

*Case : Integration with DBM (DoubleClick Bid Manager)*

## **Introduction**

This document will show how we integrate and collecting report data from DBM. DBM sent .csv report data through email daily, so the basic process is :

1. Get reporting data from email attachment
2. Read and use the reporting data to provide our Campaign report content
3. Populate our Partner tables
4. Save campaign report to database
5. Populate our Dim tables

DBM report & data mapping example :

[https://drive.google.com/open?id=1Q3L76f94jRPuCqyU6ds7\\_FCJQeWh3n1wOqGSb0R\\_gYU](https://drive.google.com/open?id=1Q3L76f94jRPuCqyU6ds7_FCJQeWh3n1wOqGSb0R_gYU)

## **Detail process**

This collecting process we wrote in Ruby (rake file). Rake file will executed daily At 00:07 UTC via Cronjob.

### **1. Get reporting data from email attachment :**

- A. Setup Adskom email
- B. Find and get email from DBM

### **2. Read and convert reporting data to our Campaign report contents :**

- A. Get attachment file (.csv) from email
- B. Read and use the file to populate our database

### **3. Populate our partner tables :**

Firstly, after we have the report data, we need populate our partner tables by using the report data. Our partner table are partner brands table, partner campaigns table, partner flights table, partner creatives table, partner campaign demand side platform table.

Populate partner brands table (`dsp_partner_brands`) :

- Get Advertiser (column: 1; code & name) from attachment, create new one (code & name) when code not exist in table or update (name) partner brand when code exist in table

Populate partner campaigns table (`dsp_partner_campaigns`) :

- Get Campaign (column: 5; code & name) from attachment, create new one ( code & name & populated\_dspPartnerBrandId ) when code & populated\_dspPartnerBrandId not exist in table or update (name) partner campaign when code & populated\_dspPartnerBrandId exist in table

Populate partner flights table (dsp\_partner\_flights) :

- Get flight (column: 9; code & name) from attachment, create new one ( code & name & populated\_dspPartnerCampaignId ) when code & populated\_dspPartnerCampaignId not exist in table or update (name) partner flight when code & populated\_dspPartnerCampaignId exist in table

Populate partner creatives table (dsp\_partner\_creatives) :

- Get creative (column: 14; code & name & size) from attachment, create new one ( code & name & size ) when code not exist in table or update (name & size) partner creative when code exist in table

Populate partner campaign demand side platform

(dsp\_partner\_campaign\_demand\_side\_platforms) :

- Create new one ( taboola\_id & populated\_dspPartnerCampaignId ) when dsp\_id & populated\_dspPartnerCampaignId not exist in table
- *taboola\_id* 9C55DFD9420641B59CB88192B668D673

#### 4. Save campaign report to database (fact\_platform\_campaigns):

After we populate Partner table, so we can build campaign report content with the populated IDs from each table and attachment report data from DBM

unix_timestamp	create      unix_timestamp      from      Now.year, Now.month, day (column: 22)
action_date	convert unix_timestamp to date type
action_hour	get hour from action_date
dsp_partner_brand_id	populated_dspPartnerBrandId
dsp_partner_campaign_id	populated_dspPartnerCampaignId
dsp_partner_flight_id	populated_dspPartnerFlightId
dsp_partner_creative_id	populated_dspPartnerCreativeId
dsp_demand_side_platform_id	dsp_id

impressions	column: 24
clicks	column: 25
last_view	column: 27
last_click	column: 26
spend	column: 28

## 5. Populate our Dim tables

Dim Partner Flights (dim\_partner\_flights)

1. Truncate dim\_partner\_flights table
2. Regenerate dim\_partner\_flights table

```
INSERT into dim_partner_flights(dsp_partner_flight_id,
dsp_partner_flight_name, dsp_partner_campaign_id,
dsp_partner_campaign_name, dsp_partner_brand_id, dsp_partner_brand_name,
dsp_demand_side_platform_id, dsp_demand_side_platform_name)values (
select from dsp_partner_flights join dsp_partner_campaigns,
dsp_partner_brands, dsp_partner_campaign_demand_side_platforms,
dsp_demand_side_platforms )LEFT JOIN dsp_partner_campaigns c ON
f.dsp_partner_campaign_id = c.id LEFT JOIN dsp_partner_brands b ON
c.dsp_partner_brand_id = b.id LEFT JOIN
dsp_partner_campaign_demand_side_platforms cd ON c.id =
cd.dsp_partner_campaign_id LEFT JOIN dsp_demand_side_platforms d ON
cd.dsp_demand_side_platform_id = d.id
```

