# How to book interstitial ads in your app using Google DFP

When your app with the Google DFP SDK has been built, you can start booking interstitials into your publication in your ePaper app for iOS and Android. This guide will describe the different possible ad formats (image interstitials and interactive interstitials) and provide examples of how to book them. You might only need a part of the information in this guide in order complete your booking.

General concept and limitations

- The Google DFP module is prepared for inserting both image interstitials and URL's/HTML snippets for interactive content.
- To make booking of ads as easy as possible, we have made a *Native Ad Template* that you must import into your DFP Account. By using this native ad template you are certain to display correctly fitted images in your apps, and you are using a setup that has been (and will continuously be) thoroughly tested by the Visiolink QA department.
- As calling an Ad Unit every time a user swipes a page in the publication would make the app lack performance, we need to restrict the maximum number of possible Ad Units in the app to **five set pages and one frequency-based unit**.
    - o The five set pages must be odd pages AND cannot be to consecutive pages (if you place one Ad Unit on page 1, the next Ad Unit cannot be placed on page 3.
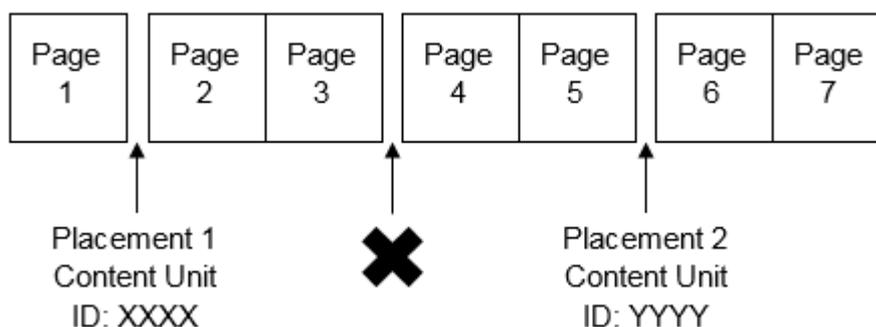
    - o The interstitial will always show up AFTER the page selected in the publication.
    - o The frequency-based Ad Unit responds to the frequency that has been set in the app. As a default the frequency is 12 (it means that an interstitial booked to this unit will show up every 12 swipes), but this number can be changed from the Visiolink backend/Visiolink Publishing Hub
- Interstitials are loaded from the DFP server on the run while the user swipes through a publication, which means that they will only work when the user's device is **online**.

1 Understanding Google DFP

If you are new to Google DFP, it might be helpful to know some basic terminology in order to understand the setup when combined with your ePaper app. Once logged in to your account (see separate guide on how to create an account), Google DFP is operated in four levels:

1. **Ad Units**: These are equivalent to placements in the publication. One Ad Unit can be placed in more apps.
2. **Order**: An order is a group of Line Items (Line Items explained below). An example: An advertiser has ordered a campaign of four different interstitials that have different active periods. These make sense to group in the same order.
3. **Line Items**: A line item contains one or a group of interstitials/creatives that should have the same booking preferences, e.g. same active period, same Ad Units, same targeting preferences etc.
4. **Creatives**: A Creative is the same as an interstitial and is inserted on a Line Item. It is possible to insert more Creatives on one Line Item, but in order to keep a clean setup and guarantee ad exposure, *we strongly advise you to insert only one Creative per Line Item*.

In this guide we will use the term *campaign* to describe a collective setup containing all the above four elements.

2 Creating a campaign

To create a campaign you must create an order, create a line item and upload a creative. Following explains how to do that.

