... and on the 3rd day God finished creating the Earth, and it looked fantastic and worked really well. And then he checked it in IE.
FAIL

Acid3

20/100

To pass the test, a browser must use its default settings, the animation has to be smooth, the score has to end on 100/100, and the final page has to look exactly, pixel for pixel, like this reference rendering.
Acid3

95/100

To pass the test, a browser must use its default settings, the animation has to be smooth, the score has to end on 100/100, and the final page has to look exactly, pixel for pixel, like this reference rendering.
SVG in Internet Explorer
an independent perspective

Michael Neutze
Test Drive
Internet Explorer Platform Preview requires Windows Vista or Windows 7. Feel free to explore our Test Drive demos in your current browser.

Speed Demos
Take full advantage of your hardware with background compiled JavaScript

- Psychedelic Browsing
- Hamster Dance Revolution
- SVG Dice
- FishIE Tank
- Flying Images
- Flickr Explorer
- Amazon Shelf
- window.msPerformance
- Asteroid Belt
- Mr. Potato Gun

New!

Graphics Demos
Create next-generation experiences with GPU-powered HTML5 graphics

- IE Beatz
- MSNBC
- Tweet Map
- Space Invader
- Canvas Zoom
- Web Fonts
- IMDb Video Panorama
- SVG-oids
- Atlas zur Europawahl
- SVG Tweet Cloud

HTML5 Demos
Deliver interoperability with same markup and next generation of Web standards

- IETrade
- Enhanced DOM Capabilities
- Border Radius
- ECMAScript 5 Game
- DOM Traversal Gallery
- HTML5 Audio XML Playlist
- CSS3 Media Queries
- DOMContentLoaded
- getComputedStyle
- getElementsByClassName

New!

More »

SunSpider JavaScript
SunSpider Results

More »

Visit IE Testing Center
1st Platform Preview at mix10 – March 16th, 2010
ie9 pre l
viewbox attribute
not supported
ATLAS ZUR EUROPÄWahl

Anwendung ist aktiv
Fahren Sie mit der Maus über die Karte

<table>
<thead>
<tr>
<th>CDU</th>
<th>SPD</th>
<th>Grüne</th>
<th>Linke</th>
<th>FDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2004</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Wahlbeteiligung 2009

<table>
<thead>
<tr>
<th>von ... bis</th>
<th>eigene Häufigkeiten</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.4 - 35</td>
<td>49</td>
</tr>
<tr>
<td>35 - 40</td>
<td>90</td>
</tr>
<tr>
<td>40 - 45</td>
<td>116</td>
</tr>
<tr>
<td>45 - 50</td>
<td>65</td>
</tr>
<tr>
<td>50 - 69.6</td>
<td>93</td>
</tr>
</tbody>
</table>

Berechnen | ändern

Darstellung mit zwei Karten nebeneinander

Werteverteilung
The size of each section represents the weight. The colour shows how the prices within that category of goods have changed.
The inflation rate in July 2010 was 1.2%. The rate of price increase does not only depend on how prices change. The weights with which the price trends of the individual goods and services are reflected in the consumer price index are also important. The size of each section represents the weight. The colour shows how the prices within that category of goods have changed.

Miscellaneous goods and services 7.4%
Personal care, personal effects, social protection, insurance and bank services, etc.
Price change: 0.8%

Restaurants and hotels 4.4%
Price change: 1.0%

Education 0.7%
Tuition fees, adult education centres, nursery school attendance, etc.
Price change: -1.4%

Recreation and culture 11.6%
Package tours, cultural services, consumer electronics, computers, media, leisure goods, etc.
Price change: -0.3%

Communication 3.1%
Telecommunication, postal and courier services, relevant equipment and its maintenance
Price change: -1.7%

Transport 13.2%
Purchase and operation of vehicles, transport services etc.
Price change: 3.2%

Health 4.0%
Price change: 0.4%

Further information
Basket of goods and services and weighting pattern
Price monitor
Personal inflation calculator

