



***SMIL***

**m1**

Transentia Pty. Ltd. DonationWare

- **Synchronised Multimedia Integration Language**
  - pronounced “smile”
  - a W3C recommendation describing a vocabulary for the creation of multimedia presentations
    - *not widely adopted*
      - Microsoft, Netscape and Macromedia have ignored it so far
        - Quicktime 4.1 and RealPlayer G3 are the only common applications
      - SOJA applet can be used in browsers
    - SMIL documents are ‘glue’ that tell a player application which resources to retrieve and when they should be presented
      - *relies on stylesheets for formatting, etc.*
    - metadata ‘switch’ element allows SMIL software to adapt to different platform/bandwidth conditions

```
<par>
  <switch>
    
    
  </switch>
  <audio src="video_narration.ra"/>
</par>
```

# Introduction & Example

- SMIL was initially perceived to be a bit isolated/academic
  - *doesn't fit in well with DHTML, etc.*
- “Learn SMIL with a SMIL” tutorial
  - <http://www.empirenet.com/~joseram/index.html>

```

<smil>
  <head>
    <layout>
      <root-layout width="640" height="480" background-color="black" />
      <region id="logo" left="20" top="5" width="100" height="50" />
      <region id="vidbk" left="200" top="50" width="150" height="76"
        background-color="#330033" z-index="1" />
      <region id="video" left="210" top="55" width="100" height="70"
        background-color="#000000" z-index="3" />
      <region id="ccbk" left="20" top="200" width="400" height="30"
        background-color="#666600" z-index="2" />
      <region id="ccscroll" left="21" top="210" width="350" height="25"
        fit="fill" z-index="2" />
    </layout>
  </head>
  <body>
    <par>
      <seq>
        <par>
          
        </par>
        <par>
          <video src="video.avi" region="logo" fill="freeze" />
          <text src="cctext.txt" region="ccscroll" fill="freeze" />
        </par>
      </seq>
    </par>
  </body>
</smil>

```

*‘But SMIL actually complements such technologies, according to Just SMIL publisher Tim Kennedy. “Sure, you might be able to achieve the SMIL look with Cascading Style Sheets, JavaScript, and other authoring wizardry. As for me, I would rather focus on crafting compelling content than struggle with tricks to deliver that content. In my opinion, SMIL makes the multimedia authoring process easier.”’*

# • Becoming better supported

## Free SMIL Authoring Tools

- [GRiNS Editor](#) (Mac, Win95/NT, SGI Irix 6, Sun) from CWI
- [MSlide Builder](#) (Web-based)
- [Real EasyPix](#) (Win95/98/NT) from RealSMILSoftware.com
- [RealProducer G2 Authoring Kit](#) (Win95/98/NT) from RealNetworks
- [RealSlideshow](#) (Win95/98/NT) from RealNetworks
- [SMIL Composer SuperTool](#) (Win95/98/NT) from Sausage Software

<http://www.apple.com/quicktime/authoring/qtsmil.html>

## Pay SMIL Authoring Tools

- [Allaire HomeSite](#) (Win95/98/NT)
- [ActivePack](#) (Win95/98/NT & Mac) from Equinox Communications
- [G2 Objects for Dreamweaver](#) (Win95/98/NT) from RealNetworks, Macromedia
- [G2 Object for Asymetrix Toolbook II](#) (Win95/98/NT) from Asymetrix
- [Lp Studio](#) (Win95/98/NT) from The Productivity Works
- [Lp Studio PRO](#) (Win95/98/NT) from The Productivity Works
- [RealProducer Pro G2](#) (Win95/98/NT) from RealNetworks
- [SMIL Composer SuperTool](#) (Win95/98/NT) from Sausage Software
- [T.A.G. Composer 2.0 for RealSystem G2](#) (Win95/98/NT) from Digital Renaissance
- [T.A.G. SMIL Editor 1.0](#) (Win95/98/NT) from T.A.G. Software (Digital Renaissance)
- [V-Active for RealSystem G2](#) (Win95/NT) from Veon

## SMIL Utilities

- [HyperGen](#) Image Mapping (Win95/98/NT) from ArsT Design
- [JPEGTRAN](#) (courtesy of [Ulead](#)) - DOS - from Independent JPEG Group
- [RealPix Bandwidth Calculator](#) (Microsoft Excel) from RealNetworks
- [RealSystem G2 Authoring Kit](#) (Win95/98/NT) from RealNetworks
- [SMIL Evaluator](#) (Web-based) from RealNetworks
- [SMIL Validator](#) (Web-based) from CWI

<http://smw.internet.com/smil/smilhome.html>

## SMIL Authoring Tools

After a while, hand-hacking SMIL gets to be a bit tedious. These packages help you to forget about SMIL tags and focus on telling a multimedia story.

