Functional Document for

Facebook API

* **Getting Started With the Facebook API**

Any user with a access token can begin using the Facebook Application Programming Interface (API)

# Downloading Reports from the Facebook Graph API

# You can extract performance data from the Facebook API for metrics such as click tags, Url tags, and Tracking specs etc.

# [Setting Up the Development Environment](javascript:void(0))

# You need user credentials, access token with access to Facebook Graph api to download a report from Facebook API.

## [Getting a Access Token](javascript:void(0))

* + To use Facebook APIs, you must have a access token and valid user credentials.
  + The user access token is the most commonly used type of token. This kind of access token is needed any time the app calls an API to read, modify or write a specific person's Facebook data on their behalf. User access tokens are [generally obtained via a login dialog and require a person to permit your app to obtain one](https://developers.facebook.com/docs/facebook-login/access-tokens#usertokens)
  + To generate an app access token by making a Graph Api Call also.
* GET /oauth/access\_token?
* client\_id={app-id}
* &amp;client\_secret={app-secret}
* &amp;grant\_type=client\_credentials
  + This call will return an app access token which can be used in place of a user access token to make API calls as noted above. Again, for security, app access token should never be hard-coded into client-side code, doing so would give everyone who loaded your webpage or decompiled your app full access to your app secret, and therefore the ability to modify your app. This implies that most of the time, you will be using app access tokens only in server to server calls.

**Create Ad Account**

If you don't have a Facebook ad account, you need to create one. You will use it to manage access to your ads, billing settings, and spending limits.

* Go to Business Manager.
* On the left side of the page, go to Add New and click Ad Accounts.
* Select your business payment method from the drop down and fill in any other details as needed.
* Click Create ad account.

**API Versions**

The Graph API has multiple versions available to access at any one time. Each version contains a set of **core** fields and edge operations.

We are using v2.5 version to fetch the performance data.

## [How](javascript:void(0)) Graph Api structured

* The Graph API is the primary way to get data in and out of Facebook's platform. It's a low-level HTTP-based API that you can use to query data, manage ads.
* The Graph API is HTTP based, so it works with any language that has an HTTP library, such as cURL.
* All nodes and edges in the Graph API can be read simply with an HTTP GET request to the relevant endpoint.
* **Node <AD\_ID>** An ad contains the data necessary for an ad, such as creative elements and measurement information.
* HTTP GET request as below:

GET /v2.5/me HTTP/1.1

Host: graph.facebook.com

* Most API calls must be signed with an [access token](https://developers.facebook.com/docs/facebook-login/access-tokens/).

**Choosing Fields**

By default, not all the fields in a node or edge are returned when you make a query. You can choose the fields (or edges) you want returned with the fields query parameter. This is really useful for making your API calls more efficient and fast.

For example, the following Graph API call https://graph.facebook.com/bgolub?fields=id,name,picture will only return the id, name, and picture in Ben's profile:

GET graph.facebook.com

/bgolub?

fields=id,name,picture

**Field Expansions in Graph API**

* The field expansion feature of the Graph API, allows you to effectively nest multiple graph queries into a single call. Certain resources, including most of Ads API, are unable to utilize field expansion on some or all connections.

GET graph.facebook.com/{node\_id}?fields=<first\_level>{<second\_level>}

* <first-level> in this case would be one or more (comma-separated) fields or edges from the parent node. <second-level> would be one or more (comma-separated) fields or edges from the first-level node.
* There is no limitation to the amount of nesting of levels that can occur here.

For example fields = date\_start, date\_stop, account\_id, account\_name, ad\_id,…… etc..

### Making Large Requests

* Some Graph API endpoints can take parameters that are very large. If your requests end up being larger than a couple thousand characters, you may start seeing server errors since our servers will reject very large GET requests.
* As a best practice, for large requests use a POST request instead of a GET request and add a method=GETparameter. If you do this, the POST will be interpreted as if it were a GET.

