Flash Ad Specs, Requirements and Setup

General Specs:
- Flash versions accepted: Flash 1Gor lower
- Flash maximum frame rate: 24 fps
- Animation maximum: Animation does not have a loop maximum, but total animation time cannot exceed 15 seconds.
- Default image is required for users without the Flash Player plug-in
- Flash creative needs to be received 5 working days before the start of the campaign for testing.
- Audio must be off by default and may only turn on if the user clicks a control labeled for this purpose.
- Ads cannot pose as system or site warnings, or be construed as Windows or Mac dialog boxes.
- Ads are not allowed to contain rapidly moving, flashing or shaking animation of any graphic, text or background that is considered to be disruptive to the user.
- Ads may not demonstrate an effect that mirrors the user's mouse cursor without the active participation of the user.
- All ads are subject to review.

Assets that Must Be Submitted:
1. Compiled SWF file
2. Source FLA file
3. Default or alternate image (JPG or GIF)
4. 3rd party tracking/click tracking, or click-thru URL

Additional Requirements:

For all ads with audio, audio must be user-initiated and a "Mute" button or equivalent is mandatory.

Click Tags:
DDM Flash ads need to support the clickTAG variable. The clickTAG is the tracking code assigned to an individual ad.

Flash Setup:
If the whole file is meant to be clickable, a transparent button should be placed on the top layer of the SWF.

In order to track clicks the SWF file must not be set up with a hardcoded click URL.

The author of the Flash source file (.fla) has to assign a clickTAG variable using a getURL button action. The author also needs to ensure that "_blank" for target is selected so it opens in a new tab/window.

