

BrightRoll Run Time Parameters (v2.0)

Mobile Integration Guide

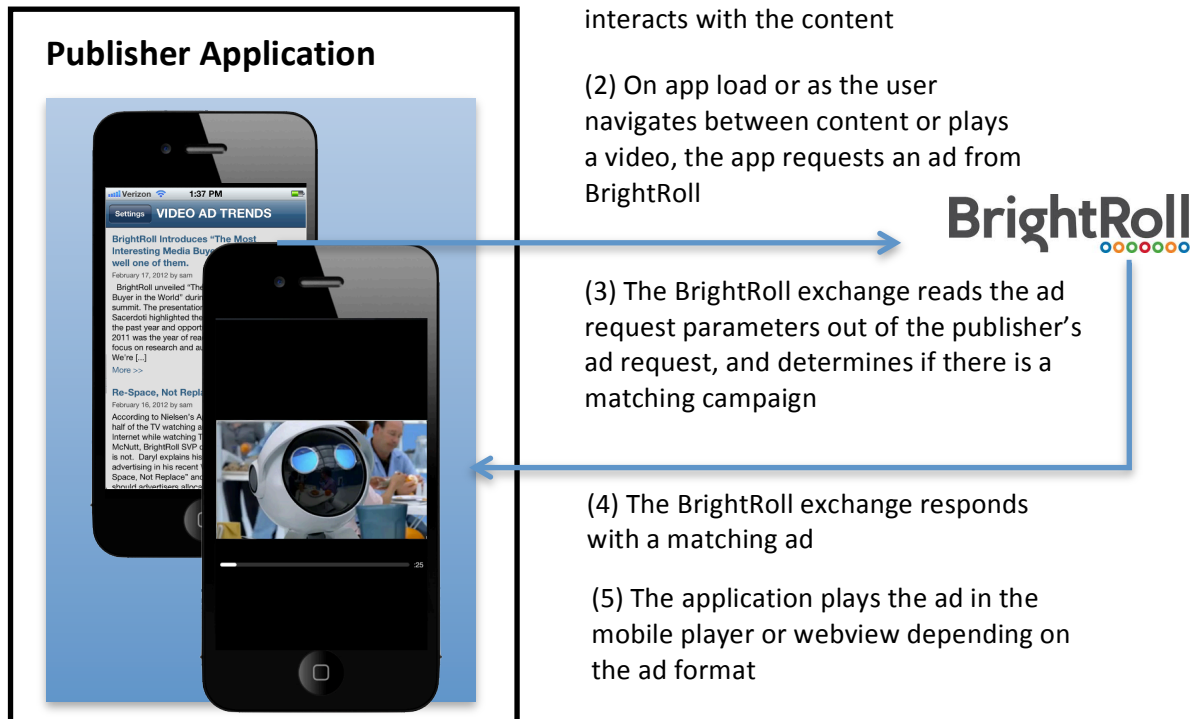
Learn how to pass required ad request parameters via an HTML5 or VAST integration between your mobile application or site and BrightRoll.

July 16, 2012

Introduction

BrightRoll's advertisers and agencies are demanding greater visibility to publisher inventory. At the same time, BrightRoll is advancing its ad-serving platform to leverage publisher metadata to improve targeting.

Recap on Ad Request Flow:



Format

VAST

For publishers integrated with BrightRoll via VAST, you should insert the run time values as query string parameters in the BrightRoll VAST tag. A "?" should separate the base part of the tag from query string. For instance:

↓ Base URL

`http://mobile.btrll.com/vast`

↓ Query string

`?siteId=xxxxxxx&field2=value2&field3=value3.
..&n=[timestamp]`

HTML5

For publishers integrated with BrightRoll via an HTML5 server request, you should insert the run time values as query string parameters in the BrightRoll endpoint request. Some additional static parameters for version, platform, format, and integration will be provided by BrightRoll. A “&” should separate the additional parameters from the base URL. For instance:

↓ Base URL

```
http://mobile.btrll.com/ad?version=xxxxxxx&platform=ios&format=html&integration=partnername&siteId=xxxxxxx&field2=value2&field3=value3...&n=[timestamp]
```

↑ Custom query string

Ad Request Parameters

- Ad request URLs cannot exceed 2,000 characters in length. Do not include parameters that when combined, may result in a URL exceeding this limit. URLs greater than 2,000 characters in length may cause errors in certain browsers.
- Parameters should be passed in the order provided below. For example, the parameter “br_uid” should always precede the parameter “br_did” in the VAST response.

