

Appstock Android SDK - Overview

Overview

Appstock SDK is a native library that monetizes Android applications.

The latest SDK version is **1.1.1**.

The minimum supported Android version: **Android 5.0** (API level **21**)

Demo applications (Kotlin, JAVA).

Integration and configuration

Follow the integration instructions to add the SDK to your app. Once the SDK is integrated, you can provide configuration options that will help increase your revenue. Keep in mind that the SDK supports basic consent providers according to industry standards.

Appstock SDK supports the following ad formats:

- Banner (HTML + Video)
- Interstitial (HTML + Video)
- Native

The SDK can be integrated directly into your app or via supported Mediation Adapters:

- AppLovin MAX
- GMA SDK (AdMob, GAM)

Appstock Android SDK - Integration

Integration using dependency

In order to integrate Appstock SDK into your application, you should add the following dependency to the app/build.gradle file and sync Gradle:

```
dependencies {  
    implementation("com.appstock:appstock-sdk:1.1.1")  
}
```

Add this custom maven repository URL into the project/settings.gradle file:

```
dependencyResolutionManagement {
    repositories {
        maven {
            setUrl\("https://public-sdk.al-ad.com/android/"\)
        }
    }
}
```

Manual integration using AAR files

Copy AAR files to your Android module libs folder (f.e. app/libs/).

- [Core SDK](#)
- [Open Measurement SDK](#)
- [AdMob adapters](#)
- [AppLovin adapters](#)

Add dependencies to build.gradle file.

```
implementation(files("libs/core-release.aar"))
implementation(files("libs/omsdk.aar"))

// Only for AdMob integration
implementation(files("libs/admob-adapters-release.aar"))

// Only for AppLovin integration
implementation(files("libs/applovin-adapters-release.aar"))
```

Integration using ARR files requires additional dependencies. You should add ExoPlayer dependency for video ads and Google ads identifier dependency for better targeting.

```
implementation 'com.google.android.exoplayer:exoplayer-core:
2.15.1'
implementation 'com.google.android.exoplayer:exoplayer-ui:2.15.1'

implementation 'com.google.android.gms:play-services-base:18.1.0'
implementation 'com.google.android.gms:play-services-ads-
identifier:18.0.1'

implementation "androidx.localbroadcastmanager:localbroadcastmanager:
1.0.0"
```

Initialization

Import the Appstock SDK core class in the main application class:

Kotlin:

```
import com.appstock.sdk.api.Appstock
```

Java:

```
import com.appstock.sdk.api.Appstock;
```

Initialize Appstock SDK in the `.onCreate()` method by calling `Appstock.initializeSdk()`.

Kotlin:

```
class DemoApplication : Application() {  
    override fun onCreate() {  
        super.onCreate()  
  
        // Initialize Appstock SDK  
        Appstock.initializeSdk(this, PARTNER_KEY)  
    }  
}
```

Java:

```
public class DemoApplication extends Application {  
    @Override  
    public void onCreate() {  
        super.onCreate();  
  
        // Initialize Appstock SDK  
        Appstock.initializeSdk(this, PARTNER_KEY);  
    }  
}
```

The `Appstock.initializeSdk()` method has two parameters:

- **context** - the reference to the Application subclass instance
- **partnerKey** - determine the Appstock server URL. The Appstock account manager should provide you with this key.

It is recommended that contextual information be provided after initialization to enrich the ad requests. For this purpose, use [SDK parametrization properties](#).

Once SDK is initialized and all needed parameters are provided, it is ready to request the ads.

If you want to see all requests made by the SDK and verbose logs, you should enable debug mode before the initialization.

Kotlin:

```
Appstock.setDebugRequests(true)  
Appstock.setLogLevel(Appstock.LogLevel.DEBUG)  
Appstock.initializeSdk(this, PARTNER_KEY)
```

Java:

```
Appstock.setDebugRequests(true);
Appstock.setLogLevel(Appstock.LogLevel.DEBUG);
Appstock.initializeSdk(this, PARTNER_KEY);
```

Appstock Android SDK - Banner

To load and show banner ads, you should initialize, configure, and add the AppstockAdView object to the app's layout and call the loadAd() method.

Kotlin:

```
private var adView: AppstockAdView? = null

private fun createAd() {
    // 1. Create AppstockAdView
    val adView = AppstockAdView(this).also { this.adView = it }

    // 2. Configure ad unit
    adView.setPlacementId(PLACEMENT_ID)
    adView.setAdSizes(AppstockAdSize(WIDTH, HEIGHT))
    adView.setAdViewListener(createListener())
    adView.autoRefreshDelay = 30

    // 3. Load ad
    adView.loadAd()

    // 4. Add AppstockAdView to the app UI
    containerForAd.addView(adView)
}
```

Java:

```
private AppstockAdView adView;

private void createAd() {
    // 1. Create AppstockAdView
    adView = new AppstockAdView(this);

    // 2. Configure ad unit
    adView.setPlacementId(PLACEMENT_ID);
    adView.setAdSizes(new AppstockAdSize(WIDTH, HEIGHT));
    adView.setAutoRefreshDelay(30);
    adView.setAdViewListener(createListener());

    // 3. Load ad
    adView.loadAd();

    // 4. Add AppstockAdView to the app UI
    getContainerForAd().addView(adView);
}
```

The AppstockAdView should be provided with one of the required configuration properties:

- `setPlacementId()` - Unique placement identifier generated on the Appstock platform's UI.
- `setEndpointId()` - Unique endpoint identifier generated on the Appstock platform's UI.

Which one to use depends on your type of Appstock account.

Important note: `setAdSizes()` should provide standard advertisement sizes, not the sizes of the screen.

It's important to destroy ad view after leaving the screen. It cleans the resources and stops auto refresh. Or you can just stop auto refresh using `stopAutoRefresh()`.

Kotlin:

```
override fun onDestroy() {  
    adView?.destroy()  
}
```

Java:

```
@Override  
public void onDestroy() {  
    super.onDestroy();  
    if (adView != null) {  
        adView.destroy();  
    }  
}
```

If you need to integrate video ads, you can also use the AppstockAdView object in the same way as for banner ads. The single required change is you should explicitly set the ad format via the respective property:

Kotlin:

```
adView.setAdUnitFormat(AppstockAdUnitFormat.VIDEO)
```

Java:

```
adView.setAdUnitFormat(AppstockAdUnitFormat.VIDEO);
```

Once it is done, the Appstock SDK will make ad requests for video placement and render the respective creatives.

Additionally, you can set more parameters for better advertisement targeting.

Kotlin:

```
adView.setAdPosition(AppstockBannerAdPosition.HEADER)  
adView.setVideoPlacementType(AppstockVideoPlacementType.IN_BANNER) //  
    Only for video ad unit format
```

Java:

```
adView.setAdPosition(AppstockBannerAdPosition.HEADER);
adView.setVideoPlacementType(AppstockVideoPlacementType.IN_BANNER); //
    Only for video ad unit format
```

You can optionally subscribe to the ad's lifecycle events by implementing the AppstockAdViewListener interface:

Kotlin:

```
private fun createListener(): AppstockAdViewListener {
    return object : AppstockAdViewListener {
        override fun onAdLoaded(adView: AppstockAdView, adInfo:
            AdInfo) {
            // Called when ad loaded
            Log.d(TAG, "Ad loaded successfully")
        }

        override fun onAdFailed(adView: AppstockAdView, e:
            AppstockAdException) {
            // Called when ad failed to load or parse
            Log.e(TAG, "Ad failed to load: " + e.message)
        }

        override fun onAdDisplayed(adView: AppstockAdView) {
            // Called when ad displayed
        }

        override fun onAdClicked(adView: AppstockAdView) {
            // Called when ad clicked
        }

        override fun onAdClosed(adView: AppstockAdView) {
            // Called when ad closed
        }
    }
}
```

Java:

```
private static AppstockAdViewListener createListener() {
    return new AppstockAdViewListener() {
        @Override
        public void onAdLoaded(AppstockAdView AppstockAdView,
            AdInfo adInfo) {
            // Called when ad loaded
            Log.d(TAG, "Ad loaded successfully");
        }

        @Override
        public void onAdFailed(AppstockAdView AppstockAdView,
            AppstockAdException e) {
            // Called when ad failed to load
            Log.e(TAG, "Ad failed to load: " + e.getMessage());
        }
    }
}
```

```

@Override
public void onAdDisplayed(AppstockAdView AppstockAdView) {
    // Called when ad displayed on screen
}

@Override
public void onAdClicked(AppstockAdView AppstockAdView) {
    // Called when ad clicked
}

@Override
public void onAdClosed(AppstockAdView AppstockAdView) {
    // Called when ad hidden
}
};
}

```

Once the ad is loaded you can utilize it's basic properties inspecting AdInfo structure.

Or you can subscribe to the video ad events (only for video ad unit format).

