

HTML <svg> - Scalable Vector Graphics

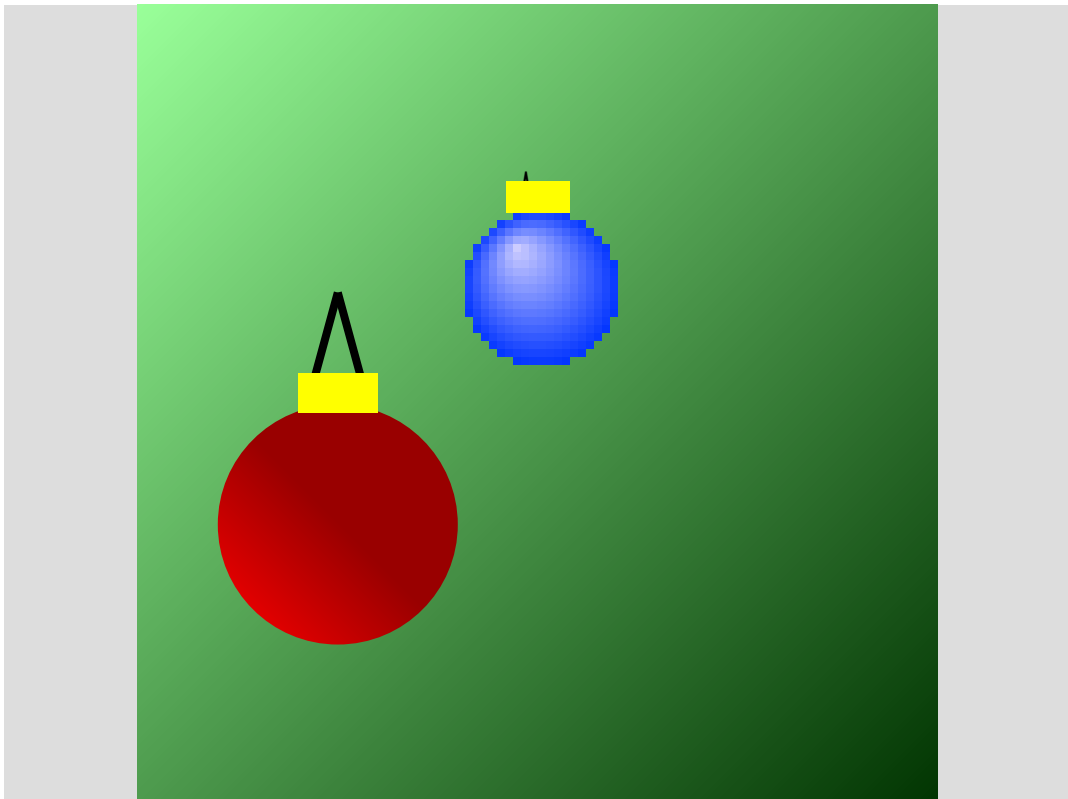
#svg# for drawing Scalable Vector Graphics. #svg# description, syntax, usage, attributes and examples. HTML-5.com is a great guide for web developers. [TV Series & Actors and Actresses](#). Follow [TV Series](#) and [HTML 5](#) on Google+.

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The <svg> Tag in HTML 5

The <svg> tag can be used to draw pictures and/or text using [SVG](#). The demo below uses two different methods to draw a sphere with a glow gradient. The larger red ornament is created using a circle with a separate glow gradient. The smaller blue ornament and its glow are created with a single radial gradient in a rectangle (however, the anti-aliasing is not as good and the color with zero opacity may not be completely transparent in some browsers, which makes the drawing rectangle visible).



This is an actual working demo of the [SVG example code](#) below. (Do *View Source* to verify that this page is using the [HTML 5 DOCTYPE](#). You can also verify it is [Valid HTML 5](#) using the [HTML Validator](#). Try using it to validate URLs with HTML examples from other places that claim to be HTML 5 web sites!)

Another way to create a glow gradient on an object is shown in the [<canvas> tag demo](#). However, that page currently causes the Firefox 3.6.12 browser to hang.

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<svg> Tag Syntax

Rules for coding the HTML `svg` element

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SVG Tag Attributes

Attributes of the SVG tags

global attributes	The common HTML attributes can be used on any of the SVG tags.
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Attributes of the <svg> tag

<code>preserveAspectRatio</code>	
<code>style</code>	
<code>version</code>	
<code>viewbox</code>	
<code>xmlns="http://www.w3.org/2000/svg"</code>	The <code>xmlns</code> attribute declares the namespace for all of the SVG elements. Since the <code>xmlns</code> attribute is inherited by child elements and descendants, it does not need to be coded on other tags in the content of the <code>svg</code> element, unless they are in a different namespace such as the HTML namespace .

