

# **HTML5 Creative Specifications**

#### **Recommended Resources**

# HTML5 For Digital Advertising: Guidance for Ad Designers and Creative Technologists

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

# HTML5 for Digital Advertising Resources Wiki -

http://www.iab.net/wiki/index.php/HTML5\_for\_Digital\_Advertising\_Resources

#### **TTD Creative Specs**

https://thetradedesk.desk.com/customer/portal/articles/1772892-creativespecifications

## IAB Display Advertising Guidelines (DRAFT)

https://docs.google.com/spreadsheets/d/1iVZvlqcq5\_c7jViouzUUXzybMnozAPbhlV3RaRwnqVA/edit-gid=1669497554

# **General Specs**

HTML 5 creatives are a type of display creative and must follow the same guidelines as display with some additional recommendations. File types:

- HTML5: HTML, JS, CSS, JPG, JPEG, GIF, PNG, and SVG
- File size:
- Initial: 200 KB maximum
- Max Initial File Load Count: 15 Files
- Subsequent/Polite Load: 1 MB maximum
- User-Initiated Load: 2.2 MB Recommended
- HTML5 Creative Specifications 201508

#### **Best Practices**

# Commonly Used JavaScript and CSS Libraries

The IAB suggests that commonly used JavaScript and CSS libraries (e.g. jQuery) do not need to be included with the creative. The IAB has a list of commonly used libraries on their HTML5 Wiki page (link above).

# **Image Sprite**

To help increase performance from HTML ads, the IAB suggests that you include image sprites instead of many images to decrease the number of file requests made by your creative. The IAB has a list of commonly used sprite creation tools on their HTML5 Wiki page.

# Video Tags

Video tags may be used in place of animations as long as the video file follows all IAB and Trade Desk guidelines for display creatives. Videos should always be muted unless a user intentionally triggers sound, and should not automatically be played on mobile devices.

# **Audio Tags**

Audio tags may be used on a creative. Audio tags should only play if an intentional user action starts the audio.

# **Graceful Degradation**

Different browsers have different subsets of HTML5 features enabled. Your creative may fail on a browser if it attempts to use a feature that is not enabled on the browser.

#### Why?

Not all browsers support all features of HTML5. It is your responsibility to ensure that your creative "gracefully degrades" in case the browser it is viewed on doesn't support the features it uses.

#### How?

The IAB suggests that you use "feature detection" to determine if a browser has the features your creative needs to be rendered. Feature detection is usually performed on the customer's browser when the creative is shown. That is the most reliable way to determine if a feature is present on a given user's browser.

The IAB suggests that you use a feature detection framework, and specifically mentions "modernizr" as an option. Modernizr documentation and files can be found at www.modernizr.com. Use of modernizr is outside the scope of this document. There are several options for displaying an ad when the browser it is running on a browser that does not support a feature. Some are listed below.

# Shim/Polyfill

There are many polyfills and shims available for older browsers to add HTML5-esque features that may not have originally been included. These are usually provided via flash, CSS and JavaScript libraries. Modernizr has a list of polyfills on their website that they suggest using.

One important HTML5 feature that may be missing is the Canvas feature. This is especially true in earlier versions of Internet Explorer (< 9). The IAB suggests using the Excanvas JavaScript library (http://code.google.com/p/explorercanvas/) to polyfill those versions of Internet Explorer. According to the IAB, this file can be added by including the following line of code in your HTML document before any JavaScript or code using Canvas.

<!-----[if lt IE 9]> <script src="excanvas.js"></script> <![endif]----->

# **Ignoring the Feature**

If a browser does not have a feature you need to display an ad, we suggest that you remove the need for that feature. One example provided by the IAB is to have a user input their Postal Code if their browser does not support geolocation.

# **Backup Image**

If all else fails, the IAB suggests displaying backup image instead of the HTML5 creative.

#### **Creative Design**

# Single Page Design

In alignment with IAB guidelines, we will be displaying HTML5 creatives as a full HTML page displayed in in iframe. These creatives can be submitted as either a single HTML file or as zip file containing the primary HTML file and all necessary asset files. Commonly used JavaScript and CSS libraries may be served from an external server/CDN (e.g. Amazon S<sub>3</sub>). All other assets and information must be provided as part of the creative submission.

