

Date:

May 2, 2015 4:33:54 PM

Trace:

2048_LTE_GsmFray

Application(s) Name : Version:

Unknown App

Data Collector Version:

1.0.0.1

Device Make/Model:

HTC / HTC One

OS/Platform Version:

5.0.2

Network Type(s):

LTE

Profile:

AT&T LTE

AT&T Application Resource Optimizer

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

!

Text: **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 16 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
8.193	jah.mqpub.com	17907	/m/aeTv=68d~55tae5555114da5888f76d1aafaf6#8w~3.2.28d~HTC%20T%20One%20Crigitatus_www&uId=fy%3Aae09ate-d5ad-6a02-bc3-8935d891c5du=0400a~...

✓

Text: **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.

!

Text: **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 headers** 60% of times. Cache headers prevent your files from being downloaded in a duplicate manner.

✓

Text: **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.

✓

Text: **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.

✓

Text: **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.

✓

Text: **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.

✗

Text: **Misify 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: AT&T ARO detected 1 files that could be shrunk through minification, resulting in 3 KB savings.

Time	Host Name	Saving (%)	Saving (B)	File Name
8.193	jah.mqpub.com	21	3664	/m/aeTv=68d~55tae5555114da5888f76d1aafaf6#8w~3.2.28d~HTC%20T%20One%20Crigitatus_www&uId=fy%3Aae09ate-d5ad-6a02-bc3-8935d891c5du=0400a~...

✓

Text: **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.

CONNECTIONS

FAIL

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May 2, 2015 4:33:54 PM

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2048_LTE_GsmfPlay

Application(s) Name : Version:

Unknown App

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1.0.0.1

Device Model/Manufacturer:

HTC / HTC One

OS/Platform Version:

5.0.2

Network Type(s):

LTE

Profile:

AT&T LTE

AT&T Application Resource Optimizer

Optimizing how you use the device's radio will speed the delivery of content and reduce your application's battery consumption.

Test:

Connection Opening

About:

This test helps ensure connections are opened properly. Some connection startups consists of an input burst, followed by a series of bursts spread out over time which can dramatically slow down the application's response time and waste energy on the device. This is a self test. [Learn more...](#)

Self Evaluation:

If you see many application-initiated bursts, consider a transaction manager to group these more closely together.

Test:

Unnecessary Connections - Multiple Simultaneous Connections

About:

This test measures bursts that could be more tightly grouped. Syncing all of your data connections can help reduce the amount of time your application is on the network, reducing the battery drain. That will also make your content appear to load faster to the user. [Learn more...](#)

Results:

5 sets of [bursts](#), that could be more tightly grouped.

Test:

Insufficient Connections - Periodic Transfers

About:

This test helps ensure that your periodic connections are truly needed for the customer, which if not handled properly could cause excessive power drain. [Learn more...](#)

Results:

No periodic transfers were detected in this trace. It may be worthwhile to look for connections that happened regularly, but are not at exact intervals. This can cause excessive battery drain.

Test:

Insufficient Connections - Screen Rotation

About:

This test tracks screen rotation, to see if the app is pinging the server on orientation changes, or actually completely redundant content. If you see this in your trace - consider a new layout for existing content (rather than re-download) or sending the orientation change later as a part of a larger data transmission. [Learn more...](#)

Results:

Either no screen rotations were noted or the screen rotations did not trigger network activity.

Test:

Insufficient Connections - Connection Closing Problems

About:

This test checks that connections are closed promptly. If not effectively closed with the last data, the server timeout can turn the radio on just to close your connections, which wastes power and bandwidth. [Learn more...](#)

Results:

AT&T ARO detected that 161 Joules (48.3% of the total energy) was used to control these [connections](#). By closing connections promptly, you will reduce battery drain.

Test:

Insufficient Connections - Offloading to WiFi when Possible

About:

This test is a check to see if you are transmitting large chunks of data. When this occurs you may consider offloading to WiFi when appropriate. [Learn more...](#)

Results:

There were not many large bursts of data seen in this trace, and it passes this test.

Test:

400, 500 HTTP Status Response Codes

About:

HTTP status response codes in the 4xx range indicate a client request error, and 5xx codes indicate a server error. There should be zero such errors in your application. [Learn more...](#)

Results:

No 4xx or 5xx HTTP status response codes were detected during the trace.

Test:

301, 302 HTTP Status Response Codes

About:

Redirects are an easy way to switch users to different versions of your data. However, redirects also add significant latency to your application. Use with care. [Learn more...](#)

Results:

No 301 or 302 HTTP status response codes were detected during the trace.

Test:

3rd Party Scripts

About:

Connecting to 3rd party content can create slowdowns in your app. If these external files fail to load, you can have a huge effect on the customer experience and load times. Consider loading these in an asynchronous manner. [Learn more...](#)

Results:

Your trace passes.

AT&T Application Resource Optimizer

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

Results: AT&T ARO discovered 0 HTML files loaded synchronously and it passes the test.

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

Results: ARO discovered 0 HTML file where JS is loaded immediately before CSS.

Results: Your trace passes.

Results: Your trace passes.

Results: ARO discovered 1 files with CSS command "display:none".

Time	File Name
8.193	jsv4dvr=68id=501adcf555114da5848b77b1aafa64f8mr=3.2.28dn=HTC%2CHTC%20One%2Cbrightstarus_www&uid=-f0a%3Abe09a6e-ddad-4a02-bcc3-b9305a80615a&z=04008a-p&sc_a=3.08mr=18mcc=310&mcc=410&no-us&cn=AT