Kotlin:

```

private fun createListener(): AppstockAdViewVideoListener {
    return object : AppstockAdViewVideoListener {
        override fun onVideoCompleted(bannerView: AppstockAdView?) {
            {
                Log.d(TAG, "Video completed")
            }
        }

        override fun onVideoPaused(bannerView: AppstockAdView?) {
            Log.d(TAG, "Video paused")
        }

        override fun onVideoResumed(bannerView: AppstockAdView?) {
            Log.d(TAG, "Video resumed")
        }

        override fun onVideoUnMuted(bannerView: AppstockAdView?) {
            Log.d(TAG, "Video unmuted")
        }

        override fun onVideoMuted(bannerView: AppstockAdView?) {
            Log.d(TAG, "Video muted")
        }
    }
}

```

Java:

```

private static AppstockAdViewVideoListener createListener() {
    return new AppstockAdViewVideoListener() {

        @Override
        public void onVideoCompleted(AppstockAdView
            teqBlazeAdView) {
            Log.d(TAG, "Video completed");
        }

        @Override
        public void onVideoPaused(AppstockAdView teqBlazeAdView) {
            Log.d(TAG, "Video paused");
        }

        @Override
        public void onVideoResumed(AppstockAdView teqBlazeAdView)
        {
            Log.d(TAG, "Video resumed");
        }

        @Override
        public void onVideoUnMuted(AppstockAdView teqBlazeAdView)
        {
            Log.d(TAG, "Video un muted");
        }

        @Override
        public void onVideoMuted(AppstockAdView teqBlazeAdView) {
            Log.d(TAG, "Video muted");
        }
    };
}

```

Appstock Android SDK - Interstitial

To load and show interstitial ads, you should initialize, configure, and add the AppstockInterstitialAdUnit object to the app's layout and call the loadAd() method. Once the ad is loaded, you can invoke the show() method at any appropriate point of the app flow to present the fullscreen ad.

Kotlin:

```

private var adUnit: AppstockInterstitialAdUnit? = null

private fun createAd() {
    // 1. Create AppstockInterstitialAdUnit
    adUnit = AppstockInterstitialAdUnit(this)

    // 2. Configure ad unit
    adUnit?.setPlacementId(PLACEMENT_ID)
    adUnit?.setInterstitialAdUnitListener(createListener())
}

```



```

        adUnit?.setAdSizes(AppstockAdSize(320, 480))

        // 3. Load ad
        adUnit?.loadAd()
    }

```

Java:

```

private AppstockInterstitialAdUnit adUnit;

private void createAd() {
    // 1. Create AppstockInterstitialAdUnit
    adUnit = new AppstockInterstitialAdUnit(this);

    // 2. Configure ad unit
    adUnit.setPlacementId(PLACEMENT_ID);
    adUnit.setInterstitialAdUnitListener(createListener());

    // 3. Load ad
    adUnit.loadAd();
}

```

Important note: `setAdSizes()` should provide standard advertisement sizes, not the sizes of the screen.

It's important to destroy ad unit after leaving the screen. It cleans the resources and stops auto refresh.

Kotlin:

```

override fun onDestroy() {
    adUnit?.destroy()
}

```

Java:

```

@Override
public void onDestroy() {
    super.onDestroy();
    if (adUnit != null) {
        adUnit.destroy();
    }
}

```

If you need to integrate video ads or multiformat ads, you should set the `adFormats` property to the respective value:

Kotlin:

```

// Make ad request for video ad
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.VIDEO))

// Make ad request for both video and banner ads (default
    behaviour)

```

```
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.BANNER,
    AppstockAdUnitFormat.VIDEO))
```

```
// Make ad request for banner ad
```

```
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.BANNER))
```

Java:

```
// Make ad request for video ad
```

```
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.VIDEO));
```

```
// Make ad request for both video and banner ads (default  
behaviour)
```

```
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.BANNER,
    AppstockAdUnitFormat.VIDEO));
```

```
// Make ad request for banner ad
```

```
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.BANNER));
```

Once the ad is loaded, you can invoke the `show()` method at any appropriate point of the app flow to present the full-screen ad. To know when the ad is loaded, you should implement `AppstockInterstitialAdUnitListener` interface and subscribe to the ad events in its methods.

When the delegate's method `onAdLoaded` is called, it means that the SDK has successfully loaded the ad. Starting from this point, you can call the `show()` method to display the full-screen ad.

Kotlin:

```
private fun createListener(): AppstockInterstitialAdUnitListener {  
    return object : AppstockInterstitialAdUnitListener {  
        override fun onAdLoaded(adUnit:  
            AppstockInterstitialAdUnit, adInfo: AdInfo) {  
            // Called when ad loaded  
            Log.d(TAG, "Ad loaded successfully")  
  
            // 4. Show ad  
            adUnit.show()  
        }  
  
        override fun onAdDisplayed(adUnit:  
            AppstockInterstitialAdUnit) {  
            // Called when ad displayed full screen  
            Log.d(TAG, "Ad displayed")  
        }  
  
        override fun onAdFailed(  
            adUnit: AppstockInterstitialAdUnit,  
            e: AppstockAdException,  
        ) {  
            // Called when ad failed to load or parse  
            Log.e(TAG, "Ad failed to load: " + e.message, e)  
        }  
    }  
}
```

```

        override fun onAdClicked(adUnit:
AppstockInterstitialAdUnit) {
            // Called when ad clicked
        }

        override fun onAdClosed(adUnit:
AppstockInterstitialAdUnit) {
            // Called when ad closed
        }
    }
}

```

Java:

```

private static AppstockInterstitialAdUnitListener createListener()
{
    return new AppstockInterstitialAdUnitListener() {
        @Override
        public void onAdLoaded(AppstockInterstitialAdUnit adUnit,
AdInfo adInfo) {
            // Called when ad loaded
            Log.d(TAG, "Ad loaded successfully");

            // 4. Show ad
            adUnit.show();
        }

        @Override
        public void onAdDisplayed(AppstockInterstitialAdUnit
adUnit) {
            // Called when ad displayed full screen
            Log.d(TAG, "Ad displayed");
        }

        @Override
        public void onAdFailed(AppstockInterstitialAdUnit adUnit,
AppstockAdException e) {
            // Called when ad failed to load
            Log.e(TAG, "Ad failed to load: " + e.getMessage());
        }

        @Override
        public void onAdClicked(AppstockInterstitialAdUnit adUnit)
        {
            // Called when ad clicked
        }

        @Override
        public void onAdClosed(AppstockInterstitialAdUnit adUnit)
        {
            // Called when ad closed
        }
    }
}

```

```
    };  
}
```

Once the ad is loaded you can utilize it's basic properties inspecting [AdInfo](#) structure.

Rendering Controls

The following properties enable rendering customization of video interstitial ads.

Setter	Description
<code>setIsMuted</code>	This option lets you switch the sound on or off during playback. Default is <code>false</code> .
<code>setCloseButtonArea</code>	This setting determines the percentage of the device screen that the close button should cover. Allowed range - <code>0...1</code> . Default value is <code>0.1</code> .
<code>setSkipButtonPosition</code>	This setting controls where the close button appears on the screen. Allowed values: <code>topLeft</code> , <code>topRight</code> . Other values will be ignored. Default is <code>topRight</code> .
<code>setSkipButtonArea</code>	This setting determines the percentage of the device screen that the skip button should cover. Allowed range - <code>0...1</code> . Default value is <code>0.1</code> .
<code>setSkipButtonPosition</code>	This control sets the position of the skip button. Allowed values: <code>topLeft</code> , <code>topRight</code> . Other values will be ignored. Default is <code>topLeft</code> .
<code>setSkipDelay</code>	This setting determines the number of seconds after the start of playback before the skip or close button should appear. Default value is <code>10.0</code> .
<code>setIsSoundButtonVisible</code>	This option switches on or off the visibility of the sound/mute button for users. Default value is <code>false</code> .

Usage examples:

Kotlin:

```
adUnit.setSkipDelay(10)  
adUnit.setSkipButtonPosition(AppstockPosition.TOP_RIGHT)  
adUnit.setSkipButtonArea(0.2)  
  
adUnit.setCloseButtonPosition(AppstockPosition.TOP_RIGHT)  
adUnit.setCloseButtonArea(0.2)  
  
adUnit.setIsMuted(true)  
adUnit.setIsSoundButtonVisible(true)
```

Java:

```
adUnit.setSkipDelay(10);  
adUnit.setSkipButtonPosition(AppstockPosition.TOP_RIGHT);  
adUnit.setSkipButtonArea(0.2);
```

```
adUnit.setCloseButtonPosition(AppstockPosition.TOP_RIGHT);
adUnit.setCloseButtonArea(0.2);

adUnit.setIsMuted(true);
adUnit.setIsSoundButtonVisible(true);
```

Appstock Android SDK - Rewarded

To load and show rewarded ads, you should initialize, configure, and add the AppstockRewardedAdUnit object to the app's layout and call the loadAd() method. Once the ad is loaded, you can invoke the show() method at any appropriate point of the app flow to present the fullscreen ad.

Kotlin:

```
private var adUnit: AppstockRewardedAdUnit? = null

private fun createAd() {
    // 1. Create ad unit
    adUnit = AppstockRewardedAdUnit(this)

    // 2. Configure ad unit
    adUnit?.setPlacementId(PLACEMENT_ID)
    adUnit?.setRewardedAdUnitListener(createListener())
    adUnit?.setAdSizes(AppstockAdSize(320, 480))

    // 3. Load ad
    adUnit?.loadAd()
}
```

Java:

```
private AppstockRewardedAdUnit adUnit;

private void createAd() {
    // 1. Create ad unit
    adUnit = new AppstockRewardedAdUnit(this);

    // 2. Configure ad unit
    adUnit.setPlacementId(PLACEMENT_ID);
    adUnit.setRewardedAdUnitListener(createListener());

    // 3. Load ad
    adUnit.loadAd();
}
```

Important note: setAdSizes() should provide standard advertisement sizes, not the sizes of the screen.

It's important to destroy ad unit after leaving the screen. It cleans the resources and stops auto refresh.