2.1 Create an Order and a Line Item

When creating an order, you will automatically create your first Line Item of that Order.
1. Click the "Delivery" tab in the left panel
2. Click "Orders" or "Line Items"
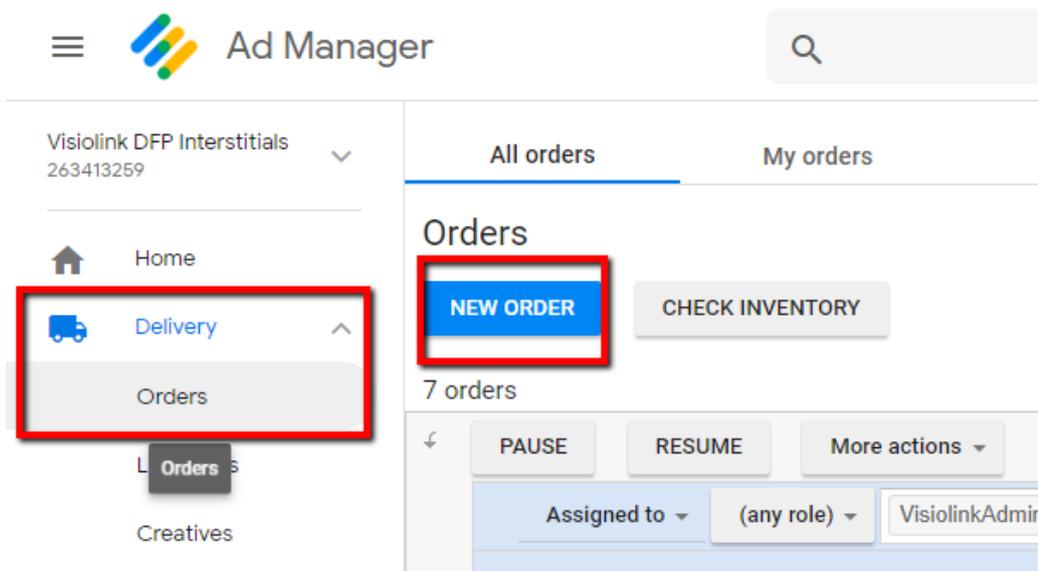3. Click the green "New order" button

Illustration 1: Making a new order

4. On the next screen, give your order a name and select or create an advertiser

Now you are ready to create a Line Item that decides all preferences of the creatives booked to it. Here all mandatory fields will be mentioned along with some useful optional settings.

5. Name the Line Item
6. Click the Size field and choose "Visiolink Native Template (Native)" from the drop down
7. Under "Settings" further below, enter a start time and an end time of your campaign
8. Choose how many times creatives booked to this Line Item should be shown or clicked. If this number is reached before the end time has come, the creatives will no longer be shown (write a big number to ensure that the creatives are shown throughout the whole active period)
9. The optional settings under "Adjust delivery" allow you to for example make sure that the same user will not see ads more than a certain number of times in a certain period (e.g. 5 times per day) by setting a "per user frequency cap" – see illustration 3 below. This setting can be useful when using the Frequency Ad Unit, where the user might see the same interstitial many times.
10. Under "Add targeting" you select, which Ad Units to target. Click on "Ad Units" in the box and then select one or more Ad Units to include.
11. Furthermore, you can add for example geographical area or platform (iOS or Android) if you want to target devices more specifically (optional). Visiolink has added two key value pairs for targeting a specific issue of your publication and for differentiating between titles if you have more titles in the same app. Please see "Key Value Targeting" further below.
12. Click "Save"

Steps 4 through 10 illustrated below

Order: **New order**

Name	Audi Summer 2016
Advertiser	Visiolink Creatives (Advertiser)
Trafficker [?]	wintherklausen@gmail.com (wintherklausen@gmail.com)
Labels [?] optional	Add a label

▸ Optional order fields

Line item: **New line item**

Name	Page 7 all of June
Inventory sizes [?]	⦿ Standard ◯ Video VAST [?]
	Visiolink Native Template ✕

Enter one or more sizes separated by a comma
Target creatives and help forecast available inventory.

Labels [?] optional	Add a label
[?]	☐ Allow same advertiser exception.
Comments optional	
Custom fields [?] optional	Type to find items

Settings

Illustration 2: Steps to create Order and Line Item

2.2 Upload your creatives/interstitials using the Native Ad Template

We always recommend you to book interstitials using the Native Ad Template (called Visiolink Native Template) you have imported into your account. By using this Native Ad Template you are certain to display correctly fitted images in your apps, and you are using a setup that has been (and will continuously be) thoroughly tested by the Visiolink QA department.

