
HTML5 GUIDELINE Version 2.0

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Introduction

HTML5 has gradually substituted Flash and is established to be the new and better standard for digital banner advertisement. Therefore, the present technical guideline on the production and delivery of HTML5 ads has been compiled by IAB members specializing in ad technology in cooperation with representatives of the Austrian and German publishers, media and creative agencies.

The purpose of this guideline is to resolve problems step by step that occur with the production and set up of HTML5 ads as well as to reduce the increasing production cost, coordination efforts and time consumption.

The present guideline is primarily targeted at creative and media agencies as well as those persons that have to deal with the production of HTML5 ads.

Apart from the above mentioned guideline on the production and delivery of HTML5 ads that can be applied globally, IAB Austria implemented special features that provide the best possible outcome for the production of HTML5 ads.

The present guideline is subject to constant improvement through experience that has been gained and know how that has been gathered with ongoing HTML5 campaigns.

Attention: The guideline basically covers fixed sized ads. Responsive ads are publisher specific for the time being.

This guideline was created in cooperation with the IAB Austria's Circle of Online Marketers "OVK" based on the original HTML5 guideline (latest version November 2014).

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1. Scope of the HTML5 Guideline

1.1 Why HTML5?

The main reason to introduce HTML5 into the production of ad formats is the growing number of tablet and smartphone users. On these clients the ads programmed in Flash can not be displayed. The way it has been done up to now using fallback images heavily decreased creativity and the impact of the ad itself.

Main reasons for using HTML5 are as follows:

- » Increased reach despite surf behavior, platform independent delivery of ad onto mobile devices (tablets, smartphones) and desktop computers
- » Possible interaction (e.g. swipe) and at the same time delivering the same experience as if using Flash
- » Ability to be used cross-device
- » No dependence upon Browser-Plugins (e.g. Flash)

1.2 What is being described in this Guideline?

This guideline defines the minimum requirements for display ads that are supposed to simplify the procedure for all the steps in an ad campaign like production or delivery.

The following ads will be defined in this guideline:

1. Standard display ads converted into HTML5 with fixed size
2. Sitebar that will be displayed in variable size

The ads are being integrated into the web page via IFrameiFrames. Alternative methods will have to be discussed with the respective publisher.

1.3 Further Information and Resources

The underlying documents for this guideline are as follows: „HTML5 for Digital Advertising – Guidelines for Ad Designers & Creative Technologists“ as of July, 15 2013¹ and their release updates. The present guideline contains information on ads such as file sizes and the number of files that have to be strictly complied with.

Download guidelines at:

<http://www.iab.com/html5>

¹ Download Guidelines at: <http://www.iab.com/html5> and <http://www.iab.com/wp-content/uploads/2015/06/HTML5DAv101.pdf>.

2. HTML Ads

Also referred to under section 2 in the International Guideline „HTML5 for Digital Advertising“

2.1 Ad formats

The following standards apply to all ads with a fixed size meaning fixed height and width according to the IAB Standards Guideline, except for ads that scale proportionally or unproportionally. Further information regarding these ad formats can be found here <http://www.iab-austria.at/digitale-wirtschaft/iab-standards/> or in the corresponding German version <http://www.werbeformen.org>).

2.2 Alignment

The alignment of the ads is set to left top with margin zero and padding zero.

2.3 File Size

HTML5 ads consist like websites of various elements which can not like Flash be compiled and compressed into one file. Those elements are:

- »»» HTML-Files
- »»» CSS
- »»» Libraries (Javascript, JQuery, etc.)
- »»» Pictures
- »»» Videos

In order not to delay rendering of the website and the ad, it is necessary to check the process of production so that the elements of the HTML5 ads are kept as small and as few as possible so that server requests will be minimized.

Therefore, compiling methods of the code and code optimization will need to be applied in the respective file. This will be achieved by means of compression and optimization methods as well as economical use of animation and integration of external elements like fonts and libraries that will also be added to the file size. Subdirectory structures are to be avoided.