© Statistisches Bundesamt, Wiesbaden / Michael Balzer, Universität Konstanz 2009
Personal Inflation Calculator

100 = price level on an annual average 2005

Overall consumer price index
Telecommunication
Charges for terrestrial telephony, mobile telephony, internet use

Change July 2010 on July 2009:

Consumer price index: +1,2%
Telecommunication: -2,0%

Set your own consumption habits
[ID57] Höhe: 267m, Distanz: 1.2km
Give me some numbers!
# Jeff Schiller’s SVG Table

<table>
<thead>
<tr>
<th>Browser</th>
<th>Last Updated</th>
<th>Support Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firefox 3.6.0</td>
<td>2010-01-15</td>
<td>C</td>
</tr>
<tr>
<td>Minefield Nightly</td>
<td>2010-05-05</td>
<td>B</td>
</tr>
<tr>
<td>Minefield Nightly</td>
<td>2010-08-20</td>
<td>B</td>
</tr>
<tr>
<td>Opera 10.53</td>
<td>2010-05-01</td>
<td>A+</td>
</tr>
<tr>
<td>Opera 10.61</td>
<td>2010-08-21</td>
<td>A++</td>
</tr>
<tr>
<td>Chrome 4</td>
<td>2010-01-25</td>
<td>A</td>
</tr>
<tr>
<td>Chrome 5</td>
<td>2010-04-04</td>
<td>A</td>
</tr>
<tr>
<td>Chrome 6 Beta</td>
<td>2010-08-21</td>
<td>A</td>
</tr>
<tr>
<td>Safari 4.0.5</td>
<td>2010-03-11</td>
<td>A</td>
</tr>
<tr>
<td>Safari 5</td>
<td>2010-06-08</td>
<td>A</td>
</tr>
<tr>
<td>IE 8</td>
<td>2009-03-19</td>
<td>F</td>
</tr>
<tr>
<td>IE9 Preview1</td>
<td>2010-03-16</td>
<td>F</td>
</tr>
<tr>
<td>IE9 Preview2</td>
<td>2010-05-05</td>
<td>F</td>
</tr>
<tr>
<td>IE9 Preview3</td>
<td>2010-06-23</td>
<td>D</td>
</tr>
<tr>
<td>IE9 Preview4</td>
<td>2010-08-20</td>
<td>D</td>
</tr>
<tr>
<td>Renesis 1.1</td>
<td>2008-05-19</td>
<td>D</td>
</tr>
<tr>
<td>CSV 2.1</td>
<td>2003-09-03</td>
<td>C</td>
</tr>
<tr>
<td>GPAC 0.4.5</td>
<td>2008-12-01</td>
<td>C</td>
</tr>
<tr>
<td>SVGWeb (Beholder)</td>
<td>2009-10-28</td>
<td>D</td>
</tr>
<tr>
<td>SVGWeb (Owlephant)</td>
<td>2010-08-29</td>
<td>D</td>
</tr>
<tr>
<td>AmpleSDK 0.9.0</td>
<td>2010-02-23</td>
<td>F</td>
</tr>
<tr>
<td>ASV3</td>
<td>2001-11-01</td>
<td>A</td>
</tr>
<tr>
<td>Batik 1.7</td>
<td>2008-01-10</td>
<td>A+</td>
</tr>
</tbody>
</table>
IE9 looks very promising
But

• IE9 needs at least Windows Vista
• Extended support for Windows XP Professional ends April 2014
• Windows XP Downgrade Rights until 2015?
What about IE9 adoption?
Let’s have a look at IE’s adoption in the past
Pressure mounts to phase out Internet Explorer 6

A Downing Street petition is calling for the UK government to drop Microsoft's Internet Explorer 6 (IE6) and move to a more modern browser.

The petition says that IE6 has security flaws and uses outdated technology, creating a burden for developers.

The petition comes as the Department of Health advised the NHS to move away from the old browser.

Other government departments - and many firms - still use the software, which was first released in 2001.

