

# **SMILe WITH RICH MEDIA**

## **Introduction**

The increasing proliferation of high-speed data connections and CPU acceleration continues to change and evolve the way we do business and communicate with the world. When ubiquitous broadband access is realized, the world will truly be a different place. Until then, rich-media via the Internet is still a valuable tool for maximizing the use of your wires. Companies that use the web to sell to customers, inform their customers or promote their products can benefit from using rich media on their web sites. The added value of rich media can be achieved whether you are connecting with a dial-up modem to use the web, or whether you are managing a corporate inter/intra/extranet connection. The following article is a brief introduction about SMIL and rich-media technology as well as an overview of how using rich-media with your web applications can benefit your organization and leverage the eyeballs coming to your site.

## **What is SMIL?**

SMIL, Synchronized Multimedia Integration Language (pronounced “smile”), was approved by the World Wide Web Consortium in 1998 as the standard markup language for streaming multimedia presentations. An easy comparison which makes understanding SMIL simple, is comparing HTML and SMIL. HTML, Hypertext Markup Language, is the language used for the layout of web pages with text and graphics, while SMIL is the language used to layout audio/video presentations like those you would find using RealPlayer G2 and now QuickTime 4.1. Examples of what SMIL can do are applications like interactive video, video on demand, online training and any other conceivable opportunity where streaming rich media could captivate given audience.

Apple Computer Inc. announced the incorporation of SMIL compatibility in the current release of QuickTime at Macworld Expo 2000. "QuickTime 4.1 will feature enhanced functionality, including seamless ad insertion; improved firewall navigation; AppleScript® support for easy digital media creation and streaming; and support of synchronized multimedia integrated language (SMIL), the emerging standard for interactive media creation.”

Web pages of yesterday are limited in similar ways to print media in their ability to captivate the viewer and relay content. Through the use of interactive media, now capable through the use of SMIL, incorporating audio, video, animation, graphics and text content into entertaining presentations can be explored in ways previously unavailable. SMIL combines rich-media elements into a cohesive whole. Through the use of SMIL the ability to create and broadcast interactive, entertaining rich media presentations is simplified and becomes accessible to anyone with a computer and an Internet connection.

## Uses for SMIL

SMIL is the language that allows you to bring together all of your rich-media assets into a complete presentation. Presentations created with SMIL can be very flexible in defining how media is laid out and played back. SMIL offers unlimited possibilities with sequencing playback of media and hyperlinking to other content, both rich-media and HTML. There are a few SMIL authoring tools available for creating SMIL presentations, otherwise presentations must be created by writing the SMIL code. Media files have to be converted into a streaming media format, which is primarily determined by the destination player program. Currently, the most widely used player is RealNetworks RealPlayer. RealPlayer, with 95 million registered users in 1999,<sup>1</sup> makes use of RealSystem G2 files, one of the best streaming media file formats. Apple, as mentioned above, has added their support of SMIL to their QuickTime Player in version 4.1. RealSystem G2 and QuickTime streaming files are not compatible with each other. If you want to make presentations available for both players, you will have to create separate presentations for each player and link to them accordingly.



<sup>1</sup> [www.real.com](http://www.real.com)

## **Corporate communications**

Anyone who has ever tried to organize and execute a meeting of any sort knows how frustrating it can be to co-ordinate schedules, arrange locations and accommodate everyone involved. Using rich-media to deploy informational updates, training and/or other forms of interpersonal communications is a proven method for increasing the access of information and improving information retention by maximizing the user's experience. Instead of trying to arrange for a group of people to meet in a specific location for a presentation followed by a question period, managers can videotape a meeting or combine audio with slides (for the camera shy). The presentation can be distributed on the corporate intranet or extranet for viewing by employees during free time or in a separate window as they work. Questions can be handled by a messaging system, through e-mail or chat sessions combined into the SMIL presentation accomplishing superior results to a scheduled physical meeting. In a market becoming less defined by geographical boundaries, virtual meetings are a very real response to coordinating a gathering.