Required Parameters

All publishers will be required to begin passing the following parameters in all ad requests to BrightRoll. If you have any questions, please contact your account manager.

Device ID

You must pass one or more of the below device Identification parameters as well as the br_didtype or br_dpctype. You only need to pass one form of ID for each user. A SHA-1 hashed DPID is preferred if available.

Ad Request Parameter Name	Description	Possible Values	Format
br_dpids	<p>A SHA-1 hashed Unique Platform Device id. Our preferred method for platform device ID hashing is SHA1.</p> <p>For iOS apps, this is the UDID (unique device identifier) value or the Advertiser ID (when it is released by Apple with</p>	Various	URL-encoded string

	<p>iOS6). For Android apps, it is the 'Android Id'.</p> <p>If this is not available, see the br_did alternatives below.</p>		
br_dpdm	<p>A MD5 hashed Unique Platform Device id. Will be interpreted as case-agnostic.</p> <p>For iOS apps, this is the UDID (unique device identifier) value or the Advertiser ID (when it is released by Apple with iOS6). For Android apps, it is the 'Android Id'.</p> <p>If this is not available, see the br_did alternatives below.</p>	Various	URL-encoded string
br_dpdu	<p>An unhashed Unique Platform Device id.</p> <p>For iOS apps, this is the UDID (unique device identifier) value or the Advertiser ID (when it is released by Apple with iOS6). For Android apps, it is the 'Android Id'.</p> <p>If this is not available, see the br_did alternatives below.</p>	Various	URL-encoded string
br_dids	<p>A SHA-1 hashed device ID.</p> <p>This should be a unique alphanumeric device ID associated with the handheld device such as MAC Address, Android device ID, ODIN, IMEI, MEID or ESN.</p>	Various	URL-encoded string
br_didm	<p>A MD5 hashed Unique Device id. Will be interpreted as case-agnostic.</p> <p>This should be a unique alphanumeric device ID associated with the handheld device such as MAC Address, Android device ID, ODIN, IMEI, MEID or ESN.</p>	Various	URL-encoded string

br_didu	<p>An un-hashed Unique Device id.</p> <p>This should be a unique alphanumeric device ID associated with the handheld device such as MAC Address, Android device ID, ODIN, IMEI, MEID or ESN.</p>	Various	URL-encoded string
br_uid	<p>In the event that you are unable to pass the unique ID associated with the device, you may pass a “cookie” based ID. This user ID cannot contain any personal identifying information (PII).</p> <p>If you are passing br_uid, you don’t need to pass the ID type.</p>	Various	URL-encoded string
br_dpidthtype	<p>The type of ID being passed as the br_dids parameter. BrightRoll recommends passing a MAC Address for iOS and device ID for Android.</p>	<p>“u”: UDID</p> <p>“i”: iOS Advertiser ID (Expected in iOS6 release)</p> <p>“a”: Android ID</p> <p>“n”: No ID is available to pass</p>	URL-encoded string
br_dpidthtype	<p>The type of ID being passed as the br_didm parameter. BrightRoll recommends passing a MAC Address for iOS and device ID for Android.</p>	<p>“u”: UDID</p> <p>“i”: iOS Advertiser ID (Expected in iOS6 release)</p> <p>“a”: Android ID</p> <p>“n”: No ID is available to pass</p>	URL-encoded string
br_didthtype	<p>The type of ID being passed as the br_dids parameter. BrightRoll recommends passing a MAC Address for iOS and device ID for Android.</p> <p>If passing multiple br_dpids or br_dids, br_didthtype should follow the ID it describes.</p>	<p>“m”: MAC Address</p> <p>“o”: ODIN</p> <p>“p”: Open UDID</p> <p>“d”: Android Device ID</p> <p>“im”: IMEI</p> <p>“me”: MEID</p> <p>“e”: ESN</p> <p>“n”: No ID is available to pass</p>	URL-encoded string
br_didthtype	<p>The type of ID being passed as the br_didm parameter. BrightRoll recommends passing a MAC Address for iOS and device ID for Android.</p> <p>If passing multiple br_dpids or br_dids, br_didthtype should follow the ID it describes.</p>	<p>“m”: MAC Address</p> <p>“o”: ODIN</p> <p>“p”: Open UDID</p> <p>“d”: Android Device ID</p> <p>“im”: IMEI</p> <p>“me”: MEID</p> <p>“e”: ESN</p> <p>“n”: No ID is available to pass</p>	URL-encoded string

