Embedding SVG

Some examples of how to embed an SVG image inside your FO documents

Introduction

This document shows some examples of how an SVG document can be embedded directly in an fo document and how FOP will render it.

There are a couple of ways to specify the XML for embedding. There are a number of factors which specify exactly how the SVG image will be rendered, such as size, clipping etc.

Note: if you want to know about SVG itself you should consult the appropriate SVG resource. The Batik Project is a good resource for information about SVG and samples etc.

XML Syntax

Here we have some examples of how the XML can be specified in the fo document.

This first example specifies the name space on the instream-foreign-object using the xmlns:svg attribute. Then all the svg elements start with the svg: namespace prefix. It can be specified on any element above where the svg:svg tag appears (eg. fo:root).

```
<fo:instream-foreign-object xmlns:svg="http://www.w3.org/2000/svg">
<svg:svg width="20" height="20">
<svg:g style="fill:red; stroke:#000000">
<svg:rect x="0" y="0" width="15" height="15"/>
<svg:rect x="5" y="5" width="15" height="15"/>
</svg:g>
</svg:svg>
</fo:instream-foreign-object>
```

This example specifies the name space on the svg:svg element using the xmlns:svg attribute. Then all the svg elements start with the svg: namespace prefix. It is able to determine the namespace for the current element.

```
<fo:instream-foreign-object>
<svg:svg xmlns:svg="http://www.w3.org/2000/svg" width="20" height="20">
<svg:g style="fill:red; stroke:#000000">
<svg:rect x="0" y="0" width="15" height="15"/>
<svg:rect x="5" y="5" width="15" height="15"/>
</svg:g>
</svg:svg>
</fo:instream-foreign-object>
```

This example specifies the namespace for the current element, rather than for the svg: prefix. This means that all elements under this one are assumed to have the same namespace.

```
<fo:instream-foreign-object>
<svg xmlns="http://www.w3.org/2000/svg" width="20" height="20">
<g style="fill:red; stroke:#000000">
<rect x="0" y="0" width="15" height="15"/>
<rect x="5" y="5" width="15" height="15"/>
</g>
</svg>
</fo:instream-foreign-object>
```

Sizing

The size of the instream-foreign-object is obtained in a number of ways.

Specify the size on the instream-foreign-object element.

```
<fo:instream-foreign-object content-width="20pt" content-height="20pt">
<svg:svg>
<svg:g style="fill:red; stroke:#000000">
<svg:rect x="0" y="0" width="15" height="15"/>
<svg:rect x="5" y="5" width="15" height="15"/>
</svg:g>
</svg:svg>
</fo:instream-foreign-object>
```
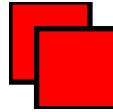
Specify the size on the svg document element.

```
<fo:instream-foreign-object>
<svg:svg width="20pt" height="20pt">
<svg:g style="fill:red; stroke:#000000">
<svg:rect x="0" y="0" width="15" height="15"/>
<svg:rect x="5" y="5" width="15" height="15"/>
</svg:g>
</svg:svg>
</fo:instream-foreign-object>
```

Specify the size on the svg document element and for the content size on the instream-foreign-object.

```
<fo:instream-foreign-object content-width="40pt" content-height="40pt">
<svg:svg width="20pt" height="20pt">
<svg:g style="fill:red; stroke:#000000">
<svg:rect x="0" y="0" width="15" height="15"/>
<svg:rect x="5" y="5" width="15" height="15"/>
</svg:g>
</svg:svg>
</fo:instream-foreign-object>
```

Clipping

Interesting Functionality