The template consists of nine variables, each with a different purpose. The purpose of each variable will be explained in the following sections.

Visiolink Native Template

Name	
Target ad unit size [?]	Native

User-defined variables

html
optional

html_url
optional

1

landscape_phone
optional   Vælg fil   Der er ikke valgt nogen fil

portrait_phone
optional   Vælg fil   Der er ikke valgt nogen fil

landscape_tablet
optional   Vælg fil   Der er ikke valgt nogen fil

portrait_tablet
optional   Vælg fil   Der er ikke valgt nogen fil

2

any_phone
optional   Vælg fil   Der er ikke valgt nogen fil

any_tablet
optional   Vælg fil   Der er ikke valgt nogen fil

any
optional   Vælg fil   Der er ikke valgt nogen fil

Click-through URL [?]

3

Labels [?]
optional   Add a label

SSL compatible [?]   Not yet scanned   override

Custom fields [?]   Type to find items

2.3 Booking image interstitials

1. Open the Line Item to which you would like to book your interstitial
2. Click "Add creatives" -> "new creative"
3. In the next screen the only active ad option should be "Native"
4. Click on "Native", click in the text input field, select "Visiolink Native Template"

5. In the next screen, give the creative a name
6. You will now see the possibilities to upload material plus a click-through URL from illustration on page 6 (numbered 2). Following an explanation to each of the image fields:
   a. landscape_tablet, portrait_tablet, landscape_phone and portrait_phone: Uploading an image to one or more of these four fields will target the exact devices in the given orientation. So if you have an interstitial you only want to have shown to readers using a tablet held in landscape mode, you should only book it to the landscape_tablet field.
   b. any_tablet and any_phone: Use these if you want the same interstitial to go out on tablet and/or phone in any orientation.
   c. any: This is the easiest way to book an image interstitial, as you can upload just one image that will be shown on all devices in both orientations.

7. In all cases you must add a click-through URL (numbered 3 in illustration 3) to define which website users should open when they tap the interstitial.

Example: An advertiser has delivered an image with a lot of detailed information that will be too small on phone-sized screens. Therefore, it should only be displayed on tablets in both orientations. This will result in the following booking:

8. Click "Save" when you have uploaded your material

Notes for displaying image interstitials in apps:
- By using the Visiolink Native Template there are no specific requirements regarding size of the booked image. The device will fit the best suited image to the screen and display it.
- If an interstitial does not fit the whole screen in one of the orientations, a black background is visible
- As different devices have different ratios, it is impossible to make one image interstitial that will fit the full screen on all devices. To optimize this, you can either target specific devices,

e.g. iPhone 8, Samsung Galaxy Note 3, or switch to HTML based ads that are responsive to screen size.
- An image will always keep it's ratio, but it will be scaled up or down to fit to a screen
- We recommend you to serve different images to phones and tablets, as a message that is properly displayed on a tablet sized screen can appear very small on a phone

2.4 Booking interactive interstitials

Booking of interactive html interstitials can succeed in two ways using the fields html and html_url (numbered 1 in illustration 3 above):

   a. Follow steps 1 through 4 above to select the Visiolink Native Template.
   b. html: insert an HTML snippet here to force the ad view in the app to render content as HTML.
   c. html_url: Insert a URL here in order to force the ad view in the app to render content as a URL.

Please note, that the system might require you to insert a Click-through URL in the Click-through URL field (numbered 3 in illustration 3 above). The app will ignore this URL, so the ad itself maintain full control of the app web view and what should happen when a user taps.