Kotlin:

```
override fun onDestroy() {  
    adUnit?.destroy()  
}
```

Java:

```
@Override  
public void onDestroy() {  
    super.onDestroy();  
    if (adUnit != null) {  
        adUnit.destroy();  
    }  
}
```

If you need to integrate video ads or multiformat ads, you should set the `adFormats` property to the respective value:

Kotlin:

```
// Make ad request for video ad  
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.VIDEO))  
  
// Make ad request for both video and banner ads (default  
behaviour)  
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.BANNER,  
    AppstockAdUnitFormat.VIDEO))  
  
// Make ad request for banner ad  
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.BANNER))
```

Java:

```
// Make ad request for video ad  
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.VIDEO));  
  
// Make ad request for both video and banner ads (default  
behaviour)  
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.BANNER,  
    AppstockAdUnitFormat.VIDEO));  
  
// Make ad request for banner ad  
adUnit.setAdUnitFormats(EnumSet.of(AppstockAdUnitFormat.BANNER));
```

Once the ad is loaded, you can invoke the `show()` method at any appropriate point of the app flow to present the full-screen ad. To know when the ad is loaded, you should implement `AppstockRewardedAdUnitListener` interface and subscribe to the ad events in its methods.

When the delegate's method `onAdLoaded` is called, it means that the SDK has successfully loaded the ad. Starting from this point, you can call the `show()` method to display the full-screen ad.

Kotlin:

```

private fun createListener(): AppstockRewardedAdUnitListener {
    return object : AppstockRewardedAdUnitListener {
        override fun onAdLoaded(adUnit: AppstockRewardedAdUnit,
            adInfo: AdInfo) {
            // Called when ad loaded
            Log.d(TAG, "Ad loaded successfully")

            // 4. Show ad
            adUnit.show()
        }

        override fun onReward(adUnit: AppstockRewardedAdUnit,
            reward: Reward?) {
            // Called when user earned reward
            if (reward == null) {
                Log.d(TAG, "User earned empty reward!")
                return
            }
            Log.d(TAG, "User earned reward: " + reward.count + " "
                + reward.type)
        }

        override fun onAdDisplayed(adUnit: AppstockRewardedAdUnit)
        {
            // Called when ad displayed full screen
            Log.d(TAG, "Ad displayed")
        }

        override fun onAdFailed(
            adUnit: AppstockRewardedAdUnit,
            e: AppstockAdException,
        ) {
            // Called when ad failed to load or parse
            Log.e(TAG, "Ad failed to load: " + e.message, e)
        }

        override fun onAdClicked(adUnit: AppstockRewardedAdUnit) {
            // Called when ad clicked
        }

        override fun onAdClosed(adUnit: AppstockRewardedAdUnit) {
            // Called when ad closed
        }
    }
}

```

Java:

```

private static AppstockRewardedAdUnitListener createListener() {
    return new AppstockRewardedAdUnitListener() {
        @Override
        public void onAdLoaded(AppstockRewardedAdUnit adUnit,
            AdInfo adInfo) {
            // Called when ad loaded

```

```

        Log.d(TAG, "Ad loaded successfully");

        // 4. Show ad
        adUnit.show();
    }

    @Override
    public void onReward(AppstockRewardedAdUnit adUnit,
        @Nullable Reward reward) {
        // Called when user earned reward
        if (reward == null) {
            Log.d(TAG, "User earned empty reward!");
            return;
        }
        Log.d(TAG, "User earned reward: " + reward.getCount()
+ " " + reward.getType());
    }

    @Override
    public void onAdDisplayed(AppstockRewardedAdUnit adUnit) {
        // Called when ad displayed full screen
        Log.d(TAG, "Ad displayed");
    }

    @Override
    public void onAdFailed(AppstockRewardedAdUnit adUnit,
        AppstockAdException e) {
        // Called when ad failed to load
        Log.e(TAG, "Ad failed to load: " + e.getMessage());
    }

    @Override
    public void onAdClicked(AppstockRewardedAdUnit adUnit) {
        // Called when ad clicked
    }

    @Override
    public void onAdClosed(AppstockRewardedAdUnit adUnit) {
        // Called when ad closed
    }
};
}

```

Once the ad is loaded you can utilize it's basic properties inspecting AdInfo structure.

onReward method allows to process user's reward. Additionally, publishers can set up the ext JSON value which can contain more info about reward.

Kotlin:

```

override fun onReward(adUnit: AppstockRewardedAdUnit, reward:
    Reward?) {
    if (reward == null) {

```



```

        Log.d(TAG, "User earned empty reward!")
        return
    }
    val type = reward.type
    val count = reward.count
    val ext = reward.ext
}

```

Java:

```

@Override
public void onReward(AppstockRewardedAdUnit adUnit, @Nullable
    Reward reward) {
    if (reward == null) {
        Log.d(TAG, "User earned empty reward!");
        return;
    }
    String type = reward.getType();
    int count = reward.getCount();
    JSONObject ext = reward.getExt();
}

```

Rendering Controls

The following properties enable rendering customization of video rewarded ads.

Setter	Description
setIsMuted	This option lets you switch the sound on or off during playback. Default is <code>false</code> .
setCloseButtonArea	This setting determines the percentage of the device screen that the close button should cover. Allowed range - <code>0...1</code> . Default value is <code>0.1</code> .
setSkipButtonPosition	This setting controls where the close button appears on the screen. Allowed values: <code>topLeft</code> , <code>topRight</code> . Other values will be ignored. Default is <code>topRight</code> .
setSkipButtonArea	This setting determines the percentage of the device screen that the skip button should cover. Allowed range - <code>0...1</code> . Default value is <code>0.1</code> .
setSkipButtonPosition	This control sets the position of the skip button. Allowed values: <code>topLeft</code> , <code>topRight</code> . Other values will be ignored. Default is <code>topLeft</code> .
setSkipDelay	This setting determines the number of seconds after the start of playback before the skip or close button should appear. Default value is <code>10.0</code> .
setIsSoundButtonVisible	This option switches on or off the visibility of the sound/mute button for users. Default value is <code>false</code> .

Usage examples:

Kotlin:

```

adUnit.setSkipDelay(10)
adUnit.setSkipButtonPosition(AppstockPosition.TOP_RIGHT)
adUnit.setSkipButtonArea(0.2)

adUnit.setCloseButtonPosition(AppstockPosition.TOP_RIGHT)
adUnit.setCloseButtonArea(0.2)

adUnit.setIsMuted(true)
adUnit.setIsSoundButtonVisible(true)

```

Java:

```

adUnit.setSkipDelay(10);
adUnit.setSkipButtonPosition(AppstockPosition.TOP_RIGHT);
adUnit.setSkipButtonArea(0.2);

adUnit.setCloseButtonPosition(AppstockPosition.TOP_RIGHT);
adUnit.setCloseButtonArea(0.2);

adUnit.setIsMuted(true);
adUnit.setIsSoundButtonVisible(true);

```

Appstock Android SDK - Native

To load a native ad, you should initialize and configure AppstockNativeAdUnit object and call the loadAd() method.

Kotlin:

```

private var adUnit: AppstockNativeAdUnit? = null

private fun createAd() {
    // 1. Create AppstockNativeAdUnit
    adUnit = AppstockNativeAdUnit()

    // 2. Configure ad unit with native config
    adUnit?.setPlacementId(PLACEMENT_ID)
    adUnit?.setNativeAdConfig(createNativeConfig())

    // 3. Load ad
    adUnit?.loadAd { result: AppstockNativeResult ->
        val nativeAd = result.nativeAd
        if (nativeAd == null) {
            Log.e("AdExample", "Native ad is null: " +
                result.status)
            return@loadAd
        }

        Log.d(TAG, "Native ad loaded successfully")
        // 4. Create native view
        createNativeView(nativeAd)
    }
}

```

```

    }
}

private fun createNativeConfig(): AppstockNativeAdConfig {
    val eventTrackingMethods = ArrayList(
        Arrays.asList(
            NativeEventTracker.EventTrackingMethod.IMAGE,
            NativeEventTracker.EventTrackingMethod.JS
        )
    )
    val eventTracker = NativeEventTracker(
        NativeEventTracker.EventType.IMPRESSION,
        eventTrackingMethods
    )

    val title = NativeTitleAsset()
    title.setLength(90)
    title.isRequired = true

    val icon = NativeImageAsset(20, 20, 20, 20)
    icon.imageType = NativeImageAsset.ImageType.ICON
    icon.isRequired = true

    val mainImage = NativeImageAsset(200, 200, 200, 200)
    mainImage.imageType = NativeImageAsset.ImageType.MAIN
    mainImage.isRequired = true

    val sponsored = NativeDataAsset()
    sponsored.len = 90
    sponsored.dataType = NativeDataAsset.DataType.SPONSORED
    sponsored.isRequired = true

    val description = NativeDataAsset()
    description.dataType = NativeDataAsset.DataType.DESC
    description.isRequired = true

    val ctaText = NativeDataAsset()
    ctaText.dataType = NativeDataAsset.DataType.CTATEXT
    ctaText.isRequired = true

    val assets = Arrays.asList(
        title,
        icon,
        mainImage,
        sponsored,
        description,
        ctaText
    )

    return AppstockNativeAdConfig.Builder()
        .setContextType(NativeContextType.SOCIAL_CENTRIC)
        .setPlacementType(NativePlacementType.CONTENT_FEED)
}

```

```

        .setContextSubType(NativeContextSubtype.GENERAL_SOCIAL)
        .setNativeEventTrackers(listOf(eventTracker))
        .setNativeAssets(assets)
        .build()
    }
}

