

DFP Mobile Ad Network and Rich Media API

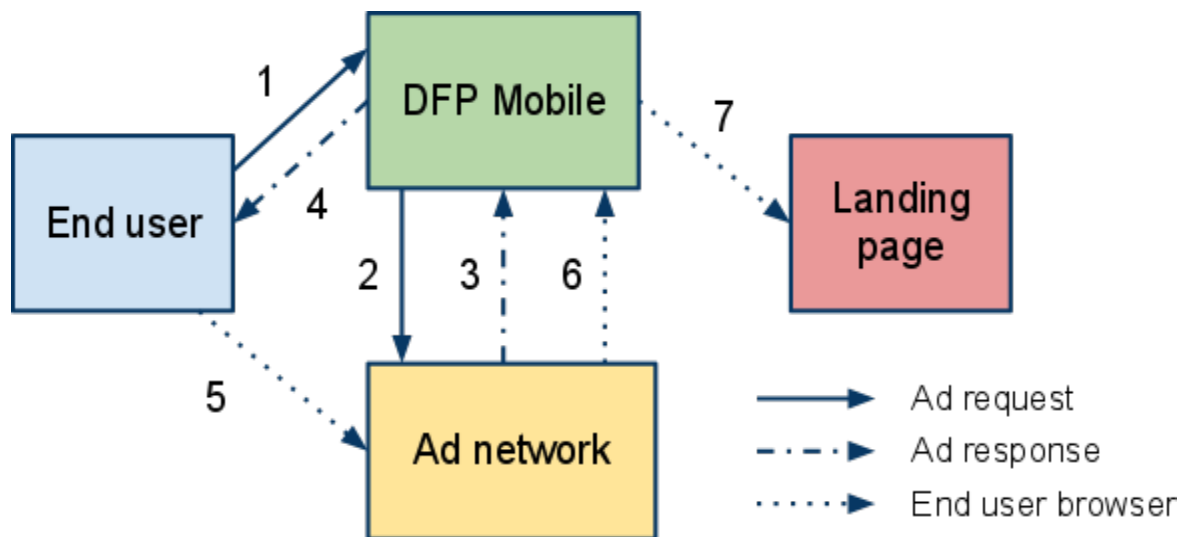
Background

DFP Mobile is adopting a single open API for integrating with all ad networks and rich media vendors. This has the following benefits:

- DFP Mobile publishers don't have to wait for a third party to be integrated;
- Ad networks and rich media vendors can return any HTML ad format;
- DoubleClick no longer has to integrate third parties one by one.

Note: Third parties can only use this API to return their own ads. That is, all ads returned using this API must be created by the third party's advertiser. Third parties can't source the ad from a fourth party.

Overview



Request flow:

1. End user requests ad from DFP Mobile.
2. DFP Mobile requests ad from ad network.
3. Ad network returns ad to DFP Mobile.
4. DFP Mobile returns ad to end user.
5. End user clicks on ad, opens ad network click URL.
6. Ad network redirects end user to DFP Mobile click URL.
7. DFP Mobile redirects end user to advertiser landing page.

The [request](#) will provide the ad network with:

- the end user's IP;
- the end user's user agent;
- an identifier for the requesting ad server;
- a click URL to which a request should be made if the user clicks on the ad.

The [response](#) will provide the ad server with:

- the status of the response: success, no matching ad, or an error;
- the HTML for the ad, or an error message.

Note that the response should not contain Javascript which fetches the ad upon execution, as this negates the benefit of a server-to-server integration. The response should be the HTML for the ad itself.

The click URL should be used to [have DFP Mobile to redirect an end user](#) to the advertiser's landing page, to ensure that DFP receives an accurate click count.

Specification

Request

The ad request will be a HTTP GET request from DFP to the ad network request URL. The ad network request URL is specified by the ad network and input into DFP by the publisher. An example ad network request URL provided to a publisher:

```
http://www.myadserver.com/youradscript.php?pubid=1045
```

The following parameters will be added to the ad network request URL:

- ip: the end user IP.
- proxyid: an identifier for the requesting ad server. For DFP Mobile, this will be dfpm.
- clickurl: the URL used by DFP Mobile to record clicks, encoded as defined by [section 17.13.4 of the W3C's HTML 4.0 specification](#) (application/x-www-form-urlencoded).

The user agent header will contain the user agent of the end user device.

