

Print and Page Layout Community Group

XSLT Extensions

The XSLT extension functions from the Print and Page Layout Community Group @ W3C allow you to run your XSL-FO formatter within your XSLT transform, and do it as often as you like, to get an area tree and make decisions based on formatted areas to do things like: adjust the start-indent of a fo:list-block based on the length of the longest fo:list-item-label; or size this text to be 75.000000000014552pt so it fits this box.

The extension is available for Java and DotNet and uses either the Apache FOP XSL formatter or Antenna House AHF formatter to produce the area trees.

The single Java jar file covers four combinations of XSLT processor and XSL-FO formatter:

- * Saxon 9.5 and FOP
- * Saxon 9.5 and Antenna House
- * Xalan and FOP
- * Xalan and Antenna House

The DotNet version supports:

- * DotNet 4.0 and FOP
- * DotNet 4.0 and Antenna House

API:

`ppl:area-tree($fo-tree as node()) as document-node()`

Runs the XSL-FO formatter on \$fo-tree to get an area tree.

`ppl:block-by-id($area-tree as document-node(), $id as string) as element()`

Returns the block area with ID \$id.

`ppl:block-bpd($block as element()) as xs:double`

Returns the block-progression-dimension of \$block in points.

`ppl:block-bpd($block as element()) as xs:double`

Returns the inline-progression-dimension of \$block in points.

`ppl:block-available-ipd($block as element()) as xs:double`

Returns the difference, in points, between the inline-progression-dimension of \$block and the inline-progression-dimension of its ancestor reference area.

XML

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- STYLESHEET PARAMETERS -->
<!-- See http://www.w3.org/community/ppl/wiki/XSLTExtensions -->
<!-- Require Saxon 9.5 or later and ANP 6.1 or later -->
<!-- Produced by the Print and Page Layout Community Group @ W3C -->
<!-- License: PUBLIC DOMAIN -->
<!-- Initial font size -->
<!-- Allowed difference in height between outer box and formatted paragraph text to be able to say paragraph fits within box and stop further iterations -->
<!-- Maximum number of iterations -->
<!-- Whether to use 'pygmentize' to highlight inserted markup -->
<!-- STYLESHEET PARAMETERS -->
<!-- Overrides of default property values -->
<!-- AD: portrait page size -->
<!-- STYLESHEET PARAMETERS -->
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<!-- STYLESHEET PARAMETERS -->
<!-- Overrides of default property values -->
```

XSLT

```
<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform" xmlns:ppl="http://www.w3.org/1999/XSL/Transform" xmlns:area="http://www.w3.org/2001/XSL/Transform" xmlns:axf="http://www.antenna-house.com/names/XSL/Extensions" exclude-result-prefixes="axf ppl">
<xsl:import href="http://www.w3.org/1999/XSL/Transform" namespace="http://www.w3.org/1999/XSL/Transform"/>
<xsl:strip-space elements="example box"/>
<xsl:variable name="font-size" select="40" as="xs:double"/>
<xsl:variable name="font-size-tolerance" select="0.1" as="xs:double"/>
<xsl:variable name="iteration-max" select="40" as="xs:integer"/>
<xsl:variable name="pygmentize" select="no" as="xs:string"/>
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