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## smartAD Expanding header

### 1. Overview

smartAD is an advertisement network with its own information system for creating and managing online ad spaces. Therefore the technical requirements of banners are dictated by smartAD, not individual web sites. The smartAD Expanding header is a regular banner that is placed in the top region of website automatically making extra space for the banner on website. At first user is presented with static banner which would be changed for bigger interactive banner if user moves mouse over static banner. Interactive banner can be in-place pushdown (moves websites content even more down in browser window) or overlay (banner part which is bigger than the static banner is displayed over website content).

Due to the limitations of common web browsers, the Expanding header consists of two separate files:

1. The static banner – usual header:
  - flash or image (jpg, gif)
  - size in pixels 1000x100 or other agreed size
  - background is not transparent
2. The splash banner, which is a bigger banner attracting the viewer's attention:
  - flash or image (jpg, gif)
  - size in pixels 1000x200 or other agreed size
  - background is not transparent

The distinction between static and splash banner is necessary because many browsers do not support clicking "through" the transparent areas in flash clips. These clips will be placed and switched by JavaScript provided by smartAD.

smartAD information system does not put any restrictions upon the capacity of the banner but it should be optimized for the use on web. Banner with capacity to 50 kB respects webpage visitor, up to 100 kB is tolerable. The recommended summed capacity of 2 banners is up to 125 kB. In case banner capacity exceeds recommended limit it should be clarified and agreed on with smartAD team.

### 2. Technical requirements for Flash version

#### 2.1 Flash version

Flash clip has to be exported as SWF version 8 in order to use ExternalInterface API through which banner will communicate with smartAD system. SmartAD script checks that webpage visitor would have at least flash player of version 8 installed.

#### 2.2 ActionScript

Due the limitations of smartAD solution banner code should be written using ActionScript 2.0. Examples provided in this guideline are also considered to be used with ActionScript 2.0.

#### 2.3 Allowing JavaScript control

Because smartAD's JavaScript is executing in the context of the participating web site, it does not have control over Flash clips due to cross-site scripting restrictions. To bypass these restrictions, flash clip must explicitly allow control from other domains immediately after loading:

ActionScript code example:

```
System.security.allowDomain("*");
```

#### 2.4 Responding to clicks

The flash banner must recognize two parameters passed in 'flashvars':

- "clickTAG" specifies the destination URL of the click. URL can be unsecure (http) or secure (https).
- "target" specifies the target browser window, similar to the HTML target attribute.
- "id" specifies which banner is used.

The banner must respond to the users click by opening up the given URL in "clickTAG" in the "target" browser window. Also banner has to launch JavaScript function "smartad\_click" right after opening landing page. "smartad\_click" function will let JavaScript know that clicking has occurred and will remove banner from website or make some additional actions. Parameter "id" is passed to flash through flashvars.

In ActionScript this can be implemented simply using:

```
on (release){
    getURL(_root.clickTAG, _root.target);
    flash.external.ExternalInterface.call("smartad_click", _root.id);
}
```

### 3. Additional possibilities

#### 3.1 Video in banner

If agreed with smartAD team flash banner can have video file in it, but video clip should not be up or downscaled in banner, as it is not pleasant to view for website visitor if video is up or downscaled.

If video is coming from smartAD server it can be accessed through flash variables:

- "videopath" – url of the video file. This variable can be accessed through \_root.videopath in flash clip;

smartAD information system does not put any restrictions upon the capacity of the video file, but it should be optimized for the use on web. Video file with capacity to 500 kB respects webpage visitor, up to 1 MB is tolerable. In case video file capacity exceeds 1 MB it should be clarified and agreed on with smartAD team. In case video file will not be hosted on smartAD server, then hosting server has to have at least 10 Mbps bandwidth.

#### 3.2 Passing variables

smartAD system has ability to send variables from banner to landing page. Variables which are passed should be added to clickTAG variable. Variables are passed by GET protocol as POST is not supported.

ActionScript example where var1 is flash variable which would be passed to landing page as custom\_var1 variable:

```
var path = _root.clickTAG + "?custom_var1=" + _root.var1;
```

Responding to clicks code with custom variables

```
on (release){
    var path = _root.clickTAG + "?custom_var1=" + _root.var1;
    getURL(path, _root.target);
    flash.external.ExternalInterface.call("smartad_click", _root.id);
}
```

#### 3.3 More than one landing page

In case there is more than one landing page campaign manger should be notified and landing page should be added dynamically to clickTAG by banner creator. This is very useful if landing page depends on the action done with banner.

ActionScript example – visitor will be redirected to address website.com

```
var path = _root.clickTAG + "http://website.com";
```

#### Responding to clicks code with custom landing page

```
on (release){  
    var path = _root.clickTAG + "http://website.com";  
    getURL(path, _root.target);  
    flash.external.ExternalInterface.call("smartad_click", _root.id);  
}
```

#### **4. Sending banner**

Banner should be sent to smartAD team for testing purposes at least 2 days before campaign start.

In order to put the banner to the smartAD information system, the following information must accompany flash clips:

1. Dimensions of the banner files (height and width in pixels)