

SUMMARY

|   |                   |
|---|-------------------|
| TEST STATISTICS                           |                   |
| HTTPS data not analyzed: 18.78% (3.16 KB) |                   |
| Duration:                                 | 8.77 minutes      |
| Total Data Transferred:                   | 15,232 bytes      |
| Energy Consumed:                          | 234.5 J (Energy)  |
| Trace Score                               |                   |
| Causes:                                   | 302 (out of 500)  |
| Effects:                                  | 268 (out of 500)  |
| Total:                                    | 568 (out of 1000) |

TESTS CONDUCTED

|   |  |   |   |
|---|--|---|---|
|  | File Download: Test File Compression                                     |  | Connections: Inefficient Connections - Connection Closing Problems      |
|  | File Download: Duplicate Content   |  | Connections: Inefficient Connections - Offloading to WiFi when Possible |
|  | File Download: Cache Control   |  | Connections: 400, 500 HTTP Status Response Codes                        |
|  | File Download: Content Expiration  |  | Connections: 301, 302 HTTP Status Response Codes                        |
|  | File Download: Content Pre-fetching                                      |  | Connections: 3rd Party Scripts  |
|  | File Download: Combine JS and CSS Requests                               |  | HTML: Asynchronous Load of JavaScript in HTML                           |
|  | File Download: Resize Images for Mobile                                  |  | HTML: HTTP 1.0 Usage  |
|  | File Download: Minify CSS, JS, JSON and HTML                             |  | HTML: File Order  |
|  | File Download: Use CSS Sprites for Images                                |  | HTML: Empty Source and Link Attributes                                  |
|  | Connections: Connection Opening  |  | HTML: FLASH   |
|  | Connections: Unnecessary Connections - Multiple Simultaneous Connections |  | HTML: "display:none" in CSS   |
|  | Connections: Inefficient Connections - Periodic Transfers                |  | Other: Accessing Peripheral Applications                                |
|  | Connections: Inefficient Connections - Screen Rotation                   |   |   |

Date:

May 2, 2015 5:53:25 PM

Trace:

2045\_10\_Background

Application(s) Name : Version :

Unknown App

Data Collector Version:

1.0.0.1

Device Make/Model:

samsung / SAMSUNG-SGH-I727

OS/Platform Version:

4.3.1

Network Type(s):

WiFi

Profile:

AT&T-3G

AT&T Application Resource Optimizer

Reducing the usage of network for file downloads can reduce your applications battery consumption.

!

Test: **Test File Compression**

About:

Sending compressed files over the network will speed delivery, and unzipping files on a device is a very low overhead operation. Ensure that all your test files are compressed while being sent over the network. [Learn more...](#)

Results:

AT&T ARO detected 5 KB of test files were sent without compression. Adding compression will speed the delivery of your content to your customers. (Note: Only files larger than 850 bytes are flagged.)

| Time  | Host Name       | File Size | File Name   |
|-------|-----------------|-----------|---|
| 5.760 | web.megabiz.com | 5703      | /m/m2V=68d-551ac18555114b58b8f7eb1aada6f9bcv=3.2.3&dt=samsung%3CSAMSUNG-SGH-I727%3CSGH-I727&uid=fv%3Aa794d18-2682-4015-a64-08c7a25037db--04008, |

✓

Test: **Duplicate Content**

About:

This test measures duplicate content. Excess duplicate content means that content was downloaded multiple times, which leads to slower applications and wasted bandwidth. [Learn more...](#)

Results:

Your trace passes with an acceptable level of duplicate content. Your trace had less than 3 duplicate items downloaded.

!

Test: **Cache Control**

About:

This test measures the presence of cache headers. For all content that should be stored in the cache the best practice is to make sure that your server is adding the appropriate cache headers. [Learn more...](#)

Results:

AT&T ARO detected the absence of **cache-control** 100% of times. Cache headers prevent your files from being downloaded in a duplicate manner.