Attributes of the <circle> tag

<code>cx</code> , <code>cy</code>	center
<code>r</code>	radius

Attributes of the <linearGradient> tag

<code>x1</code> , <code>y1</code>	
<code>x2</code> , <code>y2</code>	

Attributes of the <radialGradient> tag

<code>fx</code> , <code>fy</code>	
<code>r</code>	
<code>spreadMethod</code>	

Attributes of the <rect> tag

x, y	
width, height	

Attributes of the <stop> tag

offset	
style	stop-color: stop-opacity:

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SVG Examples

Examples of the <svg> tag in HTML 5

SVG Christmas Tree Ornaments

```

<svg xmlns="http://www.w3.org/2000/svg" version="1.1"
  style="width:400px; height:300px"
  viewBox="0 0 100 100"
  preserveAspectRatio="xMidYMid slice"
  >
  <defs>
    <linearGradient id="green-gradient" x1="0%" y1="0%" x2="100%" y2="100%">
      <stop offset="0%" style="stop-color: #99ff99"/>
      <stop offset="100%" style="stop-color: #003300"/>
    </linearGradient>
    <linearGradient id="red-gradient" x1="0%" y1="100%" x2="100%" y2="0%">
      <stop offset="0%" style="stop-color: #ff0000"/>
      <stop offset="50%" style="stop-color: #990000"/>
      <stop offset="100%" style="stop-color: #990000"/>
    </linearGradient>
    <radialGradient id="radial-glow-gradient" fx="40%" fy="40%" r="55%"
  → spreadMethod="pad">
      <stop offset="0%" style="stop-color: #ffffff; stop-opacity: 0.7"/>
      <stop offset="100%" style="stop-color: #ffffff; stop-opacity: 0.01"/>
    </radialGradient>
    <radialGradient id="radial-gradient" fx="35%" fy="25%" r="49%"
  → spreadMethod="pad">
      <stop offset="0%" style="stop-color: #ccccff; stop-opacity: 1.0"/>
      <stop offset="99%" style="stop-color: #0033ff; stop-opacity: 1.0"/>
      <stop offset="100%" style="stop-color: #66cc66; stop-opacity: 0.0"/>
    </radialGradient>
  </defs>

  <rect x="0" y="0" width="100" height="100" style="fill:
  → url(#green-gradient)"/>
  <circle cx="25" cy="65" r="15" style="fill: url(#red-gradient)"/>
  <circle cx="20" cy="58" r="6" style="opacity: 0.0; fill:
  → url(#radial-glow-gradient)"
    <animate attributeType="CSS" attributeName="opacity"
      from="0.0" to="1.0" begin="5s" dur="8s" fill="freeze"/>
  </circle>
  <line x1="25" y1="36" x2="22" y2="47" style="stroke: #000000;
  → stroke-width:1"/>

```

```
<line x1="25" y1="36" x2="28" y2="47" style="stroke: #000000;
→ stroke-width:1"/>
  <rect x="20" y="46" width="10" height="5" style="fill: #ffff00"/>

  <rect x="40" y="25" width="20" height="20" style="fill: url(#radial-gradient)"
    <animate attributeType="CSS" attributeName="opacity"
      from="0.0" to="1.0" begin="0s" dur="4s" fill="freeze"/>
  </rect>
  <text x="145" y="27" transform="scale(.33, 1.0)"
→ style="fill:#000000;">^</text>
  <rect x="46" y="22" width="8" height="4" style="fill: #ffff00"/>

</svg>
```

The large red ornament is created using an SVG `<circle>` tag with a separate circular glow gradient. Its "ornament hanger" is created with two SVG `<line>` tags. The animation causes the glow gradient to appear slowly. Since the animation starts after a five second delay (`begin="5s"`), the `style` on the `circle` must include `opacity: 0.0`, which matches the `from` attribute on the `<animate>` tag; otherwise the glow would suddenly disappear when the animation starts.

The smaller blue ornament is created with more minimal code. The ornament ball and its glow are created with a single radial gradient in a rectangle. Its ornament hook is actually a scaled text caret character (`^`). Since the animation applies to the rectangle, the whole ornament slowly appears.

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Changes in HTML 5 - <svg> Tag

What's new in HTML 5

Differences between HTML 5 and earlier versions of HTML

Other caveats

- Currently only Opera supports the `<link rel="icon">` [favorites icon](#) using SVG.

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THE END