## SMIL Browsers & Players

- [Helio Java Player](#) (Java based platforms) - free
- [GRiNS](#) (Win95/98/NT, Mac 68k/PPC, Irix 6, Solaris 2.5) from CWI - free
- [RealPlayer G2](#) (Win95/98/NT, Mac PPC early preview version) from RealNetworks - free
- [RealPlayer G2 Plus](#) from RealNetworks - pay
- [Crescendo Forte \(plug-in for G2\)](#) (Win95/98/NT) from LiveUpdate - free
- [HPAS](#) (Win95/98/NT) from Compaq - free
- [S2M2 Java Based SMIL Player](#) (Java Based platforms) from NIST - free
- [SMILeBaby Java Based Player](#) (Java Based platforms) from Rolande Kendal - free
- [Lp Player](#) (Win95/98/NT) from The Productivity Works - pay

## SMIL Encoders

- [RealProducer G2 Authoring Kit](#) (Win95/98/NT) from RealNetworks - free
- [RealProducer G2](#) (Win95/98/NT) from RealNetworks - free
- [RealProducer Plus G2](#) (Win95/98/NT, DEC Alpha) from RealNetworks - pay
- [RealProducer Pro G2](#) (Win95/98/NT) from RealNetworks - pay
- [T.A.G. Batch Encoder 1.0](#) (Win95/98/NT) from T.A.G. Software (Digital Renaissance) - free

## SMIL Servers

- [Basic Server Plus G2](#) from RealNetworks
- [Interaction Web Server Companion](#) from Media Design in-Progress
- [Veon Activation Server](#) from Veon

- A proposal by Microsoft, Macromedia and Compaq

- supported in IE5
- attempt to overcome perceived shortcomings of SMIL
  - *converging...*
- allows time attributes to be applied to any element

```
<div t:begin="1">
  This will appear after one second
</div>

  This will appear after two seconds
</img>
<p t:begin="3">
  Says hello in three seconds...
</p>
```

```
<div height="200" width="300">
  <t:seq id="presentation" t:beginEvent="none">
    
    
  </t:seq>
  
  <p align="center" onclick="presentation.beginElement()">
    Click here to begin the presentation it will begin automatically.
  </p>
  <p align="center">
    Click an image to manually advance the presentation.
  </p>
</div>
```

```
<HTML>
<HEAD>
<STYLE>
  .time { behavior: url(#default#time2); }
</STYLE>
</HEAD>
<BODY>
  <DIV CLASS="time" REPEAT="5" DUR="10" TIMELINE="par">
    <DIV CLASS="time" BEGIN="0" DUR="4">First line of text.</DIV>
    <DIV CLASS="time" BEGIN="2" DUR="4">Second line of text.</DIV>
    <DIV CLASS="time" BEGIN="4" DUR="4">Third line of text.</DIV>
    <DIV CLASS="time" BEGIN="6" DUR="4">Fourth line of text.</DIV>
  </DIV>
</BODY>
</HTML>
```

```
<html xmlns:t="urn:schemas-microsoft-com:time">
<head>
<style>
.time {behavior: url(#default#TIME2);}
</style>
<?import namespace="t" implementation="#default#time2">
<title>SMW HTML+TIME Demo</title>
</head>
<body>
<p id="intro"><b>CLICK ME:</b> Africa is an amazing place
and this is an amazing paragraph. How amazing is
this paragraph? Click the text and see what happens...</p>
```

```
<div class="time" begin="intro.click">
<button id="morning">African Morning</button>
<button id="sunset">African Sunset</button>
<button id="jungle">African Jungle</button>
```

```
<p>
<t:excl dur="indefinite">
```

```
<t:par begin="0;morning.click">

<div class="time" dur="5" timeAction="display">
Morning Fog in Africa</div>
</t:par>
```

```
<t:par begin="sunset.click">

<div class="time" dur="5" timeAction="display">Sunset at an African
Beach</div>
</t:par>
```

```
<t:par begin="jungle.click">

<div class="time" dur="5" timeAction="display">African Jungle</div>
</t:par>
```

```
</t:excl>
</p>
</div>
</body>
</html>
```

