

EXHIBIT 88

UNREDACTED VERSION OF DOCUMENT SOUGHT TO BE LODGED UNDER SEAL

From: Konstantinos Papamiltiadis </O=THEFACEBOOK/OU=EXTERNAL (FYDIBOHF25SPDLT)/CN=RECIPIENTS/CN=942ACCD3D3C54FBEA8B7253E97A8A6D7>
Sent: Wednesday, April 01, 2015 1:20 PM
To: Chris Barker
Cc: Philippe d'Arabian; Anu Kare
Subject: Re: FB graph API

2pm on Friday is good for me. If that's fine with you, will you send me an invite?

From: Chris Barker <cbarker@microsoft.com>
Date: Wednesday, April 1, 2015 at 1:08 PM
To: Konstantinos Papamiltiadis <kpapamiltiadis@fb.com>
Cc: Philippe d'Arabian <philippe.darabian@microsoft.com>, Anu Kare <ankare@microsoft.com>
Subject: RE: FB graph API

+Anu

Does 2pm today work? (sorry, I know that's short notice)

From: Konstantinos Papamiltiadis [<mailto:kpapamiltiadis@fb.com>]
Sent: 01 April 2015 11:21
To: Chris Barker
Cc: Philippe d'Arabian
Subject: Re: FB graph API

Sure, let's do this. Let me know what time works best for you.

kp

From: Chris Barker <cbarker@microsoft.com>
Date: Wednesday, April 1, 2015 at 11:01 AM
To: Konstantinos Papamiltiadis <kpapamiltiadis@fb.com>
Cc: Philippe d'Arabian <philippe.darabian@microsoft.com>
Subject: RE: FB graph API

KP – do you have time today or Friday to have a short call to review where we are please? I have a spreadsheet I can walk you through on our current app status. I'd like to invite along Anu Kare too as she looks after our PSA service, which a number of apps run through.

From: Konstantinos Papamiltiadis [<mailto:kpapamiltiadis@fb.com>]
Sent: 30 March 2015 15:14
To: Chris Barker
Subject: Re: FB graph API

Got it! Thanks a lot.

From: Chris Barker <cbarker@microsoft.com>
Date: Monday, March 30, 2015 at 3:06 PM
To: Konstantinos Papamiltiadis <kpapamiltiadis@fb.com>
Subject: RE: FB graph API

It is called *PSA – it is a service that a number of our other apps/services use including the Windows 8.x People Hub. Tomorrow AM I am speaking to the PSA team and the Windows 8.x People Hub team to understand the impact on them.

* I don't have the acronym

From: Konstantinos Papamiltiadis [<mailto:kpapamiltiadis@fb.com>]
Sent: 30 March 2015 14:54
To: Chris Barker
Subject: Re: FB graph API

Not a problem. Which app is this btw?

From: Chris Barker <cbarker@microsoft.com>
Date: Monday, March 30, 2015 at 2:42 PM
To: Konstantinos Papamiltiadis <kpapamiltiadis@fb.com>
Subject: RE: FB graph API

Thanks for cc'ing me. I am speaking to this team tomorrow around some of the downstream implications here,

Kind regards,

Chris

From: Konstantinos Papamiltiadis [<mailto:kpapamiltiadis@fb.com>]
Sent: 30 March 2015 12:05
To: Alok Dhariwal; Anu Kare; Gruia Pitigoi-Aron; Stephane Crozatier; Dhiren Patel
Cc: Chris Barker; Linda McColm
Subject: Re: FB graph API

Hello Alok,

This is correct. From 04.30 onwards, even if you call the endpoint to get back fb profile data for user's friend, the API will not return anything.

kp

From: Alok Dhariwal <alokd@microsoft.com>
Date: Monday, March 30, 2015 at 12:01 PM
To: Konstantinos Papamiltiadis <kpapamiltiadis@fb.com>, Anu Kare <ankare@microsoft.com>, Gruia Pitigoi-Aron <gpitigoi@microsoft.com>, Stephane Crozatier <stephane@fb.com>, Dhiren Patel <dhiren@fb.com>
Cc: Chris Barker <cbarker@microsoft.com>, Linda McColm <linda@microsoft.com>
Subject: RE: FB graph API

+Linda

Thank you for your prompt response!