Important notes for booking interactive interstitials

1 The app is not able to differentiate between URL's that are supposed to open in the ad view (or not open at all, e.g. tracking URL's) and URL's that should open in a new browser window (either in-app-browser or external browser). As we give you full control of the ad view, we need a signal from the ad that an URL should open a browser. We have done this by looking for href tagged URL's If a URL is href tagged it will open in an in-app browser/external browser. An example:

   **

2 *iOS ONLY:* Hooks for starting and stopping animations
   If you want to make use of animations that start up when the user is presented for the ad, Visiolink provides a JavaScript function you can use in your ad:

   vl_adview_will_appear();

   If you want to make sure that animations stop when the user has moved away from the ad, please use this hook:

   vl_adview_did_disappear();

   This hook is especially useful when performing ads with audio, so that you can make sure that the audio stops when the user moves away from the ad.

3 *ANDROID ONLY:* On Android Visiolink needs to enable the use of interactivity in the app, if you plan to use interactive interstitials. The reason is that the app needs to give away the

control of gestures, when the interstitial is shown. This means that you can build interactivity that uses swipes into your ad without risking that the users turn pages instead of interacting with the ad. This, however, has the disadvantage that it will also be in force on static image interstitials, which causes the page swiping mechanism not to work when an interstitial is shown. To avoid that the users get stuck on the interstitial, the left and right side arrows indicating that it is possible to tap to turn pages will be permanently shown (only while interstitial is visible). Furthermore, we have built an "aggression control" into the ad view. This will make sure that the pages changes if 3 swipes are performed in the same direction within 2 seconds. Lastly, it is possible to swipe from the edge of the device onto the screen to turn pages.

The iOS platform has the ability to recognize when the ad view does not need the use of gestures, which ensures that swipes performed on a static image interstitial will turn pages.

2.5 Key value Targeting:

We have added two key value pairs that you can add when creating your Line Items:

1. publicationDate: This gives you the opportunity to target a specific issue based on the date of the publication.
   IMPORTANT: The key must be created precisely like this: publicationDate and values must be written as dates in this format: YYYY-MM-DD (e.g. 2016-03-18)
2. folderID: This gives you the opportunity to target a specific folder with the folder ID from the Visiolink backend/Visiolink Publishing Hub. This is useful if you have more than one title in the same app.
   IMPORTANT: The key must be created precisely like this: folderID and values must be written as a four digit number

3 App logic and general requirements and restrictions

To fully understand the behavior of interstitial display in the app, please take notion of these rules controlling the display logic:

- The app will preload the interstitial closest to the page that is being read. The interstitials are preloaded in order to minimize load time when the reader reaches an interstitial placement. This means that swiping fast between pages can course an interstitial to not be displayed.
- Due to performance considerations, the app can only preload the interstitial of one placement at the time.
- If more than one interstitial is booked in one placement, the app will display the interstitial that has been displayed the least amount of times on the reader's device. Rules set up in the Google DFP interface might disturb this rule.
- Display of any interstitial will reset the frequency counter of frequency controlled interstitials
- An area of three swipes before and after a fixed placement will be held free of frequency-controlled interstitials in order to avoid spamming the reader with several ads within a short page span.
- If no campaigns are booked to a placement within the app, the placement will be skipped and the user is led to the next coming page of the publication.

- When testing fixed placement interstitials, you should simulate a normal reader behavior. Rushing between interstitials might not leave the device enough time register that an interstitial is active and thus skip the placement.
- Interstitials will only be displayed when the device is online
- Visiolink allows an interstitial to take over the whole screen including control of gestures. To prevent that the reader gets stuck on an interstitial that has taken over the swipe gesture, which is usually used to turn to next/previous page, we have built in three different page turn options:
  - o Edge swipe: Swipe from the edge of the device on to the screen in order to turn to next/previous page
  - o Arrows: Press the arrows on the left or right in order to turn to next/previous page. The arrows will appear every time the reader swipes within the app, and are on Android displayed permanently when an interstitial is displayed.
  - o Multiple Swipes (aggression control): Swiping three times within two seconds in the same direction will turn to the next/previous page as this behavior indicates that the reader is no longer absorbing the message of the ad, but rather that he or she is interested in turning the page.