"Most creative and software development companies are forced by government department clients to build websites for IE6 when most of the industry has moved on," the petition reads.

"Upgrading would be a massive task for government, but if the public is encouraged to lead the way and the government follows, that would create the momentum needed."

The petition was set up by Dan Frydman of web firm Inigo.

A campaign in the US, called ie6nomore, is supported by more than 70 web firms and claims the software is "holding the web back".

Microsoft has released two more versions of its web browser since IE6, but some firms and government departments still use systems designed for an earlier era.
The future is here. It’s just not evenly distributed yet.

William Gibson
How to bridge the SVG support gap

- User / admin action:
  - Plugins are dead
  - Firefox 4, Chrome 6, Opera 10 still supported on WindowsXP

- Content creators:
  - JavaScript libraries
Unbeatable JavaScript Tools

Dojo saves you time, delivers powerful performance, and scales with your development process. It’s the toolkit experienced developers turn to for building great web experiences.

1.5
Instantly Better Web Apps

GET DOJO

Creating Web Apps with Dojo

Grids and Charts
Create enterprise grade apps with grids and charts that work across browsers and can handle any data thrown at it.

Powerful Easy APIs
Dojo’s powerful, lightweight core makes common tasks quicker and easier. Animate elements, manipulate the DOM, and query with easy CSS syntax, all without sacrificing performance.

Rich UI Widgets
Don’t spend hours reinventing the wheel, use Dojo’s widget system Dijit for commonly used form widgets like calendars, input validation and more.

Open Source
Use and modify Dojo in commercial and Open Source software with confidence thanks to our 100-point process.

Learning is Easy
There are several books on Dojo which complement our extensive documentation and active community.

Support You Need
Need help? Our community is dedicated to helping each other solve issues. Commercial support is available from SitePen and uxebu.
What is it?

Raphaël is a small JavaScript library that should simplify your work with vector graphics on the web. If you want to create your own specific chart or image crop and rotate widget, for example, you can achieve it simply and easily with this library.

Raphaël [raphael] uses the SVG W3C Recommendation and VML as a base for creating graphics. This means every graphical object you create is also a DOM object, so you can attach JavaScript event handlers or modify them later. Raphaël’s goal is to provide an adapter that will make drawing vector art compatible cross-browser and easy.

Raphaël currently supports Firefox 3.0+, Safari 3.0+, Chrome 5.0+, Opera 9.5+ and Internet Explorer 6.0+.

How to use it?

Download and include raphael.js into your HTML page, then use it as simple as:

```javascript
// Creates canvas 320 x 200 at 10, 50
var paper = Raphael(10, 50, 320, 200);
```

```javascript
// Creates circle at x = 50, y = 40, with radius 10
var circle = paper.circle(50, 40, 10);
```

```javascript
// Sets the fill attribute of the circle to red (#f00)
circle.attr("fill", 
```

```javascript
// Sets the stroke attribute of the circle to white
```

Interactive Geometry, plotting, visualization

JSXGraph is a cross-browser library for interactive geometry, function plotting, charting, and data visualization in a web browser. It is implemented completely in JavaScript, does not rely on any other library, and uses SVG and VML. JSXGraph is easy to embed and has a small footprint: less than 100 KByte if embedded in a web page. No plug-ins are required! Special care has been taken to optimize the performance.

Starting with version 0.80 JSXGraph supports multitouch devices like the Apple iPad and devices running any browser with SVG support. JSXGraph is developed at the Lehrstuhl für Mathematik und ihre Didaktik, University of Bayreuth, Germany.

License

JSXGraph is released under the LGPL – Lesser GNU General Public License.
All those JavaScript libraries invented their own 2D graphics syntax
Not all vector graphics are created programmatically
Tools for designers
export standard
SVG markup
Overview

SVG Web is a JavaScript library which provides SVG support on many browsers, including Internet Explorer, Firefox, and Safari. Using the library plus native SVG support you can instantly target ~95% of the existing installed web base.