Example request:

```
GET
/youradscript.php?pubid=1045&ip=72.53.22.11&proxyid=dfpm&clickurl=http%3A%2F%2Fad.doubleclick.net%2Fclick%3Fid%3D998123%26adurl%3DUser-Agent: ePhone/Mozilla (4.1)
```

Response

The ad network response must consist of XML complying with the following schema:

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
```

```

<!-- Type for the status of the ad response -->
<xs:simpleType name="status">
  <xs:restriction base="xs:string">
    <xs:enumeration value="SUCCESS"/>
    <xs:enumeration value="NO_MATCHING_AD_FOUND"/>
    <xs:enumeration value="ERROR"/>
  </xs:restriction>
</xs:simpleType>

<xs:element name="adresponse">
  <xs:simpleContent>
    <xs:extension base="xs:string">
      <xs:attribute name="status" type="status" use="required" />
    </xs:extension>
  </xs:simpleContent>
</xs:element>

</xs:schema>

```

The `status` attribute of the `adresponse` element will be interpreted as follows:

- **SUCCESS:** the request was handled successfully and a matching ad was found.
- **NO_MATCHING_AD_FOUND:** the request was handled successfully, but no matching ad was found.
- **ERROR:** the request was not handled successfully by the ad network.

The body of the `adresponse` element will depend upon the value of the `status` element:

- **SUCCESS:** the body will contain the snippet of HTML to be served to the end user.
- **NO_MATCHING_AD_FOUND:** the body will be empty.
- **ERROR:** the body will contain a message explaining the nature of the error.

The body of the `adresponse` element must contain valid XML with entities appropriately encoded (e.g. ">" as ">"). CDATA sections will not be supported.

Examples

Example response for a successful ad request:

```

<adresponse status="SUCCESS">
  &lt;a
href='http://ad.doubleclick.net/click_id=998123&adurl=http%3A%2F%2Fwww.1
andingpage.com'&gt;&lt;img
src='http://www.myadserver.com/img?id=1234567'&gt;&lt;/img&gt;&lt;/a&gt;
</adresponse>

```

DFP Mobile would serve the following HTML for the above response:

```

<a
href='http://ad.doubleclick.net/click_id=998123&adurl=http%3A%2F%2Fwww.1
andingpage.com'><img
src='http://www.myadserver.com/img?id=1234567'></img></a>

```

Example response for a successful ad request with no matching ad found:

```
<adresponse status="NO_MATCHING_AD_FOUND"></adresponse>
```

Example response for an ad request which results in an error:

```
<adresponse status="ERROR">ERROR 0021: Invalid ad size requested</adresponse>
```

Ensuring DFP Mobile records the end user's click

It is the ad network's responsibility to ensure that DFP Mobile sees the any clicks on the ad made by the user. This is done by making a request to the URL specified in the clickurl parameter in the ad request when the user clicks on the ad. One way to do this is to redirect the user to this URL, and have DFP Mobile redirect the user to the advertiser's landing page. DFP Mobile allows this.

To specify that a request to the DFP Mobile click URL should be redirected on to the advertiser's landing page, append the landing page URL to the click URL specified in the ad request. The landing page URL must be encoded as defined by [section 17.13.4 of the W3C's HTML 4.0 specification](#) (application/x-www-form-urlencoded).

For example, for the request from DFP Mobile:

```
GET
/youradscript.php?ip=72.53.22.11&proxyid=dfpm&clickurl=http%3A%2F%2Fad.doubleclick.net%2Fclick%3Fid%3D998123%26adurl%3D
```

Assuming the ad network responds with an ad for which the advertiser landing page is <http://www.landingpage.com>, the ad network should redirect the end user to:

```
http://ad.doubleclick.net/click?id=998123&adurl=http%3A%2F%2Fwww.landingpage.com
```

This will result in DFP Mobile recording a click for this ad request and redirecting the end user to <http://www.landingpage.com>.

Passing key-values from a DFP Mobile ad request to the ad network

DFP publishers will be able to pass key-values through to the ad network by adding request parameters of the form `ad_network_parameter=$dfp_request_parameter`. For example, assume the publisher is making requests to DFP Mobile as follows:

```
http://ad.mo.doubleclick.net/dartproxy/mobile.handler?k=3475.mobile_site/homepage;path=home;content_category=sports&c=it
```

To pass the `content_category` parameter to the ad network as a parameter named `ad_type`, the publisher should add the following parameter to the ad network request URL:

```
ad_type=$content_category
```

The ad network request URL entered by the publisher would then look like:

```
http://www.myadserver.com/youradscript.php?pubid=1873&ad_type=$content_category
```