Dim Partner Creatives (dim\_partner\_creatives)

1. Truncate dim\_partner\_creatives table
2. Regenerate dim\_partner\_creatives table

```
INSERT into dim_partner_creatives (id, code, name, size) values (SELECT
c.id, c.code, c.name, c.size FROM dsp_partner_creatives c)
```

## Used Table Structure

**Table : dsp\_partner\_brands**

```
CREATE TABLE `dsp_partner_brands` (  
  `id` binary(16) NOT NULL,  
  `dsp_demand_side_platform_id` binary(16) DEFAULT NULL,  
  `name` varchar(255) DEFAULT NULL,  
  `created_at` datetime NOT NULL,  
  `updated_at` datetime NOT NULL,  
  `contact_name` varchar(255) DEFAULT NULL,  
  `country_code` varchar(255) DEFAULT NULL,  
  `address` varchar(255) DEFAULT NULL,  
  `tax_identification_number` varchar(255) DEFAULT NULL,  
  `company_name` varchar(255) DEFAULT NULL,  
  `code` varchar(255) DEFAULT NULL,  
  PRIMARY KEY (`id`),  
  UNIQUE KEY `index_dsp_partner_brands_on_code` (`code`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

`id`	binary(16) NOT NULL, PRIMARY KEY
`dsp_demand_side_platform_id`	binary(16) DEFAULT NULL
`name`	varchar(255) DEFAULT NULL
`created_at`	datetime NOT NULL,
`updated_at`	datetime NOT NULL,
`contact_name`	varchar(255) DEFAULT NULL
`country_code`	varchar(255) DEFAULT NULL
`address`	varchar(255) DEFAULT NULL
`tax_identification_number`	varchar(255) DEFAULT NULL
`company_name`	varchar(255) DEFAULT NULL
`code`	varchar(255) DEFAULT NULL, UNIQUE KEY

**Table : dsp\_partner\_campaigns**

```
CREATE TABLE `dsp_partner_campaigns` (  
  `id` binary(16) NOT NULL,  
  `dsp_partner_brand_id` binary(16) DEFAULT NULL,  
  `name` varchar(255) DEFAULT NULL,  
  `created_at` datetime NOT NULL,  
  `updated_at` datetime NOT NULL,  
  `code` varchar(255) DEFAULT NULL,  
  PRIMARY KEY (`id`),  
  UNIQUE KEY `index_partner_campaigns_code` (`dsp_partner_brand_id`,`code`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

`id`	binary(16) NOT NULL, PRIMARY KEY
`dsp_partner_brand_id`	binary(16) DEFAULT NULL, UNIQUE KEY
`name`	varchar(255) DEFAULT NULL
`created_at`	datetime NOT NULL
`updated_at`	datetime NOT NULL
`code`	varchar(255) DEFAULT NULL, UNIQUE KEY

**Table : dsp\_partner\_flights**

```
CREATE TABLE `dsp_partner_flights` (  
  `id` binary(16) NOT NULL,  
  `dsp_partner_campaign_id` binary(16) DEFAULT NULL,  
  `name` varchar(255) DEFAULT NULL,  
  `created_at` datetime NOT NULL,  
  `updated_at` datetime NOT NULL,  
  `sub_brand_id` binary(16) DEFAULT NULL,  
  `code` varchar(255) DEFAULT NULL,  
  PRIMARY KEY (`id`),  
  UNIQUE KEY `index_flight_campaign_code` (`dsp_partner_campaign_id`,`code`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

`id`	binary(16) NOT NULL, PRIMARY KEY
`dsp_partner_campaign_id`	binary(16) DEFAULT NULL, UNIQUE KEY
`name`	varchar(255) DEFAULT NULL

`created_at`	datetime NOT NULL
`updated_at`	datetime NOT NULL
`sub_brand_id`	binary(16) DEFAULT NULL
`code`	varchar(255) DEFAULT NULL, UNIQUE KEY

**Table : dsp\_partner\_creatives**