Once dropped in you get partial support for SVG 1.1, SVG Animation (SMIL), Fonts, Video and Audio, DOM and style scripting through JavaScript, and more in about a 60K library. Your SVG content can be embedded directly into normal HTML 5 or through the OBJECT tag. If native SVG support is already present in the browser then that is used, though you can override this and have the SVG Web toolkit handle things instead. No downloads or plugins are necessary other than Flash which is used for the actual rendering, so it's very easy to use and incorporate into an existing web site.

If you find a bug please file an issue. If you have questions on using SVG Web please use the Google Group forum.

One Minute Intro

Video & Audio
# Jeff Schiller’s SVG Table

<table>
<thead>
<tr>
<th>Browser</th>
<th>Version</th>
<th>Date</th>
<th>SVG Support</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firefox 3.6.0</td>
<td></td>
<td>2010-01-15</td>
<td>61.50%</td>
<td>C</td>
</tr>
<tr>
<td>Minefield Nightly</td>
<td></td>
<td>2010-05-05</td>
<td>77.74%</td>
<td>B</td>
</tr>
<tr>
<td>Minefield Nightly</td>
<td></td>
<td>2010-08-20</td>
<td>78.83%</td>
<td>B</td>
</tr>
<tr>
<td>Opera 10.53</td>
<td></td>
<td>2010-05-01</td>
<td>94.89%</td>
<td>A+</td>
</tr>
<tr>
<td>Opera 10.61</td>
<td></td>
<td>2010-08-21</td>
<td>95.26%</td>
<td>A++</td>
</tr>
<tr>
<td>Chrome 4</td>
<td></td>
<td>2010-01-25</td>
<td>82.12%</td>
<td>A</td>
</tr>
<tr>
<td>Chrome 5</td>
<td></td>
<td>2010-04-04</td>
<td>87.41%</td>
<td>A</td>
</tr>
<tr>
<td>Chrome 6 Beta</td>
<td></td>
<td>2010-08-21</td>
<td>90.33%</td>
<td>A+</td>
</tr>
<tr>
<td>Safari 4.0.5</td>
<td></td>
<td>2010-03-11</td>
<td>82.12%</td>
<td>A</td>
</tr>
<tr>
<td>Safari 5</td>
<td></td>
<td>2010-06-08</td>
<td>82.48%</td>
<td>A</td>
</tr>
<tr>
<td>IE 8</td>
<td>2009-03-19</td>
<td></td>
<td>0.00%</td>
<td>F</td>
</tr>
<tr>
<td>IE9 Preview1</td>
<td>2010-03-16</td>
<td></td>
<td>28.73%</td>
<td>F</td>
</tr>
<tr>
<td>IE9 Preview2</td>
<td>2010-05-05</td>
<td></td>
<td>30.91%</td>
<td>F</td>
</tr>
<tr>
<td>IE9 Preview3</td>
<td>2010-06-23</td>
<td></td>
<td>52.91%</td>
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</tr>
<tr>
<td>IE9 Preview4</td>
<td>2010-08-20</td>
<td></td>
<td>58.00%</td>
<td>D</td>
</tr>
<tr>
<td>Renesis 1.1</td>
<td>2008-05-19</td>
<td></td>
<td>58.73%</td>
<td>D</td>
</tr>
<tr>
<td>CSV 2.1</td>
<td>2003-09-03</td>
<td></td>
<td>61.27%</td>
<td>C</td>
</tr>
<tr>
<td>GPAC 0.4.5</td>
<td>2008-12-01</td>
<td></td>
<td>64.78%</td>
<td>C</td>
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<tr>
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<td>2009-10-28</td>
<td></td>
<td>50.73%</td>
<td>D</td>
</tr>
<tr>
<td>SVGWeb (Owlephant)</td>
<td>2010-08-29</td>
<td></td>
<td>55.45%</td>
<td>D</td>
</tr>
<tr>
<td>AmpleSDK 0.9.0</td>
<td>2010-02-23</td>
<td></td>
<td>26.09%</td>
<td>F</td>
</tr>
<tr>
<td>ASV3</td>
<td>2001-11-01</td>
<td></td>
<td>83.03%</td>
<td>A</td>
</tr>
<tr>
<td>Batik 1.7</td>
<td>2008-01-10</td>
<td></td>
<td>93.61%</td>
<td>A+</td>
</tr>
</tbody>
</table>