evActionScript 3.0 (Flash versions 9!%&):
1. Create a button. If the button is not already on the stage, drag it to the stage.
2. Give the button an instance name (myButton) on the stage.
3. Right click on the first key frame for the layer that contains the button (in the timeline pane).
4. From the context menu, select "Actions." (This will open the Actions Frame for that layer.)
5. Place the clickTAG ActionScript (listed below) in the Actions Frame.

```
// ActionScript 3.0
/* Requires
* - Button symbol on Stage with instance name "myButton"
*/
myButton.addEventListener (MouseEvent.CLICK, buttonSymbol_click);
function buttonSymbol_click (evt:MouseEvent):void {
var clickTAG:String = loaderInfo.parameters.clickTAG;
// Check for malicious code injections, only use URLs if they begin with http: or https:
if ((clickTAG.substr(0, 5) == "http:") || (clickTAG.substr(0, 6) == "https:"))
{
var req:URLRequest = new URLRequest(clickTAG);
navigateToURL(req, "_blank");
}
}
```
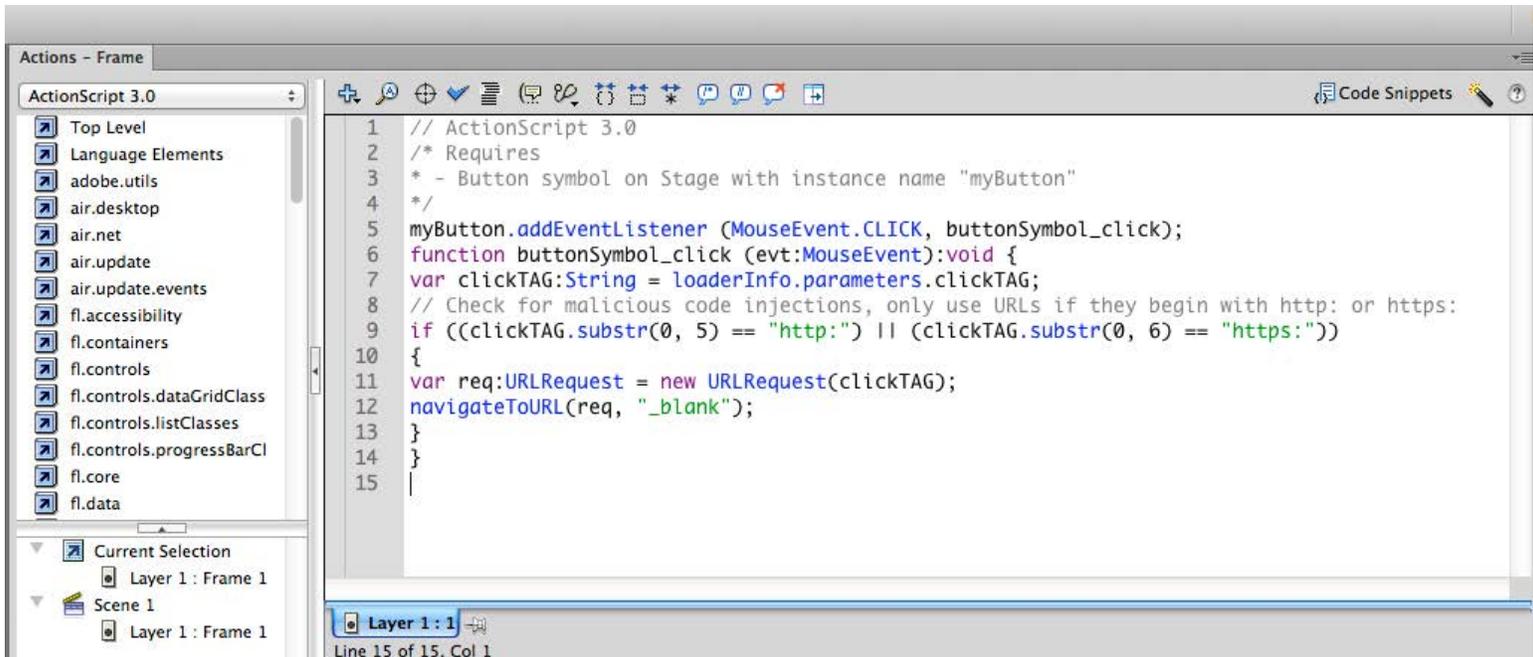
ActionScript 2.0 (Flash versions 8-9):
1. A clickable flash object such as a button or "hitarea" in the flash movie clip will require some ActionScript attached to it.
2. Associate the on (release) event with that object.
3. The object will now listen for that particular event. When the event occurs, it will trigger ActionScript instructions.
4. Place the clickTAG ActionScript (listed below) as the instructions for the "on (release)" event. The button action code should look like one of the examples below.
5. Make sure to check off the "Expression" checkbox for the URL field that is the variable for the getURL ActionScript function.

```
on (release) {
    getURL(clickTAG,"_blank")
}

on (release) {
    getURL(_level0.clickTAG,"_blank")
}

on (release) {
   if (clickTAG.substr(0,5) == "http:") {
     getURL(clickTAG,"_blank")
    }
}
```
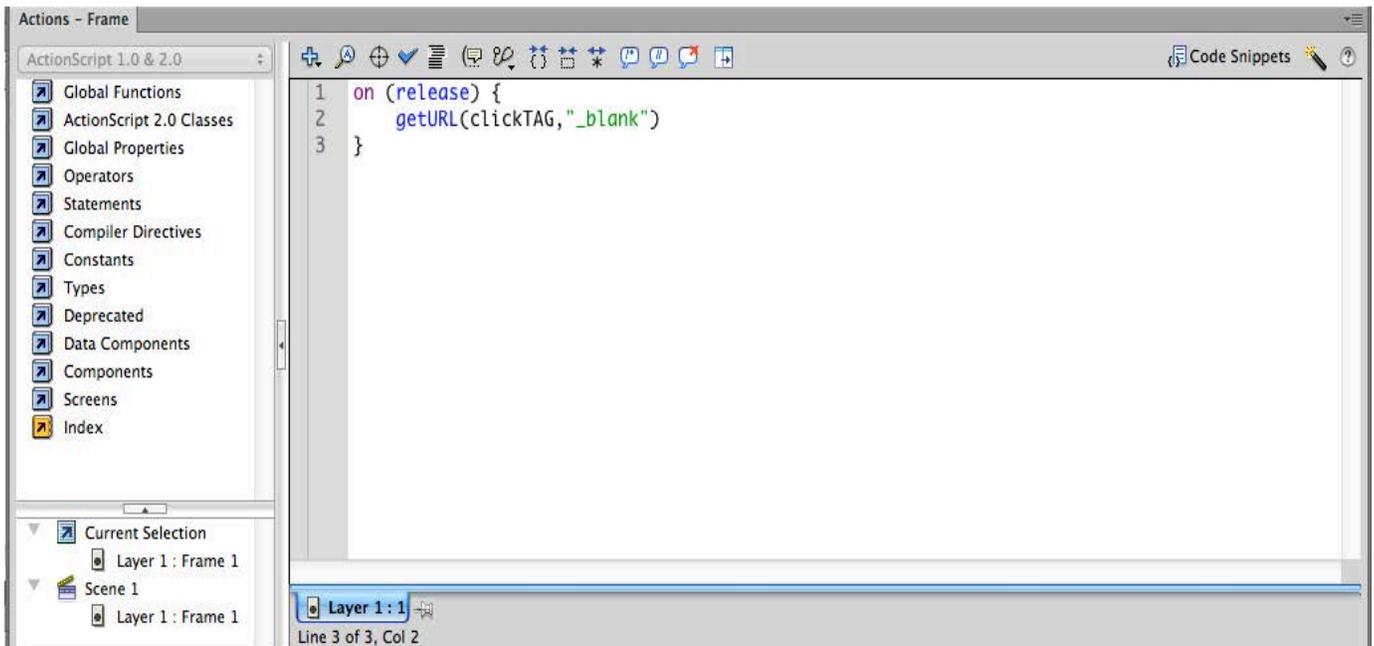
CPU Usage:

When a Flash file contains a significant amount of mathematical computations for animations, loops or timers, the percentage of a computer's CPU (central processing unit) is greatly increased. This causes the Flash file to compete with other resources and leads to increased load times for ads and Web pages.

To help ads load quickly, which can lead to faster webpage loads, you may consider using one or more of the following practices:

- Limit the amount of math-based animations from ActionScript.

- Limit or eliminate looping in ActionScript. (Note looping functions are normally associated with timers.)

- Limit masking and animated masking techniques.

A CPU rate of 20-30% is considered normal, and in some cases this may jump to 40-60% for a few seconds of an ad. However, usage beyond this may need to be revised.

For additional information and ideas on how to optimize Flash files and decrease CPU usage, review Adobe's Flash documentation on optimization.

DDM reserves the right to not accept creative that requires a higher than normal percentage of CPU resources that would cause other elements on a webpage to run slower.