```

Java:

```

private AppstockNativeAdUnit adUnit;

private void createAd() {
    // 1. Create AppstockNativeAdUnit
    adUnit = new AppstockNativeAdUnit();

    // 2. Configure ad unit with native config
    adUnit.setPlacementId(PLACEMENT_ID);
    adUnit.setNativeAdConfig(createNativeConfig());

    // 3. Load ad
    adUnit.loadAd((result) -> {
        AppstockNativeAd nativeAd = result.getNativeAd();
        if (nativeAd == null) {
            Log.e("AdExample", "Native ad is null: " +
                result.getStatus());
            return;
        }

        Log.d(TAG, "Native ad loaded successfully");
        // 4. Create native view
        createNativeView(nativeAd);
    });
}

private AppstockNativeAdConfig createNativeConfig() {
    ArrayList<NativeEventTracker.EventTrackingMethod>
        eventTrackingMethods = new ArrayList<>()
        Arrays.asList(
            NativeEventTracker.EventTrackingMethod.IMAGE,
            NativeEventTracker.EventTrackingMethod.JS
        )
    );

    NativeEventTracker eventTracker = new NativeEventTracker(
        NativeEventTracker.EventType.IMPRESSION,
        eventTrackingMethods
    );

    NativeTitleAsset title = new NativeTitleAsset();
    title.setLength(90);
    title.setRequired(true);

    NativeImageAsset icon = new NativeImageAsset(20, 20, 20, 20);
    icon.setImageType(NativeImageAsset.ImageType.ICON);
    icon.setRequired(true);
}

```

```

NativeImageAsset mainImage = new NativeImageAsset(200, 200,
    200, 200);
mainImage.setImageType(NativeImageAsset.ImageType.MAIN);
mainImage.setRequired(true);

NativeDataAsset sponsored = new NativeDataAsset();
sponsored.setLen(90);
sponsored.setDataTyp(NativeDataAsset.DataType.SPONSORED);
sponsored.setRequired(true);

NativeDataAsset description = new NativeDataAsset();
description.setDataTyp(NativeDataAsset.DataType.DES);
description.setRequired(true);

NativeDataAsset ctaText = new NativeDataAsset();
ctaText.setDataTyp(NativeDataAsset.DataType.CTATEXT);
ctaText.setRequired(true);

List<NativeAsset> assets = Arrays.asList(
    title,
    icon,
    mainImage,
    sponsored,
    description,
    ctaText
);

return new AppstockNativeAdConfig.Builder()
    .setContextType(NativeContextType.SOCIAL_CENTRIC)
    .setPlacementType(NativePlacementType.CONTENT_FEED)
    .setContextSubType(NativeContextSubtype.GENERAL_SOCIAL)
    .setNativeEventTrackers(Collections.singletonList(eventTracker))
    .setNativeAssets(assets)
    .build();
}

```

Once the ad is loaded you can utilize it's basic properties inspecting [AppstockNativeAd.adInfo](#) structure.

AppstockNativeAdConfig

The class responsible for configuration native ad parameters. Here is a brief description of parameters for the builder:

- **setNativeAssets** - an array of assets associated with the native ad.
- **setNativeEventTrackers** - an array of event trackers used for tracking native ad events.
- **setContextType** - the context type for the native ad (e.g., content, social).

- **setContextSubType** - a more detailed context in which the ad appears.
- **setPlacementType** - the design/format/layout of the ad unit being offered.
- **setPlacementCount** - the number of identical placements in this layout. Default is 1.
- **setSequence** - the sequence number of the ad in a series. Default is 0.
- **setAUrlSupport** - whether the supply source / impression supports returning an asseturl instead of an asset object. Default is 0 (unsupported).
- **setDUrlSupport** - whether the supply source / impression supports returning a dco url instead of an asset object. Default is 0 (unsupported).
- **setPrivacy** - set to 1 when the native ad support buyer-specific privacy notice. Default is 0.
- **setExt** - a dictionary to hold any additional data as key-value pairs.

Once the ad is loaded, the SDK provides you with a `AppstockNativeAd` object in the callback of the `loadAd()` method. This object contains ad assets that you should apply to the native ad layout.

Assets configuration

NativeTitleAsset

Request asset for the advertisement title. Parameters:

- `length` - the length of the title.
- `required` - flag whether the field is mandatory.
- `ext` - additional json data.

Kotlin:

```
val title = NativeTitleAsset()
title.setLength(90)
title.isRequired = true
```

Java:

```
NativeTitleAsset title = new NativeTitleAsset();
title.setLength(90);
title.setRequired(true);
```

NativeDataAsset

Request asset for any text data. Parameters:

- `length` - the length of the data.
- `type` - the type of data asset (e.g., sponsored, description).
- `required` - flag whether the field is mandatory.

- ext - additional json data.

Kotlin:

```
val sponsored = NativeDataAsset()
sponsored.len = 90
sponsored.dataType = NativeDataAsset.DataType.SPONSORED
sponsored.isRequired = true
```

Java:

```
NativeDataAsset sponsored = new NativeDataAsset();
sponsored.setLen(90);
sponsored.setDataType(NativeDataAsset.DataType.SPONSORED);
sponsored.setRequired(true);
```

Available data types:

- SPONSORED - represents sponsored content.
- DESC - represents a description.
- RATING - represents a rating.
- LIKES - represents likes.
- DOWNLOADS - represents download count.
- PRICE - represents the price.
- SALEPRICE - represents a sale price.
- PHONE - represents a phone number.
- ADDRESS - represents an address.
- DESC2 - represents a secondary description.
- DISPLAYURL - represents a display URL.
- CTATEXT - represents call-to-action text.
- CUSTOM - represents a custom data asset. You can set custom exchange id.

ImageDataAsset

Request asset for image. In the example below we request ad with desired size 200x200, and minimal size: 30x30. Parameters:

- imageType - the type of image asset (e.g., icon, main image).
- width, height - the desired size of the image.
- minWidth, minHeight - the minimum allowed size of the image.
- mimes - an array of supported MIME types for the image.
- required - flag whether the field is mandatory.
- ext - additional json data.

Kotlin:

```
val mainImage = NativeImageAsset(200, 200, 30, 30)
mainImage.imageType = NativeImageAsset.ImageType.MAIN
mainImage.isRequired = true
mainImage.addMime("image/jpeg")
```

Java:

```

NativeImageAsset mainImage = new NativeImageAsset(200, 200,
    200, 200);
mainImage.setImageType(NativeImageAsset.ImageType.MAIN);
mainImage.setRequired(true);
mainImage.addMime("image/jpeg")

```

Available data types:

- ICON - represents an icon image asset.
- MAIN - represents a main image asset.
- CUSTOM - represents a custom image asset.

Native event tracking

You can also specify what type of event tracking is supported. For that you need to set `setEventTrackers` setter.

Kotlin:

```

val eventTrackingMethods = ArrayList(
    Arrays.asList(
        NativeEventTracker.EventTrackingMethod.IMAGE,
        NativeEventTracker.EventTrackingMethod.JS
    )
)
val eventTracker = NativeEventTracker(
    NativeEventTracker.EventType.IMPRESSSION,
    eventTrackingMethods
)

```

Java:

```

ArrayList<NativeEventTracker.EventTrackingMethod>
eventTrackingMethods = new ArrayList<>(
    Arrays.asList(
        NativeEventTracker.EventTrackingMethod.IMAGE,
        NativeEventTracker.EventTrackingMethod.JS
    )
);
NativeEventTracker eventTracker = new NativeEventTracker(
    NativeEventTracker.EventType.IMPRESSSION,
    eventTrackingMethods
);

```

The event method configures desired tracking method: - Impression - represents an impression event.

- ViewableImpression50 - represents a 50% viewable impression event.
- ViewableImpression100 - represents a 100% viewable impression event.
- ViewableVideoImpression50 - represents a 50% viewable video impression event.
- Custom - represents a custom event type.

The event type configures desired tracking type: - Image - represents image-based event tracking.
- JS - represents JavaScript-based event tracking.
- Custom - represents a custom tracking method.

Native view for the ad

Once the ad is loaded, the SDK provides you with a AppstockNativeAd object in the callback of the loadAd() method. This object contains ad assets that you should apply to the native ad layout.

Kotlin:

```
private fun createNativeView(ad: AppstockNativeAd) {
    val nativeContainer = View.inflate(this,
        R.layout.layout_native, null)

    val icon =
        nativeContainer.findViewById<ImageView>(R.id.imgIcon)
    ImageUtils.download(ad.iconUrl, icon)

    val title =
        nativeContainer.findViewById<TextView>(R.id.tvTitle)
    title.text = ad.title

    val image =
        nativeContainer.findViewById<ImageView>(R.id.imgImage)
    ImageUtils.download(ad.imageUrl, image)

    val description =
        nativeContainer.findViewById<TextView>(R.id.tvDesc)
    description.text = ad.description

    val cta = nativeContainer.findViewById<Button>(R.id.btnCta)
    cta.text = ad.callToAction

    containerForAd.addView(nativeContainer)

    ad.registerView(nativeContainer, Lists.newArrayList(icon,
        title, image, description, cta), createListener())
}
```

Java:

```
private void createNativeView(AppstockNativeAd ad) {
    View nativeContainer = View.inflate(this,
        R.layout.layout_native, null);

    ImageView icon = nativeContainer.findViewById(R.id.imgIcon);
    ImageUtils.download(ad.getIconUrl(), icon);

    TextView title = nativeContainer.findViewById(R.id.tvTitle);
    title.setText(ad.getTitle());
}
```

```

    ImageView image = nativeContainer.findViewById(R.id.imgImage);
    ImageUtils.download(ad.getImageUrl(), image);

    TextView description =
        nativeContainer.findViewById(R.id.tvDesc);
    description.setText(ad.getDescription());

    Button cta = nativeContainer.findViewById(R.id.btnCta);
    cta.setText(ad.getCallToAction());
    getContainerForAd().addView(nativeContainer);

    ad.registerView(nativeContainer, Arrays.asList(icon, title,
        image, description, cta), createListener());
}

```

If you need to manage stages of the ad lifecycle you should implement the AppstockNativeAdUnitEventListener interface.