✓

Test: **Content Expiration**

About:

This test compares the number of "304 not modified" requests versus files that should be cached but were downloaded multiple times. [Learn more...](#)

Results:

It appears that content expiration is being handled properly. No caching issues were detected in this trace and it passes this test.

✓

Test: **Content Pre-fetching**

About:

This test measures multiple user input bursts all in a row. Prefetching may help speed up an app in these situations. Downloading files "as needed" can slow the user experience. If a user scrolls through the main screen of your application and has to wait for images to load, the application appears slow. [Learn more...](#)

Results:

The files in this trace seem to be downloaded in reasonable bursts, and it passes this test. Remember that this may need to change as user behavior changes.

✓

Test: **Combine JS and CSS Requests**

About:

Multiple requests for CSS or JS can slow loading. Whenever possible, combine into as few files as possible. [Learn more...](#)

Results:

ARO found no issues with multiple CSS requests nor with multiple javascript requests.

✓

Test: **Resize Images for Mobile**

About:

Images that are not correctly sized for mobile can cause extreme delays in rendering. Before delivering content to a mobile, resize it to fit the available area. [Learn more...](#)

Results:

Your trace passes. There are no image files that are 110% larger than the area specified for them.

✓

Test: **Minify CSS, JS, JSON and HTML**

About:

Many test files contain excess whitespace to allow for better human coding. Run these files through a minifier to remove the whitespace in order to reduce file size. [Learn more...](#)

Results:

Your trace passes.

✓

Test: **Use CSS Sprites for Images**

About:

Small images can be combined into Sprites, and then rendered with CSS. This will reduce the number of HTTP requests and speed the loading of your app. [Learn more...](#)

Results:

Your trace passes.



Date:

May 2, 2015 5:53:25 PM

Trace:

2046\_16\_Background

Application(s) Name : Version:

Unknown App

Data Collector Version:

1.0.0.1

Device Make/Model:

samsung / SAMSUNG-SGH-I727

OS/Platform Version:

4.3.1

Network Type(s):

WiFi

Profile:

AT&T 3G

AT&T Application Resource Optimizer

Reducing the usage of device peripherals and optimizing your HTTP connectivity can further reduce your application's battery consumption.

✔

Test:

Asynchronous Load of JavaScript in HTML

About:

JavaScript loading blocks parallel downloads, and files downloaded in the HEAD of your HTML, will block the rendering of your HTML. If you must load JavaScript in the HEAD load asynchronously. [Learn more...](#)

Results:

AT&T ARO discovered 0 HTML files loaded asynchronously and it passes the test.

✔

Test:

HTTP 1.0 Usage

About:

This test is just review to make sure you are using HTTP 1.1, which allows multiple items to be downloaded per connection, which is more efficient for your app. [Learn more...](#)

Results:

AT&T ARO detected 0 HTTP 1.0 headers, and it passes this test.

✔

Test:

File Order

About:

In the HEAD of your HTML, CSS files should always be loaded before JS files to ensure faster loading of your website. [Learn more...](#)

Results:

ARO discovered 0 HTML files where JS is loaded immediately before CSS.

✔

Test:

Empty Source and Link Attributes

About:

Many browsers will attempt to connect even if there is no url. This can cause delays in loading your site. [Learn more...](#)

Results:

Your trace passes.

✔

Test:

FLASH

About:

Android and iOS platforms do not support Flash, therefore your content is unreadable to your users. Consider using an HTML5 video player instead. [Learn more...](#)

Results:

Your trace passes.

✔

Test:

"display:none" in CSS

About:

The CSS rule "display:none" is used to hide HTML objects from being shown on a page. However, this does not prevent the objects from being downloaded to the mobile device. These extra objects (that are never displayed to the user), will slow down your app and waste data. [Learn more...](#)

Results:

ARO discovered 0 files with no CSS rule "display:none" and it passes the test.