## **Advertising enhancement**

Electronic commerce and advertising are two of the greatest uses for business the Internet has offered to date. As banner advertising and click-through initiatives continue to saturate the market place and lose their effectiveness, advertisers must use any available advantage to help increase brand recognition and click-through rates. Rich-media enhanced advertising can create new and more effective means for advertisers to communicate with consumers, attract potential customers and establish brand awareness. In a recent study conducted by Millward Brown Interactive<sup>2</sup>, the first ever Streaming Media Brand Impact Study, In-Stream advertising was found to significantly increase brand impact. According to the study, brand recall was increased by 213% and brand awareness was up by 160% compared with static web sites. By creating the best shopping experience through the use of rich media, ecommerce sites can leverage their audience by showcasing products in an exciting, immersing manner that truly engages the consumer with a unique experience.

## **Content Enhancement**

If content and your creative content producing abilities are what you want to showcase on the web, then the use of rich-media can be the most valuable and the most challenging. Broadcasting content on the web requires the ultimate in production quality as well as technological understanding. Interactivity and secure commerce are the most prominent technology focuses today, whereas production quality and user appreciation are equally, if not more, vital. By creating a quality rich-media experience for your users, the perception of the value of the content is more easily appreciated by the viewer. Text content can be further enhanced by adding voice over scrolling text, and video and

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<sup>2</sup> Millward Brown Interactive Study, April 1999;  
[http://www.realnworks.com/company/advertising/newsinfo/mbi\\_summary.html](http://www.realnworks.com/company/advertising/newsinfo/mbi_summary.html)

animation based content is far more desirable to the consumer and more valuable than mere static text. This higher value creates new opportunities in pay per view and subscription content services that in the past were not available. Web sites that have limited rich-media production capabilities can also outsource their requirements to other companies that either produce content or syndicate content for use on the web. The opportunities that SMIL offers to the Internet community and to the movement towards convergent media will evolve as further capitalization of these new technologies are realized.



## **Rich-Media Assets**

Adding interactive, entertaining rich-media to existing or new web applications involves the accumulation or production of media assets. Media assets include photos, copy, video, audio clips, animations or any other media that has been produced for the product or service being presented. It is possible to re-purpose existing media into new media for use online. Photos can be combined with a voiceover allowing existing media

to be reassembled into a new media experience. Existing radio or television advertising can also be digitized and encoded for broadcast on the web and combined with links to product information. The GAP<sup>3</sup> currently has reproduced previous advertising campaigns for broadcast on their web site furthering their communications initiatives and promoting their brand on the web. SMIL is the enabling technology for the combination of media assets into an interactive rich-media presentation.

## **Conclusion**

The Internet has created new opportunities for everyone in business. Never before has such a wide spread boost in competition and technological advancement been realized. Streaming rich-media over the internet is the next frontier for web content delivery and using SMIL with existing and new media assets can give any business a definite advantage, if those assets are used to their full potential.

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Steven Dryall is the President and CTO of Confluent Technologies Incorporated, creators of the SMIL authoring tool Fluition. Mr. Dryall is involved with all aspects of Confluent Technologies from conception to execution and is the lead developer and creator of Fluition. Mr. Dryall has extensive experience with many aspects of rich-media production ranging from film, video and animation production to the many aspects of new media creation, integration and delivery. Confluent Technologies is dedicated to making the implementation of new technologies easier and the goal in the creation of Fluition was to make using SMIL easier for anyone producing rich-media.

## **Online Resources for SMIL and streaming media:**

### **RealNetworks**

Leading provider of streaming media server and encoding solutions, creators of RealSystem G2.

<http://www.real.com>

### **Apple's QuickTime site**

Leading edge media hardware and software company, creators of QuickTime.

<http://www.apple.com/quicktime>

### **World Wide Web Consortium SMIL site**

The organization that leads the standardization and execution of World Wide Web systems

<http://www.w3.org/AudioVideo/Overview.html>

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<sup>3</sup>

[www.gap.com](http://www.gap.com)

**Confluent Technologies Inc.**

Creators of Fluition, SMIL authoring tool for the Macintosh

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