
- Can create and use variables, loops and/or conditions
- Can post-process the query result

Introduction – The power of XPath in CSS

- Use the `oxy_xpath()` function
- Match using the DITA classes
 - With the XPath `contains()` function
- Apply on the `merged.html` file

```
<div class="- map/topicmeta bookmap/bookmeta topicmeta bookmeta">  
  <div class="- topic/author author">Julien Lacour</div>  
  ...  
</div>
```

Introduction - The :before(n) and :after(n) CSS pseudo-elements

- Allow multiple levels of static content
- Higher the level, bigger the distance between the element and the pseudo-element.
- First level correspond to the original :before or :after

See: [Using the :before\(n\) and :after\(n\) CSS Pseudo-Elements](#)

Add metadata into the Cover Page

- Create additional blocks
 - Relative to an existing element
 - Multiple before/after pseudo-elements
- Insert the content inside those blocks
 - With the XPath `text()` function

Add metadata into the Cover Page

- What if the query has multiple results?
- Use a 'for' loop to process each result
 - Use a 'let' instruction to store the results

See: [XQuery FLWOR Expressions](#)

Add metadata into Margins

- Define custom page-margin boxes

See: [Page Margin Boxes](#)

```
@page front-page, matter-page, table-of-contents, chapter, index {
  @bottom-left {
    content: oxy_xpath("normalize-space(concat('Copyright © ', \
      /**[contains(@class, 'bookmap/copyrlast')]/**[contains(@class, 'bookmap/year')]/text(), ' ', \
      /**[contains(@class, 'bookmap/bookowner')]/**[contains(@class, 'bookmap/organization')]/text(),
    '.')))"
      "\A" "All rights reserved.");
  }
}
```


Add custom text based on Language

- Use an 'if' instruction
 - With an attribute from the document (@lang)

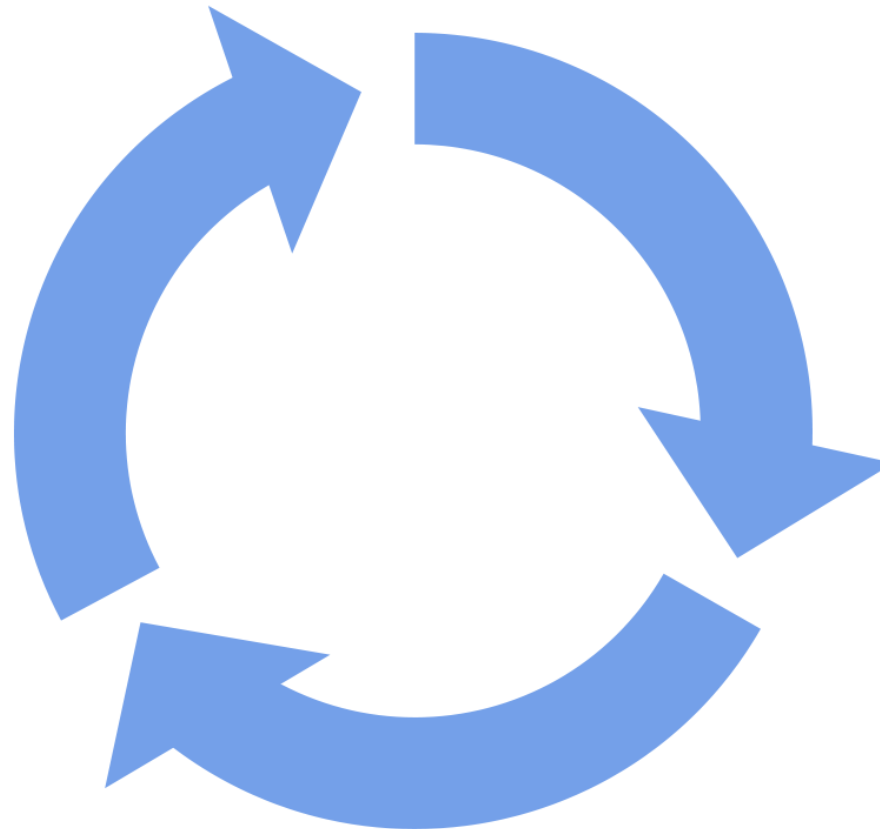
```
@page chapter {
  @bottom-right {
    content: oxy_xpath("if (@lang='de') then 'Seite' \
      else if (@lang='es') then 'Página' \
      else 'Page'") " " counter(page);
  }
}
```

Add a Watermark

- Define a @page CSS at-rule
- Use the CSS background properties
- Use an 'if' instruction
 - With an existing/missing element

Conclusion

- Reusable
- Interactive
- Dynamic



Useful Links

- [How to Write XPath Expressions](#)
- [How to Debug XPath Expressions](#)
- [Page Headers and Footers](#)
- [Cover Page](#)
- [Draft Watermarks](#)

THANK YOU!

Any questions?

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