The use of standardized libraries is recommended. The most common libraries are as follows:

- »»» CreateJS – <http://www.createjs.com>
- »»» GSAP (GreenSock Animation Platform) – <http://www.greensock.com>
- »»» Velocity.js – <http://velocityjs.org/>

Maximum file size for HTML5 ads:

»»» 80 KB in compressed (via gzip) state (zip) - without supplied standard library

The hosting of HTML5 ads can cause additional cost - depending on the ad server and publisher starting at 70 kb.

Ads that exceed 80 kb in file size must be downloaded politely and only when it is completed the animation may start.

»»» Maximum file size that can be downloaded politely is 2,5 MB.

2.4 Requests, maximum Amount of Files

In general ads should consist of as few files as possible to minimize server requests. HTML5 ads with all their necessary elements may not exceed 10 files.

Additionally .js files and stylesheets need to be in one file.

External Requests

Libraries that need to be included from external servers must be included via `https://[ZIELURL]` to ensure secure delivery.

Ads that contain elements that are included via `http://[ZIELURL]` can cause display errors through delivery via redirect (external Hosting) in some browsers.

Instead of hardcoded „https“ it is recommended to include the path without protocol (like: `//[ZIELURL]`). It must be ensured that the respective server is available through http as well as https. This ensures that ssl encryption is only used when necessary, therefore, unnecessary cpu-load is being avoided.

In-App-Integration will need to be discussed with the publisher.

2.5 Clicktag

The correct way to write the word clicktag is as follows: clicktag

The correct way to write the word multi-clicktag is as follows: clicktag, clicktag1, clicktag2

The following lines of codes have to be included in the HTML5 ads to pass on the clicktags:

This function delivers all GET parameters back that have been passed on to the file:

Attention: the integration of HTML5 ads is done via iFrames. The clicktag is optimized for this version as you can see below. Individual cases need to be agreed on with the publisher.

Clicktag for the Inclusion of HTML5 ads via iFrame

```
<html>
<head>
<meta charset="utf-8">
<title>Unbenanntes Dokument</title>
<script>
var getUriParams = function() {
    var query_string = {}
    var query = window.location.search.substring(1);
    var parmsArray = query.split('&');
    if(parmsArray.length <= 0) return query_string;
    for(var i = 0; i < parmsArray.length; i++) {
        var pair = parmsArray[i].split('=');
        var val = decodeURIComponent(pair[1]);
        if (val != '' && pair[0] != '') query_string[pair[0]] = val;
    }
    return query_string;
}();
</script>

</head>

<body bgcolor="#F7A409" >

<a href="#clicktag" id="IAB_clicktag" target="_blank">IAB clicktag</a>
<a href="#clicktag2" id="IAB_clicktag2" target="_blank">IAB clicktag2</a>

<script>
    document.getElementById('IAB_clicktag').setAttribute('href',
getUriParams.clicktag);
    document.getElementById('IAB_clicktag2').setAttribute('href',
getUriParams.clicktag2);
</script>

</body>
</html>
```

You can download html-files at

<http://www.iab-austria.at/digitale-wirtschaft/technische-spezifikationen/html-5-richtlinie/2-5-clicktag/>

Testing of the Clicktag-GET-Parameters to pass on to the ad

To avoid unnecessary feedback cycles the ads need to be tested by the creative agency if the passing on of the clicktag is working.

Test:

html5werbemittel.html?clicktag=%LANDINGPAGE%

%LANDINGPAGE% has to be replaced with the tested target page and must be passed on URL-encoded (*encodeURIComponent-Function*)

2.6 Close button

When the publisher requests a close button it has to be included by individual requirements of that publisher and in close cooperation with the creative agency or respectively the programmer or producer of the ad.

The code shown here is not copyrighted and may be used free of license fees.