#### **Constraints**

Under IAB guidelines, dynamic creatives are not to be used. Because they will be served inside an iframe, expandable creatives are not allowed because they are confined to the size of the creative.

# **Graceful Degradation**

You are responsible for ensuring that your creative gracefully degrades for browsers or devices that do not support HTML5 features used in your creative.

# **Static Backup Image**

The Trade Desk Hosted HTML5 system will require that you upload a static backup image. This image will be used to display the ad if a user has JavaScript disabled.

#### **Tools**

The IAB has several suggestions for HTML5 conversion and creation in their HTML5 wiki page.

## Swiffy

#### https://developers.google.com/swiffy/?hl=en

Swiffy is a tool developed by Google which converts a single SWF file to a single HTML5 file. All assets are encoded in the file. Google has also developed a Swiffy plugin for Adobe Flash Professional. Swiffy's online tool only allows a maximum SWF file size of 1 megabyte.

#### Adobe Flash Professional Toolkit for Create JS

https://helpx.adobe.com/flash/using/creating-publishing-html5canvasdocument.html

This plugin was developed by Adobe to allow easy transition from Adobe Flash development to HTML5. Using this plugin, you can directly save your Flash files as an HTML5 creative.

# Click Tag Parameter

The Click Tag parameter is provided to the primary HTML file as a URL parameter. The name of the URL parameter is customizable at the time of creative upload or during editing. This system is similar to how we provide Click Tracking information for Hosted Flash ads. We suggest using JavaScript to read the parameter from the document location URL and using it to set up the landing page for your clicks.

# **Backup/Default Clickthrough Parameter**

To correctly call the clickthrough page through the backup ad image, you must supply a clickthrough parameter for that purpose. If you wish to also use that clickthrough URL in your HTML5 creative, you can configure the creative to use the Backup Clickthrough URL as the Default Clickthrough URL.

# **Retrieving the Click Tag Parameter**

The Click Tag URL can be retrieved from using the following code:

```
function getParameterByName(name) {
   name = name.replace(/[\[]/, "\\[").replace(/[\]]/, "\\]");
   var regex = new RegExp("[\\?&]" + name + "=([^&#]*)"),
        results = regex.exec(location.search);
   return results === null ? "" :
        decodeURIComponent(results[1].replace(/\+/g, " "));
}

var clickTag = getParameterByName(<Your Parameter Name>);
```

By appending a URL escaped landing page to the click tag URL, our system will track the click and redirect the request to the given landing page. If no landing page is provided, we will track the click and redirect the result to the default landing page.

```
Var clickTag = getParameterByName(<Your Parameter Name>) +
encodeURIComponent(<Your Landing Page>);
```

Different landing pages can be used for different actions. Please see the IAB's Guidance for Ad Designers and Creative Technologists for more suggestions on implementing multiple landing pages.

# **Using Multiple Clickthrough URLs**

By appending a URL escaped landing page to the click tag URL, our system will track the click and redirect the request to the given landing page.

```
Var clickTag = getParameterByName(<Your Parameter Name>) +
encodeURIComponent(<Your Landing Page>);
```

Different landing pages can be used for different actions. Please see the IAB's Guidance for Ad Designers and Creative Technologists for more suggestions on implementing multiple landing pages.

# **Using the Click Tracking Parameter**

When the advertisement is clicked on, the creative must direct the user to the correct click tag page in a new window. Please see the IAB's Guidance for Ad Designers and Creative Technologists for more suggestions on implementing clicks in HTML5 ads.

#### Size Definition

The IAB has suggested that the dimensions of your creative be added to your primary HTML document in a meta tag inside of the head section of your document. The IAB has defined the dimension meta tag as:

```
<meta name="ad.size" content="width=300,height=250"/>.
```

Replace the width and height values with your creative's dimensions. If an ad size meta tag is not provided in the primary HTML document, you will be prompted to enter dimensions when you submit the creative.