01. SVG Introduction.

SVG stands for **Scalable Vector Graphics**.

SVG defines vector-based graphics in XML format.

1.1. What you should already know

Before you continue, you should have some basic understanding of the following:

- HTML
- Basic XML

1.2. What is SVG?

- SVG stands for Scalable Vector Graphics
- SVG is used to define vector-based graphics for the Web
- SVG defines the graphics in XML format
- Every element and every attribute in SVG files can be animated
- SVG is a W3C recommendation
- SVG integrates with other W3C standards such as the DOM and XSL

1.3. SVG is a W3C Recommendation

SVG 1.0 became a W3C Recommendation on 4 September 2001.
SVG 1.1 became a W3C Recommendation on 14 January 2003.
SVG 1.1 (Second Edition) became a W3C Recommendation on 16 August 2011.

1.4. SVG Advantages

Advantages of using SVG over other image formats (like JPEG and GIF) are:

- SVG images can be created and edited with any text editor
- SVG images can be searched, indexed, scripted, and compressed
- SVG images are scalable

- SVG images can be printed with high quality at any resolution
- SVG images are zoomable
- SVG graphics do NOT lose any quality if they are zoomed or resized
- SVG is an open standard
- SVG files are pure XML

The main competitor to SVG is Flash.

The biggest advantage SVG has over Flash is the compliance with other standards (e.g. XSL and the DOM). Flash relies on proprietary technology that is not open source.

1.5. Creating SVG Images

SVG images can be created with any text editor, but it is often more convenient to create SVG images with a drawing program, like **Inkscape**.