For the permissions that are marked as deprecated below, does that mean we can no longer request for that data? E.g. birthday, work history, location, website for the users friends will no longer be available?

friends_birthday	Deprecated
friends_location	Deprecated
friends_work_history	Deprecated
friends_website	Deprecated

From: Konstantinos Papamiltiadis [mailto:kpapamiltiadis@fb.com]
Sent: Friday, March 27, 2015 6:08 PM
To: Anu Kare; Gruia Pitigoi-Aron; Stephane Crozatier; Dhiren Patel
Cc: Alok Dhariwal; Chris Barker
Subject: Re: FB graph API

+ Chris Barker as an fyi

Hello Anu,

Could you please give me some context here? What is your App ID and where those permissions are going to be used would be very helpful. The reason I am suggesting having more context is based on the fact that every App Developer that request extended permissions will need to go through Login review now and is important to know how those permissions are in use before you can submit for approval by our review team. Net you may have been requesting user_location before, but if there is no product featured powered by this, then the permission will be rejected. With regards to the specifics:

- 1/ The table below is correct in terms of mapping, but please note that read_stream permission is going to be deprecated and as such non FB branded Apps will not be given access to it.
- 2/ Besides the format of the response changing the other significant change is that me/friends will only return app users (i.e. User that have authorised the app)
- 3/ User_friends permission does not require Login review. However be aware that people can x-out from this. In this case the API will return no results.
- 4/ User don't need to re-auth when an access token that has not expired acquired against v1 is in us – however the API will behave as if this is a V2 access token.

I hope this helps,
kp

From: Anu Kare <ankare@microsoft.com>
Date: Friday, March 27, 2015 at 2:18 PM
To: Gruia Pitigoi-Aron <gpitigoi@microsoft.com>, Stephane Crozatier <stephane@fb.com>, Dhiren Patel <dhiren@fb.com>
Cc: Alok Dhariwal <alokd@microsoft.com>, Konstantinos Papamiltiadis <kpapamiltiadis@fb.com>
Subject: RE: FB graph API

Thanks folks for your responses. Here are a few more questions that we have:

1. For the login review, the table below is the list of permissions that we came up with. The V1 permissions are the ones that we have been using so far and the table translates them to the V2 permissions.
 - i. We just want to confirm if that's the right mapping.
 - ii. For the permissions highlighted in yellow:

Friends_xxx: Are there any other permissions that replace them? Do we need a different approval process for these permissions or is this completely going away?

Offline_access: What is the purpose of this permission? We see it used in our product code however not sure of the exact purpose.

2. With the change in permissions will the data that is returned change? Will we get different/more/less name-value pairs in the responses of the queries we send? If so, can you provide the details of these changes?
3. Do we need to specify any permissions for the request https://graph.facebook.com/v2.0/me/friends/{user_id}? What about user_friends permission, is this required? I don't see this permission in the login review list, how do we get it approved if its needed?
4. You mentioned below that the legacy access tokens remain valid, however if we use these tokens which have the v1 permissions in the post April 30th API's, what's the expected behavior? Will there be an error or a re-auth? Will the return values be different?

Thanks,
Anu

V1 permissions	V2 permissions
offline_access	??
read_stream	read_stream
user_birthday	user_birthday
user_location	user_location
user_website	user_website
user_work_history	user_work_history
friends_birthday	Deprecated
friends_location	Deprecated
friends_work_history	Deprecated
friends_website	Deprecated
publish_stream	publish_actions
user_photos	user_photos
friends_photos	Deprecated
friends_videos	Deprecated
user_videos	user_videos

From: Gruia Pitigoi-Aron

Sent: Thursday, March 19, 2015 5:33 PM

To: Stephane Crozatier; Dhiren Patel

Cc: Alok Dhariwal; Anu Kare; Konstantinos Papamiltiadis

Subject: RE: FB graph API

Thank you for the prompt response – much appreciated! Will certainly come back with anything else once we've digested the answers.

Thank you,
Gruia

From: Stephane Crozatier [mailto:stephane@fb.com]
Sent: Thursday, March 19, 2015 5:29 PM
To: Gruia Pitigoi-Aron; Dhiren Patel
Cc: Alok Dhariwal; Anu Kare; Konstantinos Papamiltiadis
Subject: Re: FB graph API

+ KP fyi

Hi Gruia,

Comments inline in red.
Let us know if you have additional questions.

Thanks!
-stephane

From: Gruia Pitigoi-Aron <gpitigoi@microsoft.com>
Date: Thursday, March 19, 2015 at 1:15 PM
To: Dhiren Patel <dhiren@fb.com>, Stephane Crozatier <stephane@fb.com>
Cc: Alok Dhariwal <alokd@microsoft.com>, Anu Kare <ankare@microsoft.com>
Subject: RE: FB graph API

+ Stephane, per OOF message. Thanks!

From: Gruia Pitigoi-Aron
Sent: Thursday, March 19, 2015 1:11 PM
To: Dhiren Patel
Cc: Alok Dhariwal; Anu Kare
Subject: FB graph API

Hi Dhiren,

I'm Anu's manager and reaching out as she is currently on vacation. Our devs are working to implement upgrading graph API changes from 1.0 to 2.0, a change that we understand is taking effect at the end of next month.

We've accumulated a fair amount of questions which I'll list below. However, if a phone call would make more sense to quickly go through these, we can certainly get that set up.

