HTML5 SVG

‹ Previous Next ›

What is SVG?

- SVG stands for Scalable Vector Graphics
- SVG is used to define graphics for the Web
- SVG is a W3C recommendation

The HTML <svg> Element

The HTML `<svg>` element is a container for SVG graphics.

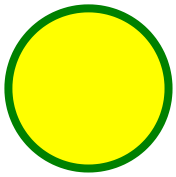
SVG has several methods for drawing paths, boxes, circles, text, and graphic images.

Browser Support

The numbers in the table specify the first browser version that fully supports the `<svg>` element.

Element					
<svg>	4.0	9.0	3.0	3.2	10.1

SVG Circle



Example

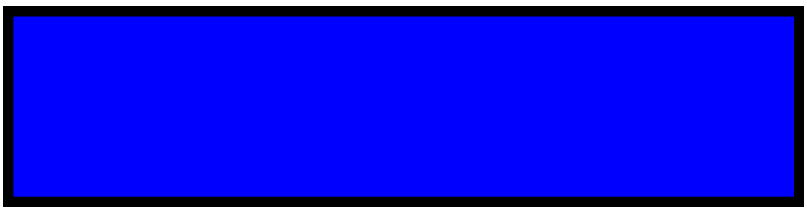
```
<!DOCTYPE html>
<html>
<body>

<svg width="100" height="100">
  <circle cx="50" cy="50" r="40" stroke="green" stroke-width="4"
fill="yellow" />
</svg>

</body>
</html>
```

Try it Yourself »

SVG Rectangle

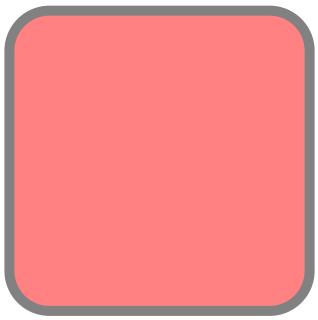


Example

```
<svg width="400" height="100">
  <rect width="400" height="100" style="fill:rgb(0,0,255);stroke-
width:10;stroke:rgb(0,0,0)" />
</svg>
```

Try it Yourself »

SVG Rounded Rectangle

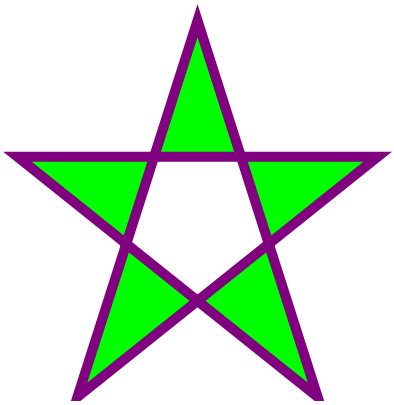


Example

```
<svg width="400" height="180">
  <rect x="50" y="20" rx="20" ry="20" width="150" height="150"
  style="fill:red;stroke:black;stroke-width:5;opacity:0.5" />
</svg>
```

Try it Yourself »

SVG Star



Example

```
<svg width="300" height="200">
  <polygon points="100,10 40,198 190,78 10,78 160,198"
  style="fill:lime;stroke:purple;stroke-width:5;fill-rule:evenodd;" />
</svg>
```

Try it Yourself »

SVG Logo

Example

```
<svg height="130" width="500">
  <defs>
    <linearGradient id="grad1" x1="0%" y1="0%" x2="100%" y2="0%">
      <stop offset="0%" style="stop-color:rgb(255,255,0);stop-opacity:1" />
      <stop offset="100%" style="stop-color:rgb(255,0,0);stop-opacity:1" />
    </linearGradient>
  </defs>
  <ellipse cx="100" cy="70" rx="85" ry="55" fill="url(#grad1)" />
  <text fill="#ffffff" font-size="45" font-family="Verdana" x="50"
y="86">SVG</text>
  Sorry, your browser does not support inline SVG.
</svg>
```

Try it Yourself »

Differences Between SVG and Canvas

SVG is a language for describing 2D graphics in XML.

Canvas draws 2D graphics, on the fly (with a JavaScript).

SVG is XML based, which means that every element is available within the SVG DOM. You can attach JavaScript event handlers for an element.

In SVG, each drawn shape is remembered as an object. If attributes of an SVG object are changed, the browser can automatically re-render the shape.

Canvas is rendered pixel by pixel. In canvas, once the graphic is drawn, it is forgotten by the browser. If its position should be changed, the entire scene needs to be redrawn, including any objects that might have been covered by the graphic.

Comparison of Canvas and SVG

The table below shows some important differences between Canvas and SVG:

Canvas	SVG
• Resolution dependent • No support for event handlers • Poor text rendering capabilities • You can save the resulting image as .png or .jpg • Well suited for graphic-intensive games	• Resolution independent • Support for event handlers • Best suited for applications with large rendering areas (Google Maps) • Slow rendering if complex (anything that uses the DOM a lot will be slow) • Not suited for game applications

SVG Tutorial

To learn more about SVG, read our SVG Tutorial.

‹ Previous Next ›

HOW TO

Tabs
Dropdowns
Accordions
Side Navigation
Top Navigation
Modal Boxes
Progress Bars
Parallax
Login Form
HTML Includes
Google Maps
Range Sliders
Tooltips
Slideshow
Filter List
Sort List

SHARE

CERTIFICATES

HTML
CSS
JavaScript
SQL
Python
PHP
jQuery
Bootstrap
XML

Read More »

Java Examples
XML Examples

Web Certificates

HTML Certificate
CSS Certificate
JavaScript Certificate
SQL Certificate
Python Certificate
jQuery Certificate
PHP Certificate
Bootstrap Certificate
XML Certificate

Get Certified »