Additional Required Parameters

Ad Request Parameter Name	Description	Possible Values	Format
n	Cache busting parameter. It is recommended that this is the first parameter to be included.	Various	Integer
br_ip	IP Address	Various Formatted as x.x.x.x	URL-encoded string
br_appurl	The link to the application landing page in the app store or marketplace.	Various	URL-encoded string
br_osvers	The device OS version	Various	URL-encoded string
br_ua	The User Agent string associated with the user's device e.g. Mozilla/5.0 (iPad; CPU OS 5_1 like Mac OS X) AppleWebKit/534.46 (KHTML, like Gecko) Version/5.1 Mobile/9B176 Safari/7534.48.3	Various	URL-encoded string
br_network	The type of connection a user is accessing the internet through	"wifi": Connected via a wifi network "cell": connected via a cellular network "u": connected via an unknown generation of cellular network	URL-encoded string

Recommended Parameters

It is recommended that you include the following parameters in your ad request. Although a number of these parameters are not in common use for ad serving yet, as mobile advertising increases in scale and scope, these parameters will come more into use for targeting by advertisers. By enabling support for these parameters, you will be included in additional campaigns as advertisers begin to target campaigns based on this data.

Additionally, some of these parameters will enable us to certify your inventory as part of our IAB Quality Assurance Guidelines certification process. If you opt not to pass these parameters, your site's inventory may not be included as IAB QAG certified.

Ad Request Parameter Name	Description	Possible Values	Format
br_domain	Domain of the application e.g. "mygame.foo.com"	Various	URL-encoded string
br_bundle	Application bundle or package name e.g. com.foo.mygame	Various	URL-encoded string
br_appname	The application name	Various	URL-encoded string
br_appversion	Application Version	Various	URL-encoded string
br_appid	Your system ID for this application	Various	URL-encoded string
br_privpol	If the application has a privacy policy, this parameter should be set to true. Required for IAB QAG Compliance. If you do not pass this and your privacy policy status is not classified in BrightRoll, your privacy policy status will be listed as "Unknown".	"y" : site has privacy policy "n" : site does not have a privacy policy "u" : unknown	URL-encoded string
br_paid	If the application is a paid app, this parameter should be set to true.	"y" : app is a paid app "n" : app is a free app "u" : unknown	URL-encoded string
br_carrier	The service provider	Various	URL-encoded string
br_carrierctry	The carrier country	Country using ISO-3166-1 Alpha-3	URL-encoded string
br_make	The make of the user's device	Various	URL-encoded string
br_model	The device model	Various	URL-encoded string
br_os	The device OS	Various	Integer
br_language	The device language	ISO 639-1 language code (e.g., "en" for English)	URL-encoded string
br_appcat	A comma separated list of IDs corresponding to the IAB's quality assurance guidelines for app	See IAB QAG v.1.5	Comma-separated string, URL-encoded string

Ad Request Parameter Name	Description	Possible Values	Format
	categories Required for IAB QAG Compliance. If you do not pass this, your page contextual category will be listed as "Unknown".		
br_appsect	App "Section" Category corresponding to the IAB's quality assurance guidelines for the app section Required for IAB QAG Compliance. If you do not pass this, your page contextual category will be listed as "Unknown".	See IAB QAG v.1.5	Comma-separated string, URL-encoded string
br_apppage	App "Page" Category corresponding to the IAB's quality assurance guidelines for the current app "page" Required for IAB QAG Compliance. If you do not pass this, your page contextual category will be listed as "Unknown".	See IAB QAG v.1.5	Comma-separated string, URL-encoded string

Optional Parameters

We recommend publishers begin passing the following parameters in all ad requests to BrightRoll. This list is sorted in order of highest to lowest priority based on advertiser requests.