Thanks a bunch for any help and insights!

Gruia

1. We would like confirmation that we will be able to simply change graph api by adding versioning with no additional changes to functionality or return type.
 - a. <http://graph.facebook.com/me> to
 - b. <http://graph.facebook.com/v2.0/me>

Yes, adding the version number will force the API to behave in the version specified. If the specified version is deprecated, the call will be defaulted to the next oldest version available. If you do not specify a version number, we'll also default the call to the next oldest version available. This means that calls to <http://graph.facebook.com/me> will automatically switch to v2.0 on April 30. We do recommend that you specify a version number, to better control which API version is being used and try to use the latest version whenever possible.

More information here: <https://developers.facebook.com/docs/apps/versions#versioning>

For Fql.multiquery calls such as <https://api.facebook.com/method/Fql.multiquery>

Do these need to be changed as part of the graph 1.0 deprecation?

FQL does not change but will completely go away after we deprecate Graph API 2.0. We recommend that you use the "batch" Graph API for querying multiple requests: <https://developers.facebook.com/docs/graph-api/making-multiple-requests>

What is the date when this type of api is no longer supported by FB?

Same day as for API v2.0, which is available until Aug 7, 2016.

If they need to be changed, is the correct mapping <https://graph.facebook.com/v2.0/fql>?

Continue to use <https://api.facebook.com/method/fql.multiquery>

i. If this is the case the return data structures are different (XML vs graph). Can we get details about the response structure?

There are fields we see in existing request and response that we have been unable to find any documentation about (for example) `is_pushable`.

Is there documentation on this?

We do not provide general documentations on private APIs, but i'm happy to provide details on a case-by-case basis. "`is_pushable`" is a boolean value telling you whether or not the user is capable of receiving push notifications to any mobile device.

What would be the FB behavior if we continue to pass this parameter, but FB no longer supports it?

The behavior would be different depending on the type of query. If you try to fetch an invalid field, we would return an error code 100, with the message "(#100) Tried accessing nonexistent field (<fieldname>) on nude type (<nodetype>)". It's unlikely that we would deprecate a private API without letting you know in advance. We generally only allow specific developers to use private APIs and we monitor their usage. For example, we know that you are making 8.5M requests/day for this specific field on average.

Additional fields requiring clarification

`Publish_stream`

This permission is no longer available, please use 'publish_actions' instead.

`Publish action`

Extended user permission required for publishing on their behalf: https://developers.facebook.com/docs/facebook-login/permissions/v2.0#reference-publish_actions

`Offline access`

This permission is usually automatically granted when using APIs that rely on it. You shouldn't be using it, but i may need to understand your specific use-case to provide a definitive answer. Can i ask which product this is for?

Is there a testing server available which is already set up in the post 4/30/15 configuration so that we can confirm the validity of our changes?

The online [developers.facebook.com graph api explorer](https://developers.facebook.com/graph-api-explorer) is insufficient for running testcases.

We've been live since Apr 30, 2014. You can force API v2.0 calls by specifying the version number to the call (per your question above).

You can also force test users into the post 4/30 configuration and test end-to-end scenarios:

- Go to https://developers.facebook.com/apps/<your_app_id>/roles/test-users/
- Click "Edit" on specific test user

- Select "Override the API version in Graph API requests for this test user"
- Enable "Override" and select the API version you want to target

I can also enroll specific 'real' users into the post 4/30 configuration if you think that would simplify testing but would strongly recommend to use test users.

Need clarification on changes required for authentication. Are there changes required for obtaining the access token?

We currently use https://graph.facebook.com/oauth/access_token are there any changes beyond updating the url https://graph.facebook.com/v2.0/oauth/access_token required?

Any changes to parameters, permissions

No change to access tokens, or authentication parameters. However, you may want to consider the following:

- Login review. All apps must go through "Login review" to be able to continue to use specific permissions post 4/30: <https://developers.facebook.com/docs/apps/review/login>. Because your case is special we will have to work together to get you approved (but you'll still have to submit your app).
- App-scoped User IDs. People authenticating your app for the first time will be issued App-scoped User IDs with API v2.0. This means that IDs for the same user will be different between apps.

Will the response structure change?

No.

Is there documentation of private Graph API, especially /me/importcontact. How does it work? What's the update in v2.2?

This is to upload contacts to Facebook. I'll see if we have a doc for you, otherwise i can provide more information. Is this for Office365?

This endpoint should not be affected by the Graph API v1.0 deprecation in any way - you're sending us a list of contacts and we're returning the number of contacts processed.

On May 1st, will the existing valid user token in user's mailbox become invalid since our app retrieved the token using v1.0 API? Do users who use our app need to retrieve tokens again? What error code will the API return if there is any?

Access tokens remain valid and are portable across API versions.