

INTEROPERABILITY OF MACROMEDIA (ADOBE SYSTEMS)

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Abstract

This article presents the interoperability between Macromedia (Adobe) and its own software's and also interoperability between Macromedia (Adobe) and different applications. I make a particular study of interactivity on Macromedia by creating web pages and insist on expanding the Dreamweaver's facilities.

Keywords

Interoperability, Macromedia, Adobe, interaction, media, platform

Introduction

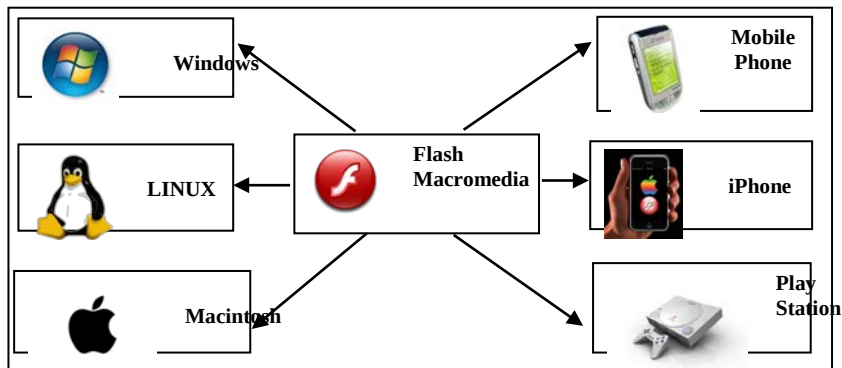
For understanding this article theme we need to take a quick tour of Macromedia's history and structure. First in 1988, Macromedia begin with a software that can play many media files (images, movies and sounds) named Director. Marc Canter, the creator of Macromedia, intended to make a system easy to use for the artists who want to create virtual spaces. In 1992 Macromedia merge with 2 important companies: Authorware Inc and MacroMind-Paracomp. While World Web gets more popularity, Macromedia created Shockwave, a Director viewer plug-in for web browsers and extend its market by branching out into web-native media tools. With Shockwave you could run video movies created by Director without jerkiness typically associated with computer video too. Also create an application called Afterburner, who converts shockwave movies to a web usable format. Till 2005, when Macromedia was taken by Adobe's company, Macromedia produce many important programs in different versions like Shockwave, Flash, Dreamweaver, Director, Freehand, Authorware etc. Now we have more interactive software from Adobe creators that respond incredibly well to new web market demands and different media's platform.

Base article

Interaction on Flash Macromedia (Adobe Systems)

Frequently I use Flash to make some peace of sites or integral sites. For the people who don't know what can make Flash, I resume that Flash is an application used on applet-objects development for web pages or media animations. Using Flash you can grow up dynamic pages and facility interaction with users. Flash can run on independent platforms because was set up for a large range of hardware and operating systems. We can see Flash object on Windows, running automatically Flash Player for Window's version, Flash objects are used on phone software (Flash Player Lite 1.0), and also Flash can be used on MacOS if we run it with a proper player. [FLSH01]

Adobe said that the getting Flash to work successfully on iPhone is a hard technical challenge and they need to continue to put efforts to make it work.

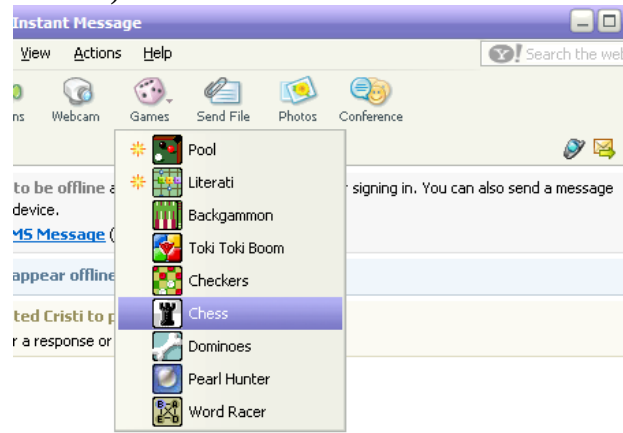


Flash offered the most robust framework and tool kit for achieving our vision of breathing life into a typically static e-mail experience.