2.7 Backup image, Browser compatibility

In case a special feature or a library used in the ad is not supported by the browser, a fallback JPG/GIF has to be displayed that is directly defined in the ad itself.

For example, if the ad is not supported by IE 9, the producer of the ad has to include a fallback JPG/GIF that will be displayed instead. The ads will need to be checked by the producer and the respective agency on all common browsers so that browsers that have to be excluded can be reported to the sales house.

We recommend the use of the <http://caniuse.com> to check in which browser version a specific feature is supported.

2.8 Image Compression

Images have to be optimized to decrease their file size. We recommend the use of PNG-Crusher and scalable vector graphics. Here you will have to comply with the guidelines of the respective publisher.

2.9 Video

Videos in HTML5 ads are included via `<video></video>` tag.

Ads with videos will need to have a preview image (poster). The video will start as soon as it is downloaded or respectively through user interaction on most of the mobile devices.

Please note that videos on mobile devices can not directly use a clicktag. The clicktag will need to be included in an area outside of the video.

The video will need to be optimized for quality in file size and will need to be hosted in a server environment that is able to stream.

Maximum video file size = 2,5 MB

 The video has to be delivered in H.264/mp4 as well as in VP8/WebM.

Code example:

```
<video controls height='640' width='360'>  
  <source src='yourVideo.mp4' type='video/mp4' />  
  <source src='yourVideo.webm' type='video/webm' />  
</video>
```

Regarding compatibility of videos you can refer to <http://caniuse.com/#search=video>

2.10 Animation

See also chapter in International Guidelines „HTML5 for Digital Advertising“

When using animation one has to pay attention to not unnecessarily increase the CPU load on the client. A large number of parallel animation and overlapping transparent images need to be avoided. When using CSS3 or Javascript animation you will have to keep the CPU- and GPU-load in mind.

2.11 Delivery

The delivery of the HTML5 ad will need to be done as a ZIP-file that contains all the elements of the ad except for externally loaded libraries, videos or fonts.

There has to be an index.html file that acts as a starting point included in the ZIP-file and all included scripts as well as all elements in the ZIP-file will need to be linked relatively. Should the index.html file be named differently, you will need to report that upon delivery.

Ideal case:

- All the files are in one directory (root)
- Distinct naming conventions for the individual file and not the usage of default naming conventions (e.g. style_sitebar.css instead of only style.css)
- ZIP-Files that are sent by mail are not protected from the access of the virus scanner and therefore the ad can be destroyed (most likely .js-files). Ideally the delivery is done via download link (at least additionally with the mail).

Alternatively a redirect (hosted ad) can be delivered as a link. All the requirements mentioned above - e.g. file size, number of files – apply here as well.

Depending on the publisher delivery of the ad has to be either physical or via redirect. Hosting on external server environments is by default not included in the cost of media.

2.12 Lead time

The lead time for the delivery of the perfectly working ad is at least 5 business days.

3. Further Resources of Information

General:

http://www.iab.net/wiki/index.php/HTML5_for_Digital_Advertising_Resources

<http://www.iab.net/media/file/HTML5DAv101.pdf>

Everything regarding HTML5:

<http://caniuse.com>

DPI-Calculator:

<http://kingscalculator.com/en/other-calculators/pixel-density-calculator>

Overview on how to deal with Screen Resolution (ppi vs. dpi):

<http://www.deathmetalmods.de/was-macht-ein-display-scharf/>

<http://html5-mobile.de/blog/website-bilder-fur-das-retina-display-optimieren>

<http://digitalverlegen.de/bildschirmaufloesung/smartphone-aufloesung/>

<http://www.deathmetalmods.de/retina-quad-hd-co-wieviele-pixel-braucht-ein-smartphone/>

<http://blog.kulturbanause.de/2012/04/websites-und-bilder-fur-high-resolution-displays-retina-optimieren/>

<http://richmediagallery.com/resources/html5>

<http://html5test.com>