Kotlin:

```

private fun createListener(): AppstockNativeAdUnitEventListener {
    return object : AppstockNativeAdUnitEventListener {
        override fun onAdImpression() {
            // Called when ad displayed
            Log.d(TAG, "Ad displayed on the screen")
        }

        override fun onAdClicked() {
            // Called when ad clicked
            Log.d(TAG, "Ad clicked")
        }

        override fun onAdExpired() {
            // Called when ad expired
            Log.d(TAG, "Ad expired")
        }
    }
}

```

Java:

```

private static AppstockNativeAdUnitEventListener createListener()
{
    return new AppstockNativeAdUnitEventListener() {
        @Override
        public void onAdImpression() {
            // Called when ad displayed
            Log.d(TAG, "Ad displayed on the screen");
        }

        @Override
        public void onAdClicked() {
            // Called when ad clicked

```

```

        Log.d(TAG, "Ad clicked");
    }

    @Override
    public void onAdExpired() {
        // Called when ad expired
        Log.d(TAG, "Ad expired");
    }
};
}

```

Appstock Android SDK - Parametrisation

Configuration via AppstockTargeting class

The AppstockTargeting class provided a set of properties that allow to enrich the ad request.

Method	Description	OpenRTB Field
AppstockTargeting.setPublisherName()	App's publisher name	app.publisher.name
AppstockTargeting.setDomain()	Domain of the app (e.g., mygame.foo.com).	app.domain
AppstockTargeting.setStoreUrl()	App store URL for an installed app.	app.storeurl
AppstockTargeting.setSubjectToCOPPA()	Integer flag indicating if this request is subject to the COPPA regulations established by the USA FTC, where 0 = no, 1 = yes	regs.coppa
AppstockTargeting.setExternalUserId()	App store URL for an installed app.	user.ext.eids[]
AppstockTargeting.setUserLatLong()	Location of the user's home base defined by a Geo object This is not necessarily their current location.	user.geo.lat/lon
AppstockTargeting.setUserKeywords()	Comma separated list of keywords, interests, or intent.	user.keywords
AppstockTargeting.setUserCustomData()	Optional feature to pass bidder data that was set in the exchange's cookie. The string must be in base85 cookie safe	user.customdata

Method	Description	OpenRTB Field
	characters and be in any format. Proper JSON encoding must be used to include “escaped” quotation marks.	

Usage examples:

Kotlin:

```
AppstockTargeting.setPublisherName("appstock")
AppstockTargeting.setDomain("appstock.com")
AppstockTargeting.setStoreUrl("https://google.play.url")
AppstockTargeting.setSubjectToCOPPA(true)
AppstockTargeting.setExternalUserId(ExternalUserId("adserver.org",
    "111111111111", null, mapOf("rtiPartner" to "TDID")))
AppstockTargeting.setUserLatLng(35.82348f, 23.8243823f)
AppstockTargeting.setUserKeywords(setOf("cats", "hobby",
    "sport"))
AppstockTargeting.setUserCustomData("custom")
Appstock.initializeSdk(context, PARTNER_KEY)
```

Java:

```
AppstockTargeting.setPublisherName("appstock");
AppstockTargeting.setDomain("appstock.com");
AppstockTargeting.setStoreUrl("https://google.play.url");
AppstockTargeting.setSubjectToCOPPA(true);
AppstockTargeting.setUserLatLng(35.82348f, 23.8243823f);
AppstockTargeting.setUserCustomData("custom");

HashMap<String, Object> externalUserIdExt = new HashMap<>();
externalUserIdExt.put("rtiPartner", "TDID");
AppstockTargeting.setExternalUserId(new
    ExternalUserId("adserver.org", "111111111111", null,
        externalUserIdExt));

HashSet<String> keywords = new HashSet<>();
keywords.add("cats");
keywords.add("sport");
AppstockTargeting.setUserKeywords(keywords);

Appstock.initializeSdk(context, PARTNER_KEY);
```

Configuration via Appstock class

Public methods:

- initializeSdk - initializes the SDK.
- setEndpointId - a unique identifier generated on the platform's UI.

- `setExternalUserIds` - an array containing objects that hold external user ID parameters.
- `setAssignNativeAssetId` - determines whether the asset ID for native ads should be manually assigned.
- `setDebugRequests` - sets debug mode for verbose logging of requests and responses bodies (use with `setLogLevel(LogLevel.DEBUG)`)
- `setLogLevel` - sets the desired verbosity level for the SDK's logs.
- `setTimeoutMillis` - set network HTTP timeout for all requests.
- `setCreativeFactoryTimeout` - timeout for parsing and render banner ads content (default: 6000).
- `setCreativeFactoryTimeoutPreRenderContent` - timeout for parsing and render video ads content (default: 30000).

Kotlin:

```
Appstock.setEndpointId("endpoint_id")
Appstock.getAssignNativeAssetId(true)
Appstock.setDebugRequests(true)
Appstock.setLogLevel(Appstock.LogLevel.DEBUG)

Appstock.setTimeoutMillis(3000)
Appstock.setCreativeFactoryTimeout(10000)
Appstock.setCreativeFactoryTimeoutPreRenderContent(40000)

val externalUserIdExt = HashMap<String, Any>()
externalUserIdExt["rtiPartner"] = "TDID"
val externalUserId = ExternalUserId("adserver.org",
    "11111111111", null, externalUserIdExt)
Appstock.setExternalUserIds(List.of(externalUserId))

Appstock.initializeSdk(this, PARTNER_KEY)
```

Java:

```
Appstock.setEndpointId(ENDPOINT_ID);
Appstock.getAssignNativeAssetId(true);
Appstock.setDebugRequests(true);
Appstock.setLogLevel(Appstock.LogLevel.DEBUG);

Appstock.setTimeoutMillis(3000);
Appstock.setCreativeFactoryTimeout(10_000);
Appstock.setCreativeFactoryTimeoutPreRenderContent(40_000);

HashMap<String, Object> externalUserIdExt = new HashMap<>();
externalUserIdExt.put("rtiPartner", "TDID");
ExternalUserId externalUserId = new
    ExternalUserId("adserver.org", "11111111111", null,
        externalUserIdExt);
Appstock.setExternalUserIds(List.of(externalUserId));

Appstock.initializeSdk(this, PARTNER_KEY);
```

Appstock Android SDK - Utils

Appstock Ad Info

The class AdInfo provides additional information about the received ad. Currently, it provides the ad price and later this object will be extended.

This object is provided to the loading listeners for all ad unit types.

Kotlin:

```
object : AppstockAdViewListener {  
    override fun onAdLoaded(adView: AppstockAdView, adInfo:  
        AdInfo) {  
        val adPrice = adInfo.getPrice()  
    }  
}
```

Java:

```
AppstockAdViewListener listener = new AppstockAdViewListener() {  
    @Override  
    public void onAdLoaded(AppstockAdView adView, AdInfo adInfo) {  
        Double adPrice = adInfo.getPrice();  
    }  
};
```

Appstock Android SDK - Consent Management

Appstock SDK reads consent data provided by CMPs from User Settings and sends it in the ad request. You shouldn't do anything except to be sure that the CMP SDKs write data into particular place in the user storage defined by the IAB standards.

The following table describes which data is used by SDK and how exactly:

Storage Key	Description	
TCF v2	Number: 1 GDPR applies in current context 0 - GDPR does not apply in current context Unset - undetermined (default before initialization)	regs.ext.gdpr
IABTCF_gdprApplies		
IABTCF_TCString		user.ext.consent

Storage Key	Description	
IABTCF_PurposeConsents	String: Full encoded TC string Binary String: The '0' or '1' at position n – where n's indexing begins at 0 – indicates the consent status for purpose ID n+1; false and true respectively. eg. '1' at index 0 is consent true for purpose ID 1	Defines the ability of SDK to collect device info.
<u>CCPA</u>		
IABUSPrivacy_String	String: Aligns with IAB OpenRTB CCPA Advisory. The String encodes all choices and information.	regs.ext.us_privacy
<u>GPP</u>		
IABGPP_HDR_GppString	Full consent string in its encoded form	regs.gpp
IABGPP_GppSID	Section ID(s) considered to be in force. Multiple IDs are separated by underscore, e.g. "2_3"	regs.gpp_sid

Android Mediation - AdMob

To integrate the Appstock SDK into your app, you should add the following dependency into the app/build.gradle file and sync Gradle:

```
dependencies {
    implementation("com.appstock:appstock-sdk:1.1.1")
    implementation("com.appstock:appstock-sdk-google-mobile-ads-adapters:1.1.1")
}
```

Add this custom maven repository URL into the project/settings.gradle file:

```
dependencyResolutionManagement {
    repositories {
        maven {
            setUrl("https://public-sdk.al-ad.com/android/")
        }
    }
}
```

Initialize Appstock SDK in the `.onCreate()` method by calling `Appstock.initializeSdk()`. This step can be skipped when `partner_key` is set.

Kotlin:

```
class DemoApplication : Application() {
    override fun onCreate() {
        super.onCreate()

        // Initialize Appstock SDK
        Appstock.initializeSdk(this, PARTNER_KEY)
    }
}
```

Java:

```
public class DemoApplication extends Application {
    @Override
    public void onCreate() {
        super.onCreate();

        // Initialize Appstock SDK
        Appstock.initializeSdk(this, PARTNER_KEY);
    }
}
```

In order to add Appstock to the waterfall, you need to create a custom event in your AdMob account and then add this event to the respective mediation groups.