Ad Request Parameter Name	Description	Possible Values	Format
br_lat	Latitude of device location	Various Formatted as xx.xxx	URL-encoded string
br_long	Longitude of device location	Various Formatted as xx.xxx	URL-encoded string
br_country	Country of device based on GPS/location services	Country using ISO-3166-1 Alpha-3	URL-encoded string
br_region	Region of device based on GPS/location services	Region using ISO 3166-2	URL-encoded string
br_metro	Metro of device based on GPS/location services	Metro code (Metro codes are similar to but not exactly the same as Nielsen DMAs)	URL-encoded string
br_city	City of device based on	City using United	URL-encoded

Ad Request Parameter Name	Description	Possible Values	Format
	GPS/location services	Nations Code for Trade and Transport Locations (http://www.unece.org/cefact/locode/service/location.htm)	string
br_zip	Zip of device based on GPS/location services	Zip/postal code	URL-encoded string
br_demcountry	Country of user based on user-submitted registration data	Country using ISO-3166-1 Alpha-3	URL-encoded string
br_demregion	Region of user based on user-submitted registration data	Region using ISO 3166-2	URL-encoded string
br_demmetro	Metro of user based on user-submitted registration data	Metro code (Metro codes are similar to but not exactly the same as Nielsen DMAs)	URL-encoded string
br_demcity	City of user based on user-submitted registration data	City using United Nations Code for Trade and Transport Locations (http://www.unece.org/cefact/locode/service/location.htm)	URL-encoded string
br_demzip	Zip of user based on user-submitted registration data	Zip/postal code	URL-encoded string
br_demgen	Gender of user (if known)	"m": male "f": female "u": unknown	URL-encoded string
br_dmage	Age of user (if known) Do not pass information regarding users under 14 years of age.	age of user if > 14	Integer
br_connm	The title of the video/content	various	URL-encoded string
br_pagenm	The page title	various	URL-encoded string
br_propnm	The name of the current site/app property. This is useful when a partner exposes sites/apps in channels; the site or app name can be passed at runtime	various	URL-encoded string
br_propid	The partner ID of the current site or app. This is useful when a partner exposes sites/apps in channels	various	URL-encoded string

Ad Request Parameter Name	Description	Possible Values	Format
br_stdelay	This parameter describes the temporal placement of the ad. The value represents the number of seconds into the content that the ad will be displayed.	various	Integer
br_medbitr	The bitrate in kbps for the video/media content	various	Integer
br_medfing	The fingerprint ID associated with the video/media content	various	URL-encoded string
br_appver	The version of the app being used	various	URL-encoded string
br_condes	A description of the current page/video content	various	URL-encoded string
br_conlang	Content language	ISO 639-1 language code (e.g., "en" for English)	URL-encoded string

Examples

Blue text signifies the required parameters and **green text** signifies the recommended parameters.

VAST

The following is an example of a VAST ad request URL for BrightRoll:

```
http://mobile.btrll.com/vast?siteId=3844778&n=2345678909&br_didm=59F62741
8330A01D8F0CBA9F63513570&br_didmtype=m&br_ip=66.54.159.162&br_appurl=http
%3A%2F%2Fitunes.apple.com%2Fus%2Fapp%2Fmygame%2Fid343246656%3Fmt%3D8&br_o
svers=5.1&br_ua=Mozilla%2F5.0%20(iPad%3B%20CPU%20OS%205_1%20like%20Mac%20
OS%20X)%20AppleWebKit%2F534.46%20(KHTML%2C%20like%20Gecko%20)%20Version%2
F5.1%20Mobile%2F9B176%20Safari%2F7534.48.3&br_network=wifi&br_domain=myga
me.foo.com&br_bundle=com.foo.mygame&br_appname=My%20Game&br_appversion=3.
0.2&br_appid=34563456&br_privpol=y&br_carrier=verizon&br_carrierctry=USA&
br_make=Apple&br_model=iPad&br_os=iOS&br_language=en&br_appcat=Movies%2CV
ideo%20%26%20Computer%20Games%2CRoleplaying%20Games&br_appsect=Video%20%2
6%20Computer%20Games%2CRoleplaying%20Games&br_apppage=Roleplaying%20Games
&br_lat=37.7750&br_long=122.4183&br_country=USA&br_region=US-
CA&br_metro=807&br_city=US%20SFO&br_zip=94199&br_demcountry=USA&br_demreg
ion=US-
CA&br_demmetro=807&br_demcity=US%20SFO&br_demzip=94199&br_demage=25&br_pr
opnm=My%20Game&br_connm=Level%202&br_pagenm=Page%20Name&br_propid=12345&b
r_stdelay=120&br_medbitr=160&br_medfing=mediafingerprintid&br_appver=2.3&
br_condes=This%20is%20a%20description%20of%20the%20content&br_conlang=en
```

