



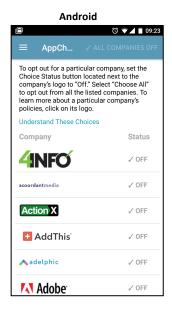
Implementation Instructions for DAA Participants to AppChoices

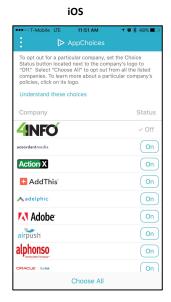
(August 4, 2017)

Confidential

The DAA mobile application (AppChoices) enable user opt-out of the mobile interest-based advertising that occurs within applications on their mobile device. In order to facilitate consumer choice, the DAA AppChoices collects the device IDs used to customize ads for users, and passes those same IDs back to the ad customization platform when a user chooses to opt-out for that platform.

The method of passing these IDs is flexible. However most companies are working towards the integration described below. If you have any questions or concerns, please contact AppChoices@AboutAds.info.





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Checklist

Below you will find a checklist of what needs to be accomplished in order to successfully integrate with AppChoices:

- 1. Please ensure that your company has executed and has an active DAA AppChoices Agreement or Addendum in place.
- 2. Fill out the <u>registration form</u> (providing logo, company description, and other requested URLs)
- 3. Determine which ID(s) you use to track devices
 - a. For more guidance please review the "Supported IDs" (below)
- 4. Create the Opt Out URL to receive ID(s) identified above
 - a. for Android
 - b. for iOS
- 5. Provide the Opt Out URLs with the ID order to DAA
- 6. DAA will schedule a testing time frame for your URLs to ensure you are receiving opt out request correctly. During this time, there will be more back and forth communications between DAA and you to ensure that when the opt out request is sent, you are receiving the correct ID(s)
- 7. Integration completed. If you receive the ID(s) correctly then integration is complete
 - a. If you do not receive ID(s) correctly, we will have to work through the issue(s)



Standard Opt-Out Integration

Once the necessary agreement is in place, between your company and the DAA, the AppChoices technical integration process can be initiated through the DAA Onboarding Form located at http://www.aboutads.info/daa-appchoices-onboarding-form

i. In conjunction with the DAA, the Ad Customization platform develops an HTTP URL that will ping its server on user opt-out. The syntax of the URL is at the discretion of the platform, with the end of the string reserved for a comma separated list of the IDs used for tracking, to be passed in the GET or POST.

Comma Separated Example:

http://www.companyA.com/optout/mobile?ID1,ID2,ID3

submitted as:

http://www.companyA.com/optout/mobile?%adid,%adid,%md5-ad-id

Key Value Example

http://www.companyA.com/optout/mobile?idfa=ID1&mac=ID2&o udid=ID3

Submitted as:

http://www.companyA.com/optout/mobile?idfa=%adid&mac=%md5-mac-b&o_udid=%u-udid

Notes:

- (a) The DAA AppChoices will only pass the IDs required for opt-out. The list is defined during the URL integration.
- (b) It is possible to use a delimiter other than a comma, please request this during the setup process.
- (c) The DAA AppChoices supports, and we encourage you to use, secure URLs.
- (d) In the event that the ID is not used by the device, you will receive an empty value with the defined key. If you do not use keys, the returned ID list will simply have less values.



The DAA AppChoices will integrate this URL into the mobile choice app with a corresponding company profile. Users will now see the platform listed as an opt-out option within our app.

- ii. When a user opts out, the DAA AppChoices will ping the URL with the IDs specific to the device/user.
- iii. The DAA AppChoices will consider the opt-out as being successful when the HTTP Status Code returns a successful value.
- iv. After receiving the opt-out beacon from the DAA App, it is the platform's responsibility to recognize and interact with the user as being opted out.
- v. The DAA recommends creating an opt-in URL¹ working with the same basic structure. However, in this case the syntax of the URL should denote that the user is requesting an opt-in.