To create a Appstock custom event, follow the instructions:

1. Sign in to your [AdMob account](#).
2. Click **Mediation** in the sidebar.



Google AdMob



Home



Apps



Reports



Mediation



Campaigns



Policy centre



Privacy & messaging



Blocking controls



Payments



Change history

BETA



Settings

NEW

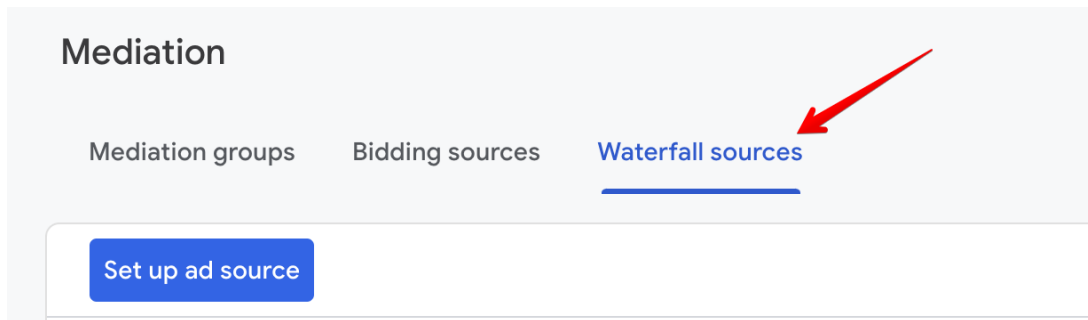


Help

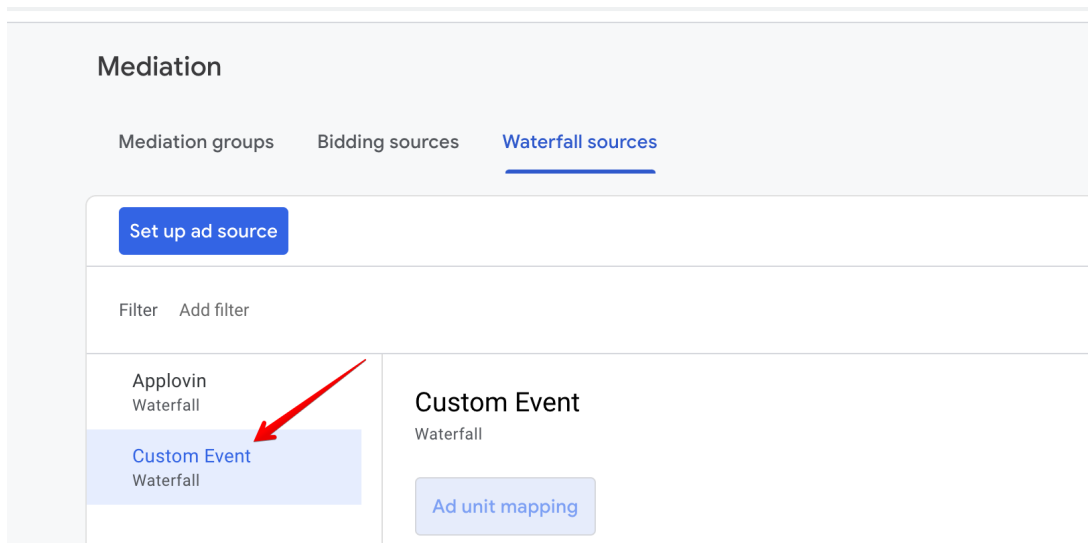


Feedback

1. Click the **Waterfall sources** tab.



1. Click **Custom Event**.



1. Find your app in the list and click **Manage mappings**.

Mediation


Mediation groups Bidding sources Waterfall sources

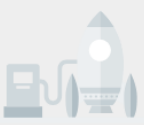
Custom Event
Waterfall

Waterfall

[Ad unit mapping](#)

All visible apps ▾

Apps ↑	App ID
 Your Application Free Android	View




No ad units have been mapped yet


[Add mapping](#)

1. Click **Add mapping**. To include multiple custom events, you'll need to set up additional mappings.

Edit ad unit mapping

Custom Event
Waterfall

 Your Application
Free | Android
ca-app-pub-2844566227051243~2122655599

AdMob ad unit	Custom Event
 Banner Banner	Add mapping

1. Add the mapping details, including a mapping name. Enter a class name (required) and a parameter (optional) for each ad unit. Typically, the optional parameter contains a JSON that contains IDs (placement ID, endpoint ID) that will be used by the custom event to load ads.

Parameters:

- **placement_id** - unique identifier generated on the platform's UI. You have to set or placement_id or endpoint_id.
- **endpoint_id** - unique identifier generated on the platform's UI. You have to set or placement_id or endpoint_id.
- **sizes** (optional) - array of the ad sizes. You can specify width in w field and height in h field. Make sure you've provided both width and height values;
- **ad_formats** (optional) - array of the ad formats. You can pass banner or video ad formats. Note that the multiformat request is not supported for the banner ad, so it uses only first value.
- **partner_key** (optional) - partner key string. If set you can skip function call `Appstock.initializeSdk()`. AdMob will initialize the SDK automatically. This value can be set only for one ad unit.

Examples:


```
{
  "placement_id": "4",
  "sizes": [
    {
      "w": 729,
      "h": 90
    }
  ],
  "ad_formats": [
    "video"
  ],
  "partner_key": "your_value"
}

{
  "endpoint_id": "1",
  "sizes": [
    {
      "w": 320,
      "h": 50
    },
    {
      "w": 300,
      "h": 250
    }
  ],
  "ad_formats": ["banner"]
}
```

Class Name: **com.appstock.sdk.admob.AppstockGadMediationAdapter**

AdMob ad unit

Custom Event



Banner
Banner

Mapping name

Appstock

Class Name

idmob.AppstockGadMediationAdapter

Parameter (optional)

{"placement_id": "5"}

[Add mapping](#)

Show rows

10

1 - 1 of 1

|<

<

>

>|

1. Click **Save**.

After you've finished setting up your custom event, you're ready to add it to a mediation group. To add your ad source to an existing mediation group:

1. Sign in to your AdMob account.
2. Click **Mediation** in the sidebar.



Google AdMob



Home



Apps



Reports



Mediation



Campaigns



Policy centre



Privacy & messaging



Blocking controls



Payments



Change history

BETA



Settings

NEW



Help



Feedback

1. In the **Mediation group** tab, click the name of the mediation group to which you're adding the ad source.

Mediation

[Mediation groups](#)[Bidding sources](#)[Waterfall sources](#)


Mediation groups don't waterfall or daisy-chain. Ad requests matching multiple groups will use the one with the highest priority. Ad requests that can't be matched to any group will be filled by the AdMob (default) group. [Learn more](#)

[Create mediation group](#)[Change status](#)[Copy](#)

1. In the Waterfall ad sources table, click **Add custom event**.

Waterfall

[Add ad source](#)[Add custom event](#)[Change status](#)

<input type="checkbox"/>	Status	Ad source	Order (by eCPM)	Ad unit mapping	Optimisation status
 <p>No waterfall ad sources have been added.</p>					

1. Enter a descriptive label for the event. Enter a manual eCPM to use for this custom event. The eCPM will be used to dynamically position the event in the mediation waterfall where it will compete with other ad sources to fill ad requests.

Add custom event

Label ?

Appstock Banner

15 / 255

Manual eCPM (\$ USD) ?

US\$ 1.0



Enter a manual eCPM for this custom event. The eCPM determines the order of the ad source to serve ads.


Cancel

Continue

1. Click **Continue**.
2. Select an existing mapping to use for this custom event or click **Add mapping** to set up a new mapping. To use multiple custom events, you'll have to create an additional mapping for each custom event.

Map ad units: Appstock

Map your ad units to this custom event. ?

AdMob	Appstock
<div> Your Application Free Android</div> <div>Banner ca-app-pub-2844566227051243/9809573926</div>	<div><input type="text" value="Search"/></div> <div>Appstock Label: Appstock Class Name: com.appstock.sdk.admob.AppstockGadMediationAdapter Parameter: {"placement_id":"5"}</div> <div>Add additional mapping</div>

1. Click **Done**.

Map ad units: Appstock

Map your ad units to this custom event. [?](#)

AdMob



Your Application
Free | Android

Banner

ca-app-pub-2844566227051243/9809573926

Appstock

Appstock

Label: Appstock

Class Name: com.appstock.sdk.admob.AppstockGadMediationAd

Parameter: {"placement_id": "5"}

Cancel

Done

1. Click **Save**. The mediation group will be saved.

Waterfall [?](#)

[Add ad source](#) [Add custom event](#) [Change status](#) [▼](#)

<input type="checkbox"/>	Status	Ad source	Order (by eCPM) ?
<input type="checkbox"/>	✓	Appstock	US\$1.00

[Save](#) [Cancel](#)

Android Mediation - IronSource

To integrate the Appstock SDK into your app, you should add the following dependency into the `app/build.gradle` file and sync Gradle:

```
dependencies {  
    implementation("com.appstock:appstock-sdk:1.1.1")  
    implementation("com.appstock:appstock-sdk-ironsource-adapters:  
        1.1.1")  
}
```

Add this custom maven repository URL into the `project/settings.gradle` file:

```
dependencyResolutionManagement {  
    repositories {  
        maven {  
            setUrl("https://public-sdk.al-ad.com/android/")  
        }  
    }  
}
```

```
}  
}
```

Initialize Appstock SDK in the `.onCreate()` method by calling `Appstock.initializeSdk()`.