**Example**

**A Sample query to retive data for ADS based on the fields**

<https://graph.facebook.com/v2.5/>+AD\_ACCOUNT\_ID+"/ads?fields=id,account\_id,adset,campaign,adlabels,adset\_id,bid\_amount,bid\_info,bid\_type,configuration\_status,conversion\_specs,created\_time,creative,effective\_status,last\_updated\_by\_app\_id,name,tracking\_specs,updated\_time,campaign\_id,ad\_review\_feedback&access\_token="+ACCESS\_TOKEN

### Receiving Error Codes

The following represents a common error response resulting from a failed API request:

{

"error": {

"message": "Message describing the error",

"type": "OAuthException",

"code": 190,

"error\_subcode": 460,

"error\_user\_title": "A title",

"error\_user\_msg": "A message",

"fbtrace\_id": "EJplcsCHuLu"

}

}

* message: A description of the error intended for the developer.
* code: An error code, some common values for which are listed below, along with common recovery tactics should you detect them.
* error\_subcode : Used to further classify an error, common values are shown below.
* error\_user\_msg : When you encounter this you should show the message directly to the user. It will be correctly translated per the locale of the API request.
* error\_user\_title : If you are showing an error dialog, this should be the title of the dialog. Again it will be correctly translated per the locale of the API request.
* fbtrace\_id :When [reporting a bug](https://developers.facebook.com/bugs/) related to a Graph API call, include the fbtrace\_id to help us finding log data for debugging.

**Ads Insights**

* Provides insights on your advertising performance. Allows for deduped metrics across child objects, such as unique\_clicks, sorting of metrics, and async reporting.
* This endpoint doesn't have any parameters.
* You can request specific [fields](https://developers.facebook.com/docs/marketing-api/insights/fields) by providing a comma separated list in the fields parameters:
* curl -G \
* -d "fields=impressions" \
* -d "access\_token=<ACCESS\_TOKEN>" \
* "https://graph.facebook.com/<API\_VERSION>/<AD\_OBJECT\_ID>/insights"

**Field Expansion**

The fields can be requested at the node level as well with fields specified using the [field expansion syntax](https://developers.facebook.com/docs/graph-api/using-graph-api/#fieldexpansion)

curl -G \

-d "fields=insights{impressions}" \

-d "access\_token=<ACCESS\_TOKEN>" \

"https://graph.facebook.com/<API\_VERSION>/<AD\_ID>"

Example Query Request for FB ADS\_ISIGHTS

"https://graph.facebook.com/v2.5/"+.AD\_ID+"/insights?access\_token="+.ACCESS\_TOKEN+"&level=ad&fields=date\_start,date\_stop,account\_id,account\_name,ad\_id,ad\_name,buying\_type,campaign\_id,campaign\_name,adset\_id,adset\_name,action\_carousel\_card\_id,action\_carousel\_card\_name,actions,unique\_actions,total\_actions,total\_unique\_actions,action\_values,total\_action\_value,impressions,social\_impressions,social\_clicks,unique\_impressions,unique\_social\_impressions,unique\_clicks,unique\_social\_clicks,spend,frequency,social\_spend,deeplink\_clicks,app\_store\_clicks,website\_clicks,cost\_per\_inline\_post\_engagement,inline\_link\_clicks,cost\_per\_inline\_link\_click,inline\_post\_engagement,call\_to\_action\_clicks,newsfeed\_avg\_position,newsfeed\_impressions,newsfeed\_clicks,reach,social\_reach,ctr,unique\_ctr,unique\_link\_clicks\_ctr,cpm,cpp,cost\_per\_total\_action,cost\_per\_action\_type,cost\_per\_unique\_click,cost\_per\_10\_sec\_video\_view,cost\_per\_unique\_action\_type,relevance\_score,website\_ctr,video\_avg\_sec\_watched\_actions,video\_avg\_pct\_watched\_actions,video\_p25\_watched\_actions,video\_p50\_watched\_actions,video\_p75\_watched\_actions,video\_p95\_watched\_actions,video\_p100\_watched\_actions,video\_complete\_watched\_actions,video\_10\_sec\_watched\_actions,video\_15\_sec\_watched\_actions,video\_30\_sec\_watched\_actions,estimated\_ad\_recallers,estimated\_ad\_recallers\_lower\_bound,estimated\_ad\_recallers\_upper\_bound,estimated\_ad\_recall\_rate,estimated\_ad\_recall\_rate\_lower\_bound,estimated\_ad\_recall\_rate\_upper\_bound,cost\_per\_estimated\_ad\_recallers,canvas\_avg\_view\_time,canvas\_avg\_view\_percent,place\_page\_name"+DATE\_RANGE