Flash make easier the creator work for long time running movies. Most advantages of Flash are animating movies and its interface makes possible synchronizing of different objects, positions and shapes.

Insertion of media tools on interface. Inside of Flash objects you can import or handle (back, next or jump) MP3 or AVI elements. You don't need to have knowledge about HTML, XHTML.

Flash objects make real time transfer (connection) with server. In this way are building different chats or applications that communicate in real time even if it runs on different computers (see chess game for Yahoo Messenger created in Flash).



Flash objects can trust real communication by start up local connection with "LocalConnection" command. Two different Flash objects placed on same computer can interact even if one of them plays one Browser window and the other in different one (even directly in Flash Player).

Flash objects make communication with scripts type Java Script with "fscommand". Also Java Script communicate with Flash calling function directly from Flash using "name" attribute form HTML code exported by Flash.

Flash can be used as interface for applications write in different programming language. For example run successfully in making interface for Play Station II.

If we have graphic animation representation with Flash Macromedia and saved as Shockwave file (.swf), there is possibility to play the file in a Microsoft Office PowerPoint 2007, using Active X control.

To play a Flash file on slide you can add an Active X control to slide and make a link to this file or include presentation file.

Interoperability of Dreamweaver

Macromedia Dreamweaver is a tool for web makers. Dreamweaver was founded by Macromedia (now Adobe System) and till this moment already arrived at 9 version.

Firs version served just as simple HTML editor (WYSIWIG) but recent edition include strong editor's function and web technology support like CSS, Java Script etc.

Dreamweaver enjoy a big success even form '90 and now holding almost 80% from HTML editors market. The product can be played on different platforms: Macintosh, Windows, but also support UNIX platform, helped by software emulation as Wine. [DRMW01]

Starting with MX version, Macromedia incorporate utilities for dynamic contains. Offer connection support for databases as MySQL and Microsoft Access. Play filters and post content with scripts as PHP, Cold Fusion, Active Server Pages (ASP) and ASP.NET. [DRMW01]

Visual editing in Dreamweaver allows quickly creation of web pages without being necessarily writing script pages. Make animation by editing and creating images with Macromedia Fireworks help, same as different graphics applications, fallow by importing directly into Dreamweaver. Dreamweaver provide a kit of tools that can make easier to reach Flash objects from web pages.

Dreamweaver have an interesting choice to process HTML Microsoft Word documents using “Clean up Word HTML” command. With this command it’s realizing automatically detection of Word version in base of added tags to HTML document.

Interoperability of Dreamweaver with media applications

Adding media files and sounds to movies, becoming more used interaction on our time. Navigation on web is now realizing on bigger bandwidth. Most popular media files occur, certainly large bandwidth.

Dreamweaver have many functions that improve the capacity of adding media files on web pages. There is a behavior who detect if user have a proper player application.

Flash and Director from Macromedia there are certainly standards for web animations. Director creates from beginning interactive software for CD-ROM, and is software for playing on continuous stream for web, named Shockwave. Flash is a well known vectorial graphic – small and scalar graphic format.

Dreamweaver use two tags for inserting media contain. Plug-in objects insert in HTML’s script the standard tag plug-in for Netscape. Internet Explorer Browser recognize <object> tag and call Active X Flash or Shockwave controls. When you insert a Flash object Dreamweaver insert automatically tags for both browsers. Netscape recognize <embed> tag and call Flash plug-in way, and Internet explorer call ActiveX.

I recommend a special attention on browsing web pages on recently Internet Explorer Browsers (7 and 8 versions). If you use Internet Explorer, you may recently have noticed some strange and mysterious rectangle outlines surrounding many Web browser components such as Flash, QuickTime, and Media Player movies. Upon attempting to interact with these components, a message appears saying that you must click to activate and use the control. When you do so, the outline disappears and the functionality of the component returns to normal. You probably noticed these outlines on some of your favorite Websites, but perhaps they even appeared on your own site. You may possibly still wonder why these outlines are there, what they are for, and if you can do anything about them.