Last updated 2010-08-30
How to support SVG in IE 6, 7 & 8 using SVG Web
Pyramide des âges: 2009
Allemagne

12ème Projection coordonnée de la population

1950-2008: accroissement de la population
2009-2060: projections

Les hypothèses:
- Taux de fécondité constant de 1,4 enfants par femme
- Espérance de vie à la naissance en 2060: 85,0 ans pour les hommes, 89,2 ans pour les femmes
- Solde migratoire annuel: +100 000 personnes

Groupes d'âges

<table>
<thead>
<tr>
<th></th>
<th>&lt;20</th>
<th>20-64</th>
<th>65+</th>
<th>Total</th>
<th>AQ</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>15.3</td>
<td>49.6</td>
<td>16.9</td>
<td>81.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>61</td>
<td>21</td>
<td>100</td>
<td>%</td>
</tr>
</tbody>
</table>

© Statistisches Bundesamt 2009
Pyramide des âges: 2036
Allemagne

12ème Projection coordonnée de la population
1950-2008: accroissement de la population
2009-2060: projections

Variante 1-W1: Les hypothèses:
- Taux de fécondité constant de 1,4 enfants par femme
- Espérance de vie à la naissance en 2060: 85,0 ans pour les hommes
  89,2 ans pour les femmes
- Solde migratoire annuel: + 100 000 personnes

<table>
<thead>
<tr>
<th>Années d'âges</th>
<th>20-64</th>
<th>65+</th>
<th>Total</th>
<th>%</th>
<th>AQ</th>
</tr>
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<tbody>
<tr>
<td>2010</td>
<td>39.1</td>
<td>23.9</td>
<td>75.3</td>
<td>100</td>
<td>61</td>
</tr>
</tbody>
</table>

© Statistisches Bundesamt 2009
Getting rid of SVG Web once IE9 prevails
<script src="svg.js"></script>

<body onsvgload="init()">
  
  <script type="image/svg+xml">
    <svg viewBox="0 0 1200 400" width="12cm" height="4cm">
      <circle cx="600" cy="200" r="100" fill="red" stroke-width="10"/>
    </svg>
  </script>

</body>
<body onload="init()">

<svg viewBox="0 0 1200 400" width="12cm" height="4cm">
  <circle cx="600" cy="200" r="100" fill="red" stroke-width="10"/>
</svg>

</body>
**12. koordinierte Bevölkerungsvorausberechnung**

1950 bis 2008: Fortschreibung
2009 bis 2060: Vorausberechnung

- Geburtenhäufigkeit annähernd konstant bei 1,4 Kindern je Frau
- Lebenserwartung Neugeborener im Jahr 2060: 85,0 Jahre für Jungen
  89,2 Jahre für Mädchen
- Jährlicher Wanderungssaldo + 100 000 Personen

**Altersgruppen**

<table>
<thead>
<tr>
<th>Altersgruppe</th>
<th>&lt;20</th>
<th>20–64</th>
<th>65+</th>
<th>Gesamt</th>
<th>Mill.</th>
<th>AQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>15,3</td>
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<td>81,7</td>
<td>Mill.</td>
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</tr>
<tr>
<td>Frauen</td>
<td>19</td>
<td>61</td>
<td>21</td>
<td>100</td>
<td>%</td>
<td></td>
</tr>
</tbody>
</table>

© Statistisches Bundesamt 2009
SVG Web needs you to support the whole IE family with SVG
Examples

http://wahlatlas.net (Election Atlas)

http://vis.uell.net/elevation

http://destatis.de/bevoelkerungspyramide
(Population Pyramid, Statistics Germany)

http://tr.im/voronoi (Inflation by Product)