Comma Separated Example:

http://www.companyA.com/optin/mobile?ID1,ID2,ID3

submitted as:

http://www.companyA.com/optout/mobile?%adid,%adid,%md5-ad-id

Key Value Example

http://www.companyA.com/optin/mobile?idfa=ID1&mac=ID2&o udid=ID3

Submitted as:

http://www.companyA.com/optout/mobile?idfa=**%adid**&mac=**%md5-mac-b**&o_udid=**%u-udid**

¹ Opt in URLs are not currently supported, but will be in the future.



Supported IDs

The following IDs are supported by the DAA AppChoices (or have been supported on a historical basis).

Token	Description	Validity	
		iOS	Android
%o-udid	OpenUDID	✓	
%md5-mac-b	MD5HashedRawMAC	√ ²	✓
%sha1-mac-b	SHA1HashedRawMAC	√ 1	✓
%md5-mac-h	MD5HashedMAC	√ ¹	
%sha1-mac-h	SHA1HashedMAC	√ ¹	
%adid	AdvertisingIdentifier	√ ³	√ ²
%md5-ad-id	MD5HashedAdvertisingIdentifier	√ ²	√ ²
%sha1-ad-id	SHA1HashedAdvertisingIdentifier	√ ²	√ ²

 $^{^2}$ iOS 7+ no longer supports MAC Address. In these instances you will be passed "02:00:00:00:00:00". Denotes the best practice use.



Frequently Asked Question

What information does the DAA need to include a company in AppChoices?

The DAA requires the following:

- 1. Company name: the name of the company as it should appear in the app
- 2. Company description: a brief description of the company and what it does
- 3. Website URL: a properly formatted internet address for the company
- 4. Privacy Policy URL: a properly formatted internet address for the company's privacy policy (direct link, no redirects)
- 5. Android Mobile opt-out URL: The URL where calls from Android devices are made to opt out via one of the supported device ID types
- 6. iOS Mobile opt-out URL: The URL where calls from iOS devices are made to opt out via one of the supported device ID types
- 7. Logo: An image file in PNG format 187 pixels wide 83 pixels high (whitespace can be added to meet dimensional requirements).

Where should this information be sent?

All company information and logos should be submitted to the registration form.

What device ID formats are supported?

AppChoices currently supports the following Device ID formats:

iOS

- OpenUDID (cleartext)
- MD5HashedRawMAC (MD5 hashed)
- SHA1HashedRawMAC (SHA1 hashed)
- MD5HashedMAC (MD5 hashed)
- SHA1HashedMAC (SHA1 hashed)
- AdvertisingIdentifier (cleartext
- MD5HashedAdvertisingIdentifier (MD5 hashed)
- SHA1HashedAdvertisingIdentifier (SHA1 hashed)

Android

- MD5HashedRawMAC (MD5 hashed)
- SHA1HashedRawMAC (SHA1 hashed)
- AdvertisingIdentifier (cleartext)
- MD5HashedAdvertisingIdentifier (MD5 hashed)
- SHA1HashedAdvertisingIdentifier (SHA1 hashed)



How many Device ID formats does a vendor need to support? Only one supported format for each device type (Android and iOS) is required.

How should opt-out URLs be formatted?

URLs can be formatted how your company prefers. AppChoices is compatible with most existing web based mobile optout APIs. A key and key value pair can be used for device type and device id or a key value only configuration with only the device id so long as the opt-out API can distinguish between them.

Examples:

- http://example.com/mobile_optout?idtype=<device type>&value=<device id>
- http://example.com/mobile_optout?<device type>=<device id>
- http://example.com/mobile_optout?<device id>

Does AppChoices support encrypted requests?

Yes, AppChoices supports SSL/TLS over HTTPS connections. TLS 1.0 or higher is recommended as recent security exploits have compromised older encryption protocols.

How long does it take for a company to be added to AppChoices?

A: The target turnaround time from request to live in-app is two business weeks. Times can vary based on testing and workload.