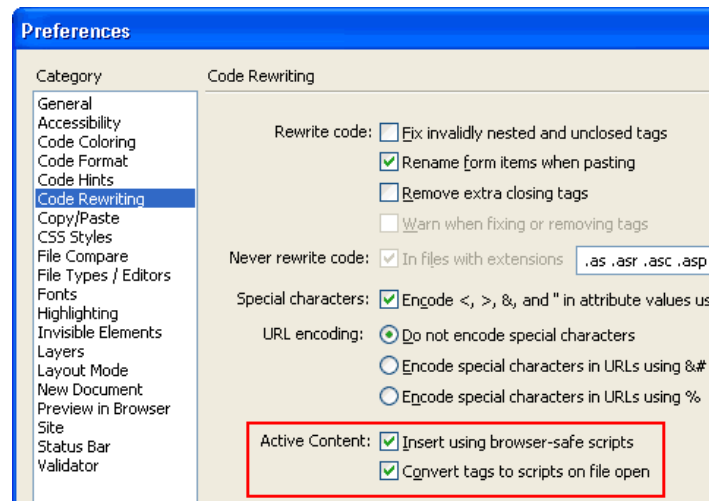
The origin of these outlines can be traced back to a lawsuit filed by Eolas Technologies against Microsoft for automatically invoking some external applications in internet explorer. Eolas claimed that this constituted a patent infringement. Since Microsoft lost the lawsuit, it was forced to find a workaround the issue in order to continue using the plug-ins, but without infringing any patents. This workaround recently materialized, thanks to a windows update for internet explorer, and it prevents direct interaction with ActiveX controls loaded with the APPLET, EMBED or OBJECT elements. Thus, an extra step—clicking on the ActiveX control or a warning message—needs to be taken before you can fully interact with your favorite browser applications such as Flash and QuickTime.

Although Microsoft’s solution does not prevent any Web applications from running smoothly, many people and companies view this additional step as a nuisance. After all, many Websites are composed of dozens of pages now requiring ActiveX activations—sometimes several per page—and this can add up to a lot of clicking. As a result, solutions to bypass these modifications have started to appear. For example, Microsoft has recommended several ways to modify the content of HTML pages to prevent having to first activate the interactive content, and Adobe offers manual suggestions and software updates which allow users to interact with their content instantly.[ADBO01]

It is important to keep in mind that Dreamweaver only converts parameters and embed tags that are contained within the identified object tags. If you’ve customized your code (for example, if you’ve added an img tag, or any other kind of tag inside your object tag), the JavaScript functions do not write out the appropriate strings for that content at run-time because Dreamweaver’s JavaScript function only generates attribute-value pairs for parameters and embed tags. If you want your custom code to render properly at run-time and still work as expected in Internet Explorer, you will need to do one of the following:

- Write your own JavaScript function that deals with custom code. (If you wish, you can also turn off the Dreamweaver Convert Active Content feature by selecting Edit > Preferences > Code Rewriting.)
- Develop an extension that lets the generateScript() function look for other kinds of information within the object tag, and that passes that information along to a JavaScript function for the processing of different kinds of arguments.

Here is a screen shot of the Active Content options in the Dreamweaver 8.0.2 Preferences dialog box:



Dreamweaver has capacity to create special text effects – Flash movies with text – directly from its workspace. Is not really necessarily to install Flash program on your computer to create this function. Dreamweaver allow creating Flash button and text.

Adding sound file to a web page it is possible in Dreamweaver with respecting some rules for web browser with proper plug-in. Some plug-in and format files are more recognized than others. Real Media and MP3 formats get real popularity on web market, and Dreamweaver make real improve of working with it.

By Parameters box Dreamweaver run possibility to work flexible advanced attributes of objects. Selecting Parameters button Dreamweaver open a dialogue structured in two parts: parameter name and value. Adding wanted parameter you can create loop effect, recognized by all browsers, and other different effects as directly run, hidden, volume (set up volume) etc.

