

VRTCAL

DISPLAY INTEGRATION GUIDE

Revision 1.8

VRTCAL provides this API, for qualified publishers only, to incorporate display ads into your mobile application. The VRTCAL MarketPlace can be accessed through a server-side HTTP request. A display response will then be returned for use by your mobile application.

Required parameters must be passed within the HTTP request to ensure ads are successfully returned. If available, we encourage you to also pass additional user-level data for better targeting, as this may help you achieve higher revenues.

The following sections outline key requirements, parameters and the process for integrating your mobile applications with the VRTCAL MarketPlace. You will find information on the following topics in this document:

- A) The HTTP request
- B) Parameters
- C) HTTP Request Example
- D) Display Ad Returns and Passbacks
- E) Efficiency Tuning
- F) Configuring Display Ad Tag Rules

Display Ad Serving Workflow for Mobile Applications.

1. User accesses a mobile application utilizing a publisher display ad engine
2. Publisher display ad engine makes an HTTP request to the VRTCAL MarketPlace server
3. VRTCAL MarketPlace fetches an ad, if available
4. VRTCAL MarketPlace returns the display response to the publisher display ad engine, which in turn renders the ad and processes all ad trackers

A) The HTTP Request

The HTTP request is comprised of two parts:

1. **Base URL** - The base URL identifies the location of the VRTCAL MarketPlace as well as the adserving end point. The Base URL is: <http://adplatform.vrtcal.com/dexch.vap>

2. **Parameters** - The parameters portion of the HTTP request contains attributes, which are passed along as part of the ad request. Please reference the following section for the parameters list.

B) Parameters

Parameter	Type	Definition	Required	Notes
aid	Integer	Ad Unit ID	Yes	VRTCAL will provide you the aid for each ad unit.
adid	String	Advertising ID (Android and iOS)	Yes, see notes.	The Advertising Identifier. You can provide the ID, Anonymous with 0s or blank.
idfv	String	Identifier For Vendors (iOS Only)	No, recommended	The Apple iOS created Identifier For Vendors.
dnt	Integer	Do Not Track	Yes	Tracking is acceptable = 0 Tracking is not acceptable = 1
cb	String	Random string	Yes	A random character string to prevent any caching issues with the ad request.
bundle	String	Application BundleID	Yes	Bundle Identifier of the app.
ip	String	Device IP Address	No	The IP address of the mobile device that the creative will be rendered. It is highly recommended that this field be populated for JSON integrations.
ua	String	Device User Agent	Yes, for JSON integrations No, for JS TAG integrations	The user agent of the mobile device that the creative will be rendered. (Note: must be URL encoded)
carrier	String	Device Internet Carrier	No, recommended	Device Internet/Network carrier.
gender	String	Gender	No, recommended	Gender of user of mobile device [M,F,O].
age	String	Age	No, recommended	Age of user of mobile device.

devicemodel	String	Device Model	No, recommended	The model of the mobile device that the creative will be rendered. (Note: must be URL encoded)
lat	Float	Latitude	No, recommended	Device Geo latitude in numerical form.
long	Float	Longitude	No, recommended	Device Geo longitude in numerical form.
clickurl	String	Click URL	No, recommended	Click tracker URL to be called on ad clicks. This parameter must be URL encoded.
keywords	String	Keywords related to the request	No, recommended	Comma separated list. This parameter must be URL encoded.

C) HTTP Request Example

http://adplatform.vrtcal.com /dexch.vap?aid=99999&adid=C256582D-3739-44CF-B3B0-9F0D2ABA6A5E&dnt=0&cb=92882737272322&bundle=com.appbundle&ip=108.52.157.60&ua=Mozilla%2F5.0+%28iPad%3B+CPU+OS+11_2_5+like+Mac+OS+X%29+AppleWebKit%2F604.5.6+%28KHTML%2C+like+Gecko%29+Mobile%2F15D60&carrier=Sprint&gender=M&age=32&devicemodel=iPad6%2C11&lat=40.769208879947207&long=-73.86224325247953&clickurl=http%3A%2F%2Fwww.publishersdkclick.com%2Fid%3D82939&keywords=ideas%2Cgaming%2Csketchpad

D) Display Ad Returns and Passbacks

VRTCAL provides a two standard mechanism for ad delivery: JSON or Javascript tag with SDK supported passbacks. Publishers that wish to use the javascript mechanism will need to provide us with the required passback content that should be returned to indicate to your system/SDK when we have no ads currently available for your request. Publishers that wish to use our uniform JSON format can parse our simple two-parameter JSON return. The following are the two returned JSON fields for the JSON mechanism:

1. **ad_available** - This field will have an integer value of 1 when there is an ad available , 0 when no ads are available
2. **ad_contents** - This field will contain the string html/js ad content when the ad_available field

is 1 Example JSON return:

```
{"ad_available":1,"ad_contents":"<html><body>test</body></html>"}
```

E) Efficiency Tuning

The VRTCAL MarketPlace is dedicated to bringing maximum efficiency and returns. To this effect, we will continually be upgrading our platform and providing you with control for tuning the VRTCAL MarketPlace engine. Tuning parameters include CPM, timeout setting, recommended parameters/macros etc.

F) Configuring Display Ad Tag Rules

We will be happy to assist you to get your display ad tags and/or request IDs active and available for your display ad engine.

Please contact your VRTCAL publisher manager for all IDs.

Thank you.