The following example includes only the required parameters:

```
http://mobile.btrll.com/vast?siteId=3844778&n=2345678909&br_didm=59F627418330A01D8F0CBA9F63513570&br_didmtype=m&br_ip=66.54.159.162&br_appurl=http%3A%2F%2Fitunes.apple.com%2Fus%2Fapp%2Fmygame%2Fid343246656%3Fmt%3D8&br_osvers=5.1&br_ua=Mozilla%2F5.0%20(iPad%3B%20CPU%20OS%205_1%20like%20Mac%20OS%20X)%20AppleWebKit%2F534.46%20(KHTML%2C%20like%20Gecko%20)%20Version%2F5.1%20Mobile%2F9B176%20Safari%2F7534.48.3&br_network=wifi
```

HTML5

The following is an example of an HTML5 ad request for BrightRoll:

```
http://mobile.btrll.com/ad?version=xxxxxxx&platform=ios&format=html&integration=partnername&siteId=3844778&n=2345678909&br_didm=59F627418330A01D8F0CBA9F63513570&br_didmtype=m&br_didenc=m&br_uid=sJLIsd97_JKJ817f6FDfa&br_ip=66.54.159.162&br_appurl=http%3A%2F%2Fitunes.apple.com%2Fus%2Fapp%2Fmygame%2Fid343246656%3Fmt%3D8&br_osvers=5.1&br_ua=Mozilla%2F5.0%20(iPad%3B%20CPU%20OS%205_1%20like%20Mac%20OS%20X)%20AppleWebKit%2F534.46%20(KHTML%2C%20like%20Gecko%20)%20Version%2F5.1%20Mobile%2F9B176%20Safari%2F7534.48.3&br_network=wifi&br_domain=mygame.foo.com&br_bundle=com.foo.mygame&br_appname=My%20Game&br_appversion=3.0.2&br_appid=34563456&br_privpol=y&br_carrier=verizon&br_carrierctry=USA&br_make=Apple&br_model=iPad&br_os=iOS&br_language=en&br_appcat=Movies%2CVideo%20%26%20Computer%20Games%2CRoleplaying%20Games&br_appsect=Video%20%26%20Computer%20Games%2CRoleplaying%20Games&br_apppage=Roleplaying%20Games&br_lat=37.7750&br_long=122.4183&br_country=USA&br_region=US-CA&br_metro=807&br_city=US%20SFO&br_zip=94199&br_demcountry=USA&br_demregion=US-CA&br_demmetro=807&br_demcity=US%20SFO&br_demzip=94199&br_demage=25&br_propnm=My%20Game&br_connm=Level%202&br_pagenm=Page%20Name&br_propid=12345&br_stdelay=120&br_medbitr=160&br_medfing=mediafingerprintid&br_appver=2.3&br_condes=This%20is%20a%20description%20of%20the%20content&br_conlang=en
```

The following example includes only the required parameters:

```
http://mobile.btrll.com/ad?version=xxxxxxx&platform=ios&format=html&integration=partnername&siteId=3844778&n=2345678909&br_didm=59F627418330A01D8F0CBA9F63513570&br_didmtype=m&br_ip=66.54.159.162&br_appurl=http%3A%2F%2Fitunes.apple.com%2Fus%2Fapp%2Fmygame%2Fid343246656%3Fmt%3D8&br_osvers=5.1&br_ua=Mozilla%2F5.0%20(iPad%3B%20CPU%20OS%205_1%20like%20Mac%20OS%20X)%20AppleWebKit%2F534.46%20(KHTML%2C%20like%20Gecko%20)%20Version%2F5.1%20Mobile%2F9B176%20Safari%2F7534.48.3&br_network=wifi
```

Testing Process

After you have updated your ad request format to support the above parameters, we will conduct an end-to-end test. Please request a test tag from your mobile account manager and provide a test environment (a test harness or compiled app) demonstrating the ad

request coming from the client, passing the required parameters, and returning an ad from BrightRoll.

Once your BrightRoll Account Manager has approved the test tag, the run time parameters can be implemented into the live environment.