Inserting Java applet in Dreamweaver it is a very simple fact because you just need to follow few steps as adding pre-established parameters to original applet script. And Java applets run in browsers same as many media files.

Even if Dreamweaver is not a dedicated animation maker, you can make on main workspace simple slide animations. Of course we can not talk about same professional effects as Flash or Director's tools, but is usable for simple and elegant objects. For Flash creators, Dreamweaver interface is already a familiarly workspace. Previews in browsers for time slides controls you need to run scripts on Dynamic HTML (recently version of Internet Explorer or Netscape Navigator).

Interoperability of Fireworks

Another application form Macromedia (Adobe) package is Fireworks.

Macromedia created Fireworks as a complete graphics applications aimed towards Web designers.

Fireworks create tools and image optimization, and we can say that is an enclosure to board tools of web development. Between Dreamweaver and Fireworks there is a strong interaction. Dreamweaver open Fireworks files directly from its interface. The changes form this interface can be viewed in first Fireworks files. Fireworks make exports of rollover images and HTML scripts.

Fireworks it also enables you to edit text, graphics and effects at any stage during production. Fireworks also simplify the process of making JavaScript buttons with mouse over effects, all combined with automatic HTML generation.

User interface from Fireworks is well looking to Dreamweaver's interface. This is document window and panel, which contain 4 different posts: Original, Preview, 2-Up and 4-Up. Can create and handle an image with Original tab selected, and in Preview tab you can see the final image.

Interoperability between this two programs give an example of importing Fireworks imported files, so you can continue editing HTML scripts directly form Dreamweaver.

With newest version, Fireworks CS4, you can prototype a full web page layout and quickly convert it to CSS-based HTML for publishing online with the new CSS export feature.

Fireworks CS4 enable you to export a clickable prototype as an interactive PDF file, so you can easily collect comments from reviewers and demo your designs.

Interoperability of FreeHand

FreeHand is a software form Macromedia's package, and same as Fireworks, offer a large range of facilities for making professional design. FreeHand is a perfectly integrate Macromedia's platform, for editing, creating and exporting graphic objects. Allow working with graphic objects from different sources on single document. It is very useful for creating design, multipage documents and editing with an exceptional design tools. You can explore easily use it on typography, Internet or Flash content. Contain a tools board for Flash and Fireworks integration. From FreeHand MX version runs new incredible options and 3G emulation. Add more visual punch to designs and illustrations—apply unlimited stroke, fill, and effect attributes to a single vector or text object while maintaining editability of the base object. Multiple attributes eliminate the need to stack duplicates of an object to create a particular appearance, making updates easier, faster, and with fewer objects to manage. Maximize creative expression with live effects, which apply complex distortions and effects without altering the original object. FreeHand MX includes such vector effects as bend, sketch, and transform—as well as bevel, drop shadow, and gradient transparency raster effects. The Object panel allows you complete control over effects, as well as to all or selected object attributes.

Easily assign complex ActionScript™ navigation commands for Adobe® Flash®. Just drag and drop a link between objects, symbols, and pages to quickly produce click-thorough for client approvals, presentations, and sophisticated Flash projects.

Assign simple actions such as Go To and Play or Go To and Stop or more complex behaviors like Get URL or Load External Movie.

With Freehand you can import more complex Flash movies (SWF files) into your FreeHand® MX document and integrate them into your designs before exporting back out to SWF. This feature is great for developing larger site interfaces and designs in FreeHand MX while still being able to include components that include more programming-intensive functions for e-commerce or video streaming.

Work more productively between programs with a launch-and-edit workflow between FreeHand MX and Flash. SWF files placed in a FreeHand MX document can be edited in Flash with a click in the Object panel. Updates made to the FLA file in Flash are automatically applied to the SWF file placed in FreeHand MX

Flash can now open and import FreeHand MX files while preserving the editability of vectors and text — and streamline the production process as projects move from design to development and programming.