Kotlin:

```
class DemoApplication : Application() {  
    override fun onCreate() {  
        super.onCreate()  
  
        // Initialize Appstock SDK  
        Appstock.initializeSdk(this, PARTNER_KEY)  
    }  
}
```

Java:

```
public class DemoApplication extends Application {  
    @Override  
    public void onCreate() {  
        super.onCreate();  
  
        // Initialize Appstock SDK  
        Appstock.initializeSdk(this, PARTNER_KEY);  
    }  
}
```

In order to add Appstock to the waterfall, you need to create a custom SDK network in your IronSource account and then add this ad source to the desired ad units.

To create the Appstock SDK network, follow the instructions:

1. Sign in to your [IronSource account](#).
2. Click **SDK networks** in the sidebar (**LevelPlay** -> **Setup**).
3. Click **Manage networks** and **Custom Adapter**.

Unity LevelPlay

Apps +

Mediation

Reports ▾

- Performance
- User activity
- Real time pivot ↗
- Cohorts
- Report generator
- Activity logs

Management ▾

- Mediation
- Segments
- A/B

Setup ▾

- Ad units
- Placements
- SDK networks

SDK Networks Setup

🔔 Your account is pending approval. We'll notify you by email when your account

Available Networks 1/24 [Manage Networks ▾](#)

ironSource	+	APPROVIN	+
Direct Deals	+	DT Exchange	+
liftoff	+	mob6	+
Pangle	+	smaato	+
Custom Adapter	+		

BIDDING

1. Write network key 15c03f8f1 and click **Save**.

Custom Adapter ×

Network Key [Enter Key →](#)

1. Fill your **partnerKey** for the Appstock platform and click **Save**.

Custom Adapter



Network Name Appstock

partnerKey

appstock-demo

Reported Revenue

- ☒ Rate based revenue • Revenue will be reported based on the rate you set
- ☐ Reporting API • Revenue will be reported based on the network's reporting API

Cancel

Save

1. Click **Setup** in the available networks list.

Available Networks 2/25 [Manage Networks](#)


APPLICATIONS (1)	
Appstock Internal Android (No Networks)	Appstock Internal APP KEY: 1927500d


BIDDING
IronSource


CUSTOM
Appstock Setup


1. Create network instances for all placements you have in the Appstock platform.
Fill **placementId**, **Mediation Groups** and **Rate** for desired type of the ad.


App Settings

 Appstock Internal android

 Appstock

 Rewarded Video

 Interstitial

 Banner

Instance Name

Banner 320x50

placementId

3

Mediation Groups

All Countries

Rate (Optional) ⓘ

\$ 10

Instance Name

Banner 300x250

placementId

4

Mediation Groups

All Countries

Rate (Optional) ⓘ

\$ 10

+ Add Network Instance (Up to 10 max.)

Cancel

Save

1. Click **Save**.

After setting up the SDK network it the Appstock adapters will be automatically applied in the application using reflection.

Android Mediation - TopOn

To integrate the Appstock SDK into your app, you should add the following dependency into the app/build.gradle file and sync Gradle:

```
dependencies {
    implementation("com.appstock:appstock-sdk:1.1.1")
    implementation("com.appstock:appstock-sdk-topon-adapters:
        1.1.1")
}
```

Add this custom maven repository URL into the project/settings.gradle file:

```
dependencyResolutionManagement {
    repositories {
        maven {
            setUrl("https://public-sdk.al-ad.com/android/")
        }
    }
}
```

Initialize Appstock SDK in the `.onCreate()` method by calling `Appstock.initializeSdk()`. You can skip this step if you have set `partner_key` parameter in the TopOn account for **all ad units**.

Kotlin:

```
class DemoApplication : Application() {
    override fun onCreate() {
        super.onCreate()

        // Initialize Appstock SDK
        Appstock.initializeSdk(this, PARTNER_KEY)
    }
}
```

Java:

```
public class DemoApplication extends Application {
    @Override
    public void onCreate() {
        super.onCreate();

        // Initialize Appstock SDK
        Appstock.initializeSdk(this, PARTNER_KEY);
    }
}
```

In order to add Appstock to the waterfall, you need to create a custom mediation network in your TopOn account and then add this ad source to the desired placement.

To create the Appstock ad source, follow the instructions:

1. Sign in to your TopOn account.
2. Click **Network** in the sidebar and click **Add custom network firm**.
3. Fill the required fields. For **Adapter class name** use these values:
 - Banner - **com.appstock.sdk.topon.AppstockBannerAdapter**
 - Interstitial - **com.appstock.sdk.topon.AppstockInterstitialAdapter**

• Native - **com.appstock.sdk.topon.AppstockNativeAdapter**

Edit Network Account ✕

Network Firm Name

Appstock 8/30

Account Name ?

Default 7/30

Parameters of app and ad source dimensions ?

App ⊕ Add Parameter

Unit ⊕ Add Parameter

❗ The parameter name will be displayed in the backend, and the key is used for SDK distribution. Please ensure that the key can be recognized by the adapter. Once the key is saved, it cannot be modified, so please confirm with the technical team before filling it out.

Adapter's class names ?

Android

RV

Example: com.customnetwork.android.rv

Interstitial

com.appstock.sdk.topon.AppstockInterstitialAdapter

Banner

com.appstock.sdk.topon.AppstockBannerAdapter

Native

com.appstock.sdk.topon.AppstockNativeAdapter

Splash

Example: com.customnetwork.android.splash

1. Click **Confirm**.
2. Go to **Mediation** page in the sidebar.
3. Select your app and placement id and click **Add ad source**.
4. Fill the required fields. It's important to set **Price** and **Ad Source Dimension Parameters** (at least one, placement or endpoint id).

Fields for **Ad Source Dimension Parameters**:

- **placement_id** - unique identifier generated on the platform's UI.
- **endpoint_id** - unique identifier generated on the platform's UI.
- **partner_key** (optional) - unique partner key string. If it's set, you can skip calling `initializeSdk()`, but it requires applying the partner key to all ad units.

Edit Ad Source

×

Segment

Default

Ad Platform

Appstock

User Name

Default

App Dimension Parameters

Ad Source Name

Appstock_banner_1

17/50

Ad Source Dimension Parameters

According to the custom network requirements, input the ad source dimension parameters, which are optional; for example, ad_unit_id=12345.

placement_id

=

3

⊖

partner_key

=

appstock-demo

⊖

⊕ Add Params

Header Bidding

?

No

Price(\$)

?

10.00

How to find the parameters ?

↗

Cancel

Confirm

1. Click **Confirm**.

Banner ad type

For the banner ad type it's important to set the size of TopOn banner based on screen size and the standardized ad size for Appstock banner (f.e. 320x50, 300x250, 728x90).

Kotlin:

```

val width = 320
val height = 50
val adView = ATBannerView(this)

val localExtras = HashMap<String, Any>()
localExtras[ATAdConst.KEY.AD_WIDTH] =
    resources.displayMetrics.widthPixels
localExtras[ATAdConst.KEY.AD_HEIGHT] = height *
    resources.displayMetrics.density
localExtras[AppstockBannerAdapter.KEY_WIDTH] = width
localExtras[AppstockBannerAdapter.KEY_HEIGHT] = height
adView.setLocalExtra(localExtras)

```

Java:


```

int width = 320;
int height = 50;
ATBannerView adView = new ATBannerView(this);

HashMap<String, Object> localExtras = new HashMap<>();
localExtras.put(ATAdConst.KEY.AD_WIDTH,
    getResources().getDisplayMetrics().widthPixels);
localExtras.put(ATAdConst.KEY.AD_HEIGHT, height *
    getResources().getDisplayMetrics().density);
localExtras.put(AppstockBannerAdapter.KEY_WIDTH, width);
localExtras.put(AppstockBannerAdapter.KEY_HEIGHT, height);
adView.setLocalExtra(localExtras);

```

Interstitial ad type

The interstitial ad type doesn't require any additional setup in code. You just have to add the Appstock mediation for the interstitial ad unit in the TopOn server.

Native ad type

For the native ad unit it's important to add native assets.

Kotlin:

```

private fun createAd() {
    // 1. Create ad unit
    val adUnit = ATNative(this, AD_UNIT_ID, createListener()).also {
        { adUnit = it }

        // 2. Configure ad unit with native config
        val localExtras = HashMap<String, Any>()
        localExtras[AppstockNativeAdConfig.KEY_EXTRAS] =
            createNativeConfig()
        adUnit.setLocalExtra(localExtras)

        // 3. Load ad
        adUnit.makeAdRequest()
    }

    private fun createNativeConfig(): AppstockNativeAdConfig {
        val eventTrackingMethods = ArrayList(
            Arrays.asList(
                NativeEventTracker.EventTrackingMethod.IMAGE,
                NativeEventTracker.EventTrackingMethod.JS
            )
        )
        val eventTracker = NativeEventTracker(
            NativeEventTracker.EventType.IMPRESSION,
            eventTrackingMethods
        )

        val title = NativeTitleAsset()
    }
}

```

```

        title.setLength(90)
        title.isRequired = true

        val icon = NativeImageAsset(20, 20, 20, 20)
        icon.imageType = NativeImageAsset.ImageType.ICON
        icon.isRequired = true

        val mainImage = NativeImageAsset(200, 200, 200, 200)
        mainImage.imageType = NativeImageAsset.ImageType.MAIN
        mainImage.isRequired = true

        val sponsored = NativeDataAsset()
        sponsored.len = 90
        sponsored.dataType = NativeDataAsset.DataType.SPONSORED
        sponsored.isRequired = true

        val description = NativeDataAsset()
        description.dataType = NativeDataAsset.DataType.DISC
        description.isRequired = true

        val ctaText = NativeDataAsset()
        ctaText.dataType = NativeDataAsset.DataType.CTATEXT
        ctaText.isRequired = true

        val assets = Arrays.asList(
            title,
            icon,
            mainImage,
            sponsored,
            description,
            ctaText
        )

        return AppstockNativeAdConfig.Builder()
            .setContextType(NativeContextType.SOCIAL_CENTRIC)
            .setPlacementType(NativePlacementType.CONTENT_FEED)
            .setContextSubType(NativeContextSubtype.GENERAL_SOCIAL)
            .setNativeEventTrackers(listOf(eventTracker))
            .setNativeAssets(assets)
            .build()
    }

