



The Association for Internet Advertising (SPIR)

Specifications for the format of Adobe FLASH according to SPIR (www.spir.cz)

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1 Using Adobe FLASH format in advertising as part of HTML pages

1.1 Basic information regarding the format of Adobe Flash, specifics and limitations.

1.1.1 Adobe Flash (hereafter Flash) is not the native audio-visual file format for display in a browser and is not part of the standards and specifications for hypertext documents. For this reason, in order for the ad to be displayed properly, a player (plug-in) is necessary. This player (plug-in) must have permission to launch such content in the browser, and must be in the same as or higher version as the executed Flash file.

1.1.2 Adobe has a patent pending on Adobe Flash, so the required plug-in in Web browsers is provided with appropriate rights reserved by this company and may not be a seamless part of standard browser installation. It also contains a number of security restrictions on the features used for Internet advertising, which may vary in different versions.

1.1.3 The final file in Adobe Flash format (file extension .swf) is a type of compiled data file exported from source code and as such is not made or designed for further corrections and modifications.

1.1.4 Adobe Flash uses the scripting language Actionscript which is based on the standard scripting language ECMAScript (Standard ECMA-262) which is similar to Javascript. The syntax is case sensitive, uses object notation and traversing and direct placement in the structure of the project and hard line breaks, like Javascript.

1.1.5 Flash is a vector format. Unlike bitmap images (including GIF images animated by using clock-driven/timed snapshots) Flash not only uses the host computer's memory to play but also its computational power, the burden is directly proportional to the number of vector elements, the overall size of the area, set frame rate (per second) and may be influenced by complex or incorrectly written script (the multiplication of objects in each cycle without removing/ disposing, infinite loops due to incorrect conditional statements,...).

1.2 General recommendations

1.2.1 Any creation using this format should be in light of paragraph 1.1.1 supplied with alternative content native to the browser – raster images such as GIF or JPEG. According to the emitting properties of the advertising system, not supplying the raster alternative to Flash may be the reason for the lower number of actual impressions compared to the measured (and charged) number of ad impressions and can also be a reason to return the Creative back to its designer until the raster is

supplied.

1.2.2 In order to maximize the possibility of displaying Flash (and not a raster alternative) in different browsers , it is suitable to export the final compiled .swf file to the oldest version. The recommended minimum version is 6 with enabled LZH compression. Higher versions are suitable only in cases where some of the features of later versions are used (filters, extension scripts, etc.).

1.2.3 The final .SWF file must be processed correctly, completely and totally in accordance with this specification. The final .SWF file must be delivered without the expectation of subsequent modification of scripts, graphics, or dimensions. Adjustments of a compiled file on behalf of the issuing system cannot be expected, although it may be accepted in some cases (but the result is not 100% guaranteed due to the proprietary format and work with the compiled files). If for technical reasons it is necessary to add as a background source code .FLA files, after an agreement again in the oldest possible version including font files used (or a verification that the party doing the adjustments has the appropriate fonts).

1.2.4 Scripts must be written correctly using standardized variable names. Final .SWF file with scripts should be tested before delivery to test the expected functional behavior and declared variables.

2 Button in the Flash file

2.1 Visual behavior of the button (e.g., change in the mouse cursor, event capturing, etc) is provided by a 'button' object , which may contain graphical elements for all states. As a minimal solution, it is enough to create a rectangle of the appropriate dimensions (typically covering the whole banner) in the button object placed on “hit” key frame.

2.2 The Button must be positioned so that it is not covered by another object or a button (typically when nesting button to MovieClip)

2.3 When creating button behavior through MovieClip object it is necessary to capture mouse events, switch the appearance of the mouse cursor, etc.

2.4 Variables for click link and click target window (and possibly other values) are defined in the HTML object of the used plug-in and are declared at the lowest level within Flash objects - For this reason it is always advised when referring to these variables to use a typology with the absolute path ("_root.") while writing.

2.5 ACTIONSCRIPT2 code in the object 'button' for use in advertising systems

```
on (release) {  
    if (_root.clickthru==undefined && _root.clickTag) {  
        _root.clickthru = _root.clickTag;  
    }  
    if (_root.clickthru==undefined && _root.clickTAG) {  
        _root.clickthru = _root.clickTAG;  
    }  
    if ( _root.clickTarget ==undefined) {  
        _root.clickTarget = "_top";  
    }  
    getURL(_root.clickthru, _root.clickTarget);  
}
```

ACTIONSCRIPT2 implementation / development environments: Macromedia FLASH5-8 (MF5, MF MX, MX2004, F 8), Adobe CS3 / 9 and CS4/10 (under AS2) SWiSH max2
The use of AS2 version is advised!

2.6 ACTIONSCRIPT3 (Adobe CS3, 4 (9,10) + AS3) - the code is not placed on the button but on the first frame of the animation in the main scene (at the same time the button object must be present from this frame on, Path and name of the button are set on the second line of the code below; it is the only line of the code that must be changed, when a button doesn't have a name “AdbuttonJmeno” assigned)

```
var clickT:Object = root.loaderInfo.parameters;
```

```

var Adbutton = root.AdbuttonJmeno; //plna cesta k objektu tlacitka
if (clickT.clickthru==undefined && clickT.clickTag) {
clickT.clickthru = clickT.clickTag;
}
if (clickT.clickthru==undefined && clickT.clickTAG) {
clickT.clickthru = clickT.clickTAG;
}
if (clickT.clickTarget==undefined) {
clickT.clickTarget = "_top";
}
Adbutton.addEventListener( MouseEvent.CLICK, AdClick );
function AdClick( e:MouseEvent):void{
navigateToURL( new URLRequest( clickT.clickthru ), clickT.clickTarget );
}

```

- 2.7 ACTIONSCRIPT1 (Flash 4 or lower, older versions of alternative development environments). In this case, it is necessary (!) to create an animation for 2 or more frames as supplied click variables are initialized from the second frame of animation (button object code may also be present at the first frame, but it must also be present at the next frame up until the end of the animation) .

on (release) {

```

if (/:clickthru.length==0 && /:clickTag.length>1) {
/:clickthru = /:clickTag
} if (/:clickthru.length==0
&& /:clickTAG.length>1) {
/:clickthru = /:clickTAG
} if (/:clickTarget.length==0) {
/:clickTarget = "_top"
}
getURL (/:clickthru, /:clickTarget)
}

```

- 2.8 These standard codes for click measurement are valid for all types of ads using the Flash format. There are further extensions to this .SWF file standard for atypical ads which are described in detail in the relevant documents of SPIR or of emitting advertising system manuals.
- 2.9 The latest version of the scripting language ActionScript3 is not yet suitable for advertising purposes and is not required or recommended (see section 1.2.2 about the reasons for using lower versions - the AS3 doesn't directly relate with Flash version 9, it is just one possible version of the language). Most importantly, this code is not globally standardized and can be accepted only for technical reasons (features of the language which cannot be used in AS2 code). Replace the variable *AdButtonJmeno* by the named button element with its path (entered unlike AS2) in the form (root.movieclipwithbutton.button) (if such nesting to MovieClip is used, otherwise (root.button)).
- 2.10 Different programming approaches and constructions may be used while achieving the same functional outcome. In order to achieve smooth and flawless deployment and rapid and unambiguous checks for correctness when inserting ads, we strongly recommend following this syntax and not to create non-standard and difficult to read variations of a functional link. Any deviation from these recommended code constructions may hinder deployment or lead to the rejection by the administration (emitting advertising system).