Use the Navigation panel to assign navigation action to objects for export to HTML or Flash. The Navigation panel streamlines your workflow by letting you apply Internet links and Flash actions to graphics and text from within FreeHand MX.

For Flash production, use the panel to assign event handlers, actions, and parameters. Available actions include Go To and Stop, Go To and Play, Get URL, Play and Stop, Print, Full Screen, Start/Stop Drag, Load/Unload Movie, and Tell Target.

Create rich web-native print applications for printing from Adobe Flash Player within any browser. FreeHand MX and Flash offer a technology that bridges the Internet and printers with web-native applications that have screen and print components. Lay out rich print designs in the flexible multipage FreeHand MX environment, and import into Flash to create compelling cross-media applications.

In FreeHand MX you can import Fireworks PNG files, maintaining the editability of objects, text, and live effects.

Enhances the launch and edit workflow between FreeHand MX and Fireworks. Bitmap images placed in a FreeHand MX document can be edited and optimized in Fireworks with a single click in the Object panel. You can choose to edit the bitmap or an original Fireworks PNG file for increased

editability. Updates made to the PNG file in Fireworks are automatically applied to the bitmap placed in FreeHand MX.

Interoperability of Authorware

Macromedia Authorware is a tool used by professional creators for making e-learning applications. Is a large software for media works and used successfully on companies networking, CD/DVD or WEB. Authorware develop available software consistent with LMS (Learning Management System) standards.

Authorware, Flash and Dreamweaver for Macromedia (Adobe System) set up together a complete solution for on-line learning. This software consecrates to a large range of applications with an education target, and satisfies the following demands: making text and graphics, learning simulations and tests with possibility to add new elements for audio-video and animation objects.

From 7th version, Authorware release new functions as:

- Importing from Microsoft PowerPoint (use PowerPoint's graphic to create e-learning slides for multimedia);
- Navigation tabs and change text into speaking.

Interactivity is built right into the Authorware design. Just add content, and then choose from 11 response types to make your content come alive.

Integrate a comprehensive array of media types that includes support for Macromedia Flash MX and Microsoft Windows Media Player. Create dynamic, data-driven applications by importing external data stored in web-standard XML files.

Import Macromedia Flash MX animations into Authorware. Zoom, scale, play, and pause Macromedia Flash MX content within Authorware, as well as capture and respond to events.

In Authorware you can add narration, music, and sound effects to e-learning applications by incorporating MP3 streaming audio.

The RTF (Rich Text Format) Objects Editor enables you to import RTF files; embed graphics, shapes, symbols, and linked text; and applies advanced text formatting. It also allows you to insert Authorware expressions, such as functions and variables, into the text. You can create rich text files that can be linked to the application at run-time.

Play back Authorware e-learning applications on systems is compatible with Mac OS X.

Authorware uses the same JavaScript engine found in Macromedia Dreamweaver MX and Macromedia Flash MX.

Conclusion

Macromedia Inc. (Adobe Systems) is the leading provider of cross-platform software tools for web publishing, multimedia and graphics.

"Adobe is facing a new challenge in the mobile-video market from Microsoft Corp, the world's largest software maker. The Redmond, Washington-based company is trying to persuade more Web-site owners to use its Silverlight in place of Flash. Microsoft introduced Silverlight in 2007." (**Bloomberg news**, by Rochelle Garner and Erik Schatzker – 30.ian.2009)

It's well supporting platforms for Microsoft, Macintosh, Linux, mobile technology. Last challenge is lunching supports for iPhone with newest Flash Lite versions.

In Romania, Macromedia (Adobe Systems) casting its softwares successfully, and give to user's chance to create high quality applications. We talk about experiences form 1988, when Macromedia lunch out gradually, better softwares for new market demands. So, from Macromedia Studio 8 designers, promoters, video experts and graphic artists, can create, develop and manage interactive on-line experience. Also include new tools for video coding and allow customers working easily and publish high quality contains for on-line workspace. With new improvements on CSS, Adobe generates style and complexity to web sites and applications. It is easy to work on Adobe space even for nonprofessional's peoples and also an excellent tool for professional creators.

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