Developing and Testing Your Game in the Live SGN Environment

Intro

This document describes a process for running local flash files on the live SGN site, without uploading. It allows for faster integration of SGN APIs into your game and ensures compatibility and reliability, before your game goes live. It will also let you know if your game is working properly with the flash API and SGN backend services. This document does not cover API integration.

Overview

The process involves bypassing your web browser's request of a live SGN game swf, and "hijacking" it with your local one. This allows you to see how your swf reacts to the SGN environment - as if it were really hosted there. Every time you publish a new swf and clear your browser cache, you can see your changes on the live site. Using ActionScript trace messages with the Flash tracer,   you can quickly resolve communication issues in your code.

Recommended Tools

The tool for "hijacking" is Charles Proxy, which can be downloaded for PC, Mac, and Linux at. You will also need a "debug" version of the Flash Plugin, a Flash tracer, and we recommend the Firefox browser. Details below…

Install Software

Download and install the Following in this order

1. Firefox Web Browser
    a. Google "firefox" or try http://www.mozilla.org/en-US/firefox/new/
    b. Install and follow installer instructions
2. Flash Debug Plugin (allows Flash Tracing)
    a. Google "flash debug player" or try
        http://www.adobe.com/support/flashplayer/downloads.html
    b. Get the "Plugin Content Debugger" for your PC, Mac, or Linux
3. Flash Tracer
    a. In the Firefox menus, look for "Add-ons"
    b. In the search box of the Add-ons manager, search for "flashlight"
    c. Enable or install the add on
4. Hijacking Tool
    a. http://www.charlesproxy.com/
    b. Get a Windows, Mac or Linux version
        i. We recommend using the 32bit version for Windows, along with a 32bit version of Java.

Configuration

Make sure your Flash tracing is working.

1. In Firefox, try a game on Mindjolt (http://apps.facebook.com/mindjolt/games)
2. Click on the Flashlight icon [icon] to show the "Flashlight Logger" window

3. The "Flashlight Logger" should have messages from Flash trace() commands.
4. You can add traces in your code to debug or test your Game's functionality. When hijacked, the traces will show up here

Set up Charles Proxy for Firefox

1. In Charles proxy, choose *Mozilla Firefox Proxy* from the *Proxy* menu so it has a check mark

2. Choose *Proxy Settings* from the *Proxy* menu and select the *Mozilla Firefox* tab
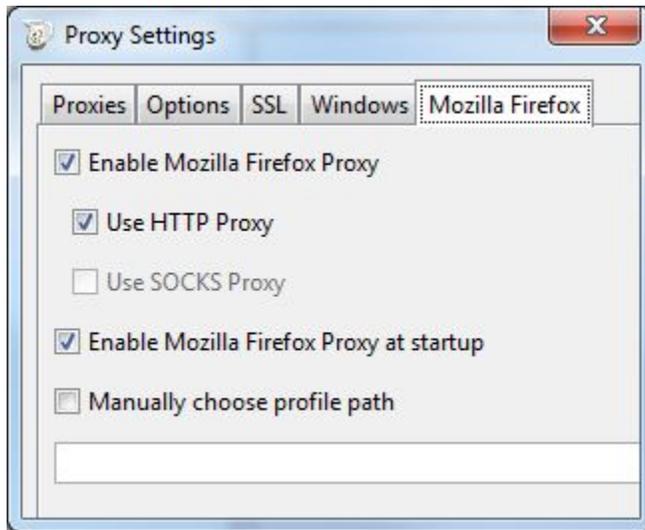
3. Make sure *Enable Mozilla Firefox Proxy* is selected. Optionally you can set Firefox to automatically use Charles every time by enabling selecting *Enable Mozilla Firefox Proxy at startup*

4. Click *OK*

Hijacking

You now have everything set up to hijack from the SGN site. This example will show you how to use Charles Proxy to bypass a web browser's request for a live swf and replace it with your local one.