```
CREATE TABLE `dsp_partner_creatives` (
  `id` binary(16) NOT NULL,
  `code` varchar(255) DEFAULT NULL,
  `name` varchar(255) DEFAULT NULL,
  `size` varchar(255) DEFAULT NULL,
  `created_at` datetime NOT NULL,
  `updated_at` datetime NOT NULL,
  PRIMARY KEY (`id`),
  UNIQUE KEY `index_dsp_partner_creatives_on_code` (`code`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

`id`	binary(16) NOT NULL, PRIMARY KEY
`code`	varchar(255) DEFAULT NULL, UNIQUE KEY
`name`	varchar(255) DEFAULT NULL
`size`	varchar(255) DEFAULT NULL
`created_at`	datetime NOT NULL
`updated_at`	datetime NOT NULL

**Table : dsp\_partner\_campaign\_demand\_side\_platforms**

```
CREATE TABLE `dsp_partner_campaign_demand_side_platforms` (
  `dsp_partner_campaign_id` binary(16) NOT NULL DEFAULT
'0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0',
  `dsp_demand_side_platform_id` binary(16) NOT NULL DEFAULT
'0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0',
  PRIMARY KEY (`dsp_demand_side_platform_id`,`dsp_partner_campaign_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

`dsp_partner_campaign_id`	binary(16) NOT NULL DEFAULT
---------------------------	-----------------------------



	'\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0', PRIMARY KEY
`dsp_demand_side_platform_id`	binary(16) NOT NULL DEFAULT '\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0\0', PRIMARY KEY
`impressions`	int(11) DEFAULT NULL
`clicks`	int(11) DEFAULT NULL
`last_view`	int(11) DEFAULT NULL
`last_click`	int(11) DEFAULT NULL
`spend`	decimal(15,2) DEFAULT NULL

**Table : dim\_partner\_flights**

```
CREATE TABLE `dim_partner_flights` (
  `dsp_partner_flight_id` binary(16) DEFAULT NULL,
  `dsp_partner_flight_name` varchar(255) DEFAULT NULL,
  `dsp_partner_campaign_id` binary(16) DEFAULT NULL,
  `dsp_partner_campaign_name` varchar(255) DEFAULT NULL,
  `dsp_partner_brand_id` binary(16) DEFAULT NULL,
  `dsp_partner_brand_name` varchar(255) DEFAULT NULL,
  `dsp_demand_side_platform_id` binary(16) DEFAULT NULL,
  `dsp_demand_side_platform_name` varchar(255) DEFAULT NULL,
  KEY `index_dim_partner_flights_on_dsp_partner_flight_id`
(`dsp_partner_flight_id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

`dsp_partner_flight_id`	binary(16) DEFAULT NULL
`dsp_partner_flight_name`	varchar(255) DEFAULT NULL
`dsp_partner_campaign_id`	binary(16) DEFAULT NULL
`dsp_partner_campaign_name`	varchar(255) DEFAULT NULL
`dsp_partner_brand_id`	binary(16) DEFAULT NULL
`dsp_partner_brand_name`	varchar(255) DEFAULT NULL
`dsp_demand_side_platform_id`	binary(16) DEFAULT NULL
`dsp_demand_side_platform_name`	varchar(255) DEFAULT NULL



**Table : dim\_partner\_creatives**

```
CREATE TABLE `dim_partner_creatives` (  
  `id` binary(16) NOT NULL,  
  `name` varchar(255) DEFAULT NULL,  
  `code` varchar(255) DEFAULT NULL,  
  `size` varchar(255) DEFAULT NULL,  
  PRIMARY KEY (`id`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

`id`	binary(16) NOT NULL, PRIMARY KEY
`name`	varchar(255) DEFAULT NULL
`code`	varchar(255) DEFAULT NULL
`size`	varchar(255) DEFAULT NULL