```

Java:

```

private void createAd() {
    // 1. Create ad unit
    adUnit = new ATNative(this, AD_UNIT_ID, createListener());

    // 2. Configure ad unit with native config
    HashMap<String, Object> localExtras = new HashMap<>();
    localExtras.put(AppstockNativeAdConfig.KEY_EXTRAS,
        createNativeConfig());
}

```

```

        adUnit.setLocalExtra(localExtras);

        // 3. Load ad
        adUnit.makeAdRequest();
    }

    private AppstockNativeAdConfig createNativeConfig() {
        ArrayList<NativeEventTracker.EventTrackingMethod>
            eventTrackingMethods = new ArrayList<>()
            Arrays.asList(

                NativeEventTracker.EventTrackingMethod.IMAGE,
                NativeEventTracker.EventTrackingMethod.JS

            )
        );
        NativeEventTracker eventTracker = new NativeEventTracker(
            NativeEventTracker.EventType.IMPRESSION,
            eventTrackingMethods
        );

        NativeTitleAsset title = new NativeTitleAsset();
        title.setLength(90);
        title.setRequired(true);

        NativeImageAsset icon = new NativeImageAsset(20, 20, 20,
            20);
        icon.setImageType(NativeImageAsset.ImageType.ICON);
        icon.setRequired(true);

        NativeImageAsset mainImage = new NativeImageAsset(200,
            200, 200, 200);
        mainImage.setImageType(NativeImageAsset.ImageType.MAIN);
        mainImage.setRequired(true);

        NativeDataAsset sponsored = new NativeDataAsset();
        sponsored.setLen(90);
        sponsored.setDataTypes(NativeDataAsset.DataType.SPONSORED);
        sponsored.setRequired(true);

        NativeDataAsset description = new NativeDataAsset();
        description.setDataTypes(NativeDataAsset.DataType.DESCR);
        description.setRequired(true);

        NativeDataAsset ctaText = new NativeDataAsset();
        ctaText.setDataTypes(NativeDataAsset.DataType.CTATEXT);
        ctaText.setRequired(true);

        List<NativeAsset> assets = Arrays.asList(
            title,
            icon,
            mainImage,
            sponsored,

```

```

        description,
        ctaText
    );

    return new AppstockNativeAdConfig.Builder()
        .setContextType(NativeContextType.SOCIAL_CENTRIC)
        .setPlacementType(NativePlacementType.CONTENT_FEED)
        .setContextSubType(NativeContextSubtype.GENERAL_SOCIAL)
        .setNativeEventTrackers(Collections.singletonList(eventTracker))
        .setNativeAssets(assets)
        .build();
}

```

Android Mediation - AppLovin

To integrate the Appstock SDK into your app, you should add the following dependency into the app/build.gradle file and sync Gradle:

```

dependencies {
    implementation("com.appstock:appstock-sdk:1.1.1")
    implementation("com.appstock:appstock-sdk-applovin-adapters:1.1.1")
}

```

Add this custom maven repository URL into the project/settings.gradle file:

```

dependencyResolutionManagement {
    repositories {
        maven {
            setUrl("https://public-sdk.al-ad.com/android/")
        }
    }
}

```

Initialize Appstock SDK in the .onCreate() method by calling Appstock.initializeSdk().

Kotlin:

```

class DemoApplication : Application() {
    override fun onCreate() {
        super.onCreate()

        // Initialize Appstock SDK
        Appstock.initializeSdk(this, PARTNER_KEY)
    }
}

```

Java:

```
public class DemoApplication extends Application {  
    @Override  
    public void onCreate() {  
        super.onCreate();  
  
        // Initialize Appstock SDK  
        Appstock.initializeSdk(this, PARTNER_KEY);  
    }  
}
```

To integrate the Appstock into your AppLovin monetization stack, you should enable a Appstock SDK ad network and add it to the respective ad units.

1. In the MAX Dashboard, select MAX > Mediation > Manage > Networks.



APPLOVIN

AppLovin

AppDiscovery



MAX

Mediation

ANALYZE

Performance

User Activity

Advanced Reporting

ALX Reporting

Cohorts

ATT Consent

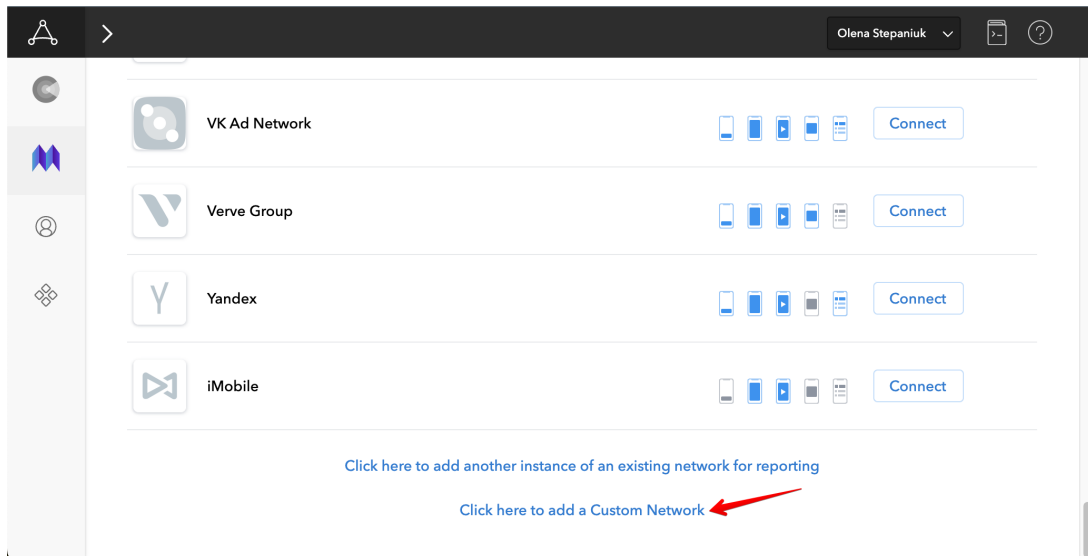
A/B Tests

Global SKA Report

MANAGE

Ad Units

1. Click **Click here to add a Custom Network** at the bottom of the page. The **Create Custom Network** page appears.



1. Add the information about your custom network:

Network Type : **Choose SDK.**

Name : **Appstock.**

Android Adapter Class Name:


`com.applovin.mediation.adapters.AppstockAppLovinMediationAdapter`

Manage Network

Network Type



SDK

Custom Network Name 

AppStock Network

iOS Adapter Class Name

AppstockAppLovinAdapter

Android / Fire OS Adapter Class Name

com.applovin.mediation.adapters.AppstockAppLovinMediationAdapter

✓ Save

1. Open MAX > Mediation > Manage > Ad Units in the MAX dashboard.



APPLOVIN



AppDiscovery



MAX

MAX

Mediation

ANALYZE

Performance

User Activity

Advanced Reporting

ALX Reporting

Cohorts

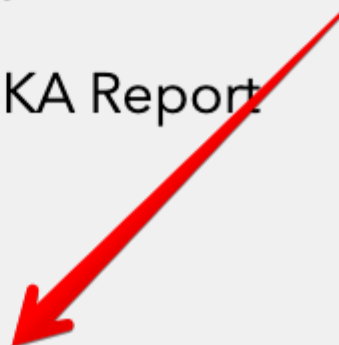
ATT Consent

A/B Tests

Global SKA Report



MANAGE

[Ad Units](#)



1. Select an ad unit for which you want to add the custom SDK network that you created in the previous step.

MAX Ad Units

<input type="text" value="com.appstock.demo.java"/>			
Application	Ad Unit	Ad Unit ID	Ad Type
 com.appstock.demo.java	 Appstock DJ Banner	c45376bfe605e7e0	BANNER

1. Select which custom network you want to enable and enter the information for each placement. Refer to the network documentation to see what values you need to set for the **App ID**, **Placement ID**, and **Custom Parameters**.

Custom Network (SDK) - AppStock Network

Status

App ID (optional) ⓘ

Placement ID

Custom Parameters

CPM Price ⓘ

\$

Country Targeting ⓘ

Include All

▼

...

Typically, the custom parameters field should contain a JSON that contains IDs (placement ID, endpoint ID) that will be used to load ads.

Parameters:

- **placement_id** - unique identifier generated on the platform's UI. You have to set or placement_id or endpoint_id.
- **endpoint_id** - unique identifier generated on the platform's UI. You have to set or placement_id or endpoint_id.
- **sizes** (optional) - array of the ad sizes. You can specify width in w field and height in h field. Make sure you've provided both width and height values;
- **ad_formats** (optional) - array of the ad formats. You can pass banner or video ad formats. Note that the multiformat request is not supported for the banner ad, so it uses only first value.

Examples:

```
{
  "placement_id": "4",
  "sizes": [
    {
      "w": 729,
      "h": 90
    }
  ],
  "ad_formats": ["video"]
}
```

```
{  
  "endpoint_id": "1",  
  "sizes": [  
    {  
      "w": 320,  
      "h": 50  
    },  
    {  
      "w": 300,  
      "h": 250  
    }  
  ],  
  "ad_formats": ["banner"]  
}
```