Example

1. Close Charles Proxy and Firefox if you have either open
2. Start Charles Proxy

3. Click on the Record button if it is not pressed
4. Start Firefox
5. Go this game on the Mindjolt Facebook app: http://apps.facebook.com/mindjolt/games/snood
6. In Charles Proxy, switch to the *Sequence* tab
7. You should see a list of files requested by Firefox
   (if you don't, something may be wrong with your Charles Proxy setup. Did you use 32 bit Java and download the 32 bit Charles? Is your Java working?)
8. In the *Filter* text box, type in .swf to just see .swf file requests

9. Select the game swf as shown in this image
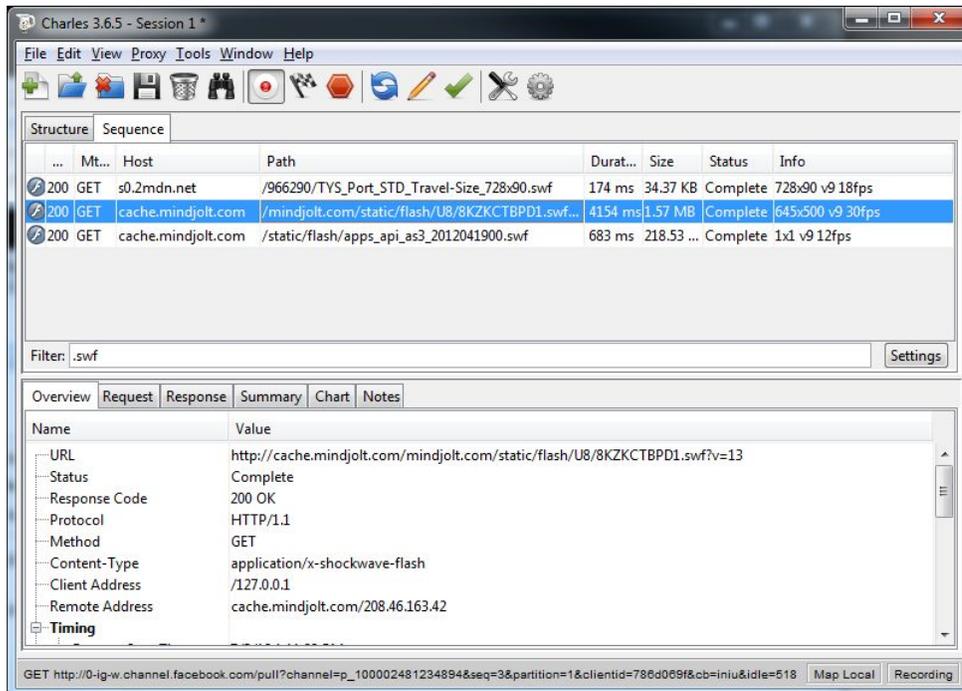
10. Right click (PC) on the selection and choose *Map Local* from the context menu
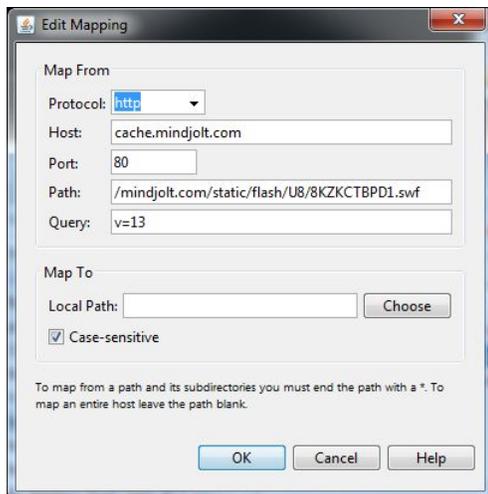

11. Clear the text in the *Query* text field
12. Click Choose to pick a .swf file that will be used to bypass the original one hosted on mindjolt.com. If you have one with trace messages, the traces should show up in the flash tracing window later.
13. Click *OK*
14. In Firefox, clear the cache. It is important that you do this the first time and every time you republish/change your swf

15. Reload the page in Firefox. You should see your local swf in place of the game.
16. In Charles Proxy, you can verify that hosted game swf is being hijacked with your local swf. To do this, scroll down the list of .swf files and re-select the last occurrence of the game swf . In the *Overview* tab, you should see a message that includes "Mapped to local file:" as in the image below:
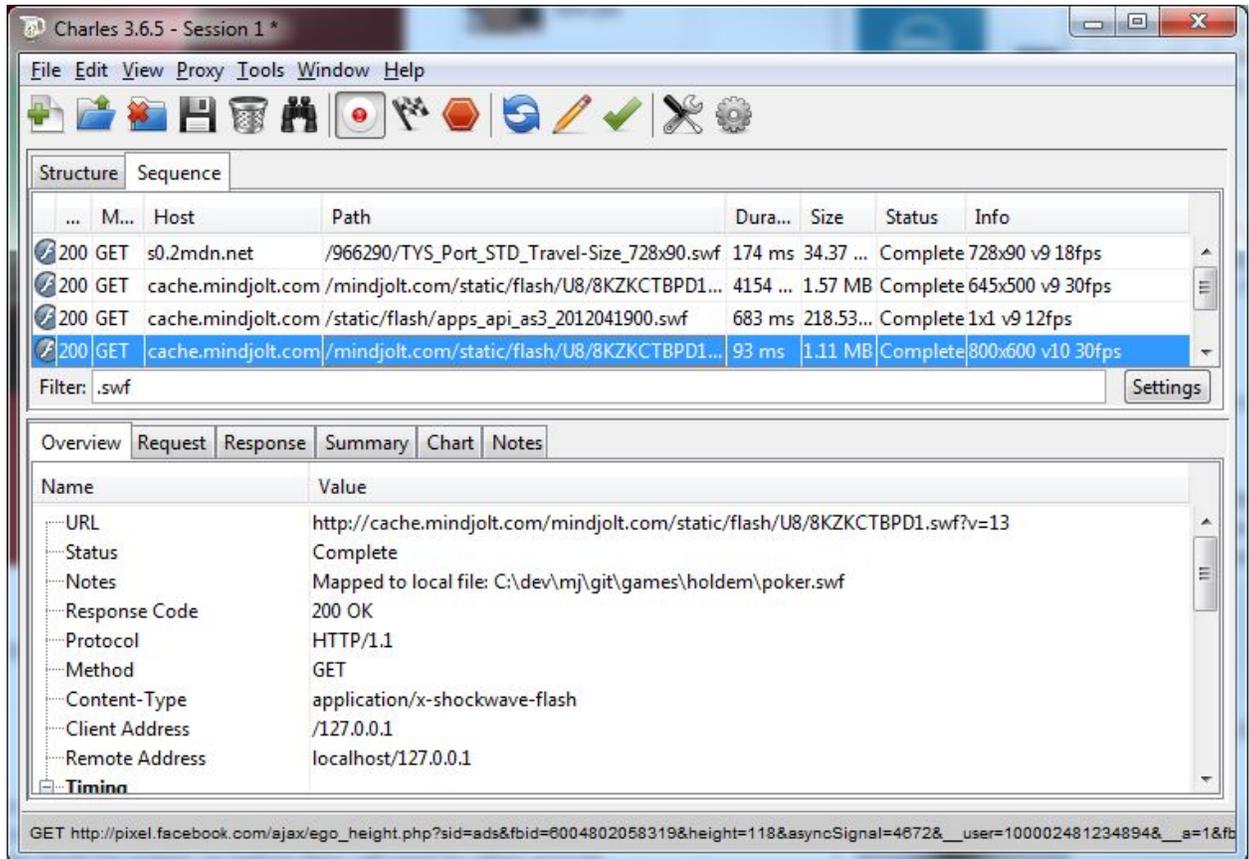
17. You should also see flash traces from your local swf in the *Flashlight Logger* window (if your swf has traces).

Development

- If your game is already hosted on SGN and you are updating it, hijack the hosted SWF of your game with your local one to get the best results. This may also be necessary if there are server side settings for your games such as PowerUps or Virtual Goods
- If you are hijacking a new game with a different one like in the example, keep in mind that it is using an html container that is for a swf with a width and height that may differ from your game, so don't be surprised if your game is the wrong size
- If you are constantly updating a swf and want to make sure the hijacked version in the browser is the same, create a trace message with a version number to ensure it is current
  ```
  trace("v 015");
  ```