

EXHIBIT 200

UNREDACTED VERSION OF DOCUMENT SOUGHT TO BE LODGED UNDER SEAL

From: Simon Cross </O=THEFACEBOOK/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=SIMON CROSS>
Sent: Wednesday, March 18, 2015 4:48 PM
To: Adam Berlinsky-Schine
Cc: Konstantinos Papamiltiadis; Barney Jackson; Eddie O'Neil; Michael Huang
Subject: Re: new FB APIs - Hashed Anon All friends API

Hey Adam, I can confirm those calls are all failing for valid privacy reasons.

The root cause here is that given you're making these calls in realtime, the privacy checks are being actively checked – rather than you relying on the cached version of the graph you have in your DB.

In this case, one of these subject users has opted out of platform, and three have deactivated their FB accounts. This means that if you attempted to make API calls with a token belonging to each of these subject users, those calls would also all fail.

I hope this makes sense.

S

From: Adam Berlinsky-Schine
Date: Wednesday, March 18, 2015 at 1:35 PM
To: Simon Cross
Cc: Konstantinos Papamiltiadis, Barney Jackson, Eddie O'Neil, Michael Huang
Subject: Re: new FB APIs - Hashed Anon All friends API

Thanks Simon. If it's for those legitimate reasons that's fine, but we're seeing an awful lot of them - 50,000 since late last week. Can you confirm that these additional calls are failing for one of those reasons?

[https://graph.facebook.com/v2.0/1456896298?fields=context.fields\(all_mutual_friends.limit\(10000\)\)&access_token=CAAD4bKUPbr8BANM04huXUlBZCerqAFqDASdZAOLQ9wlkZCg7hLZBsCOMYS6ICyp8tWPl0L0gCLUSCo7RIZByMCIBQbBbUaLnJmZAk2DzRY2U7PP7gpPFVjxMVPNZAI6Ht5vZA4XaCuo4WZCa7ZBW1PS0AdUbkmOSTpue9JpaKhVL9k7PQnZCESrZB3DmmbdDWuNzjk51kg9AyMPiMhZC4F9bhD7zQQgb3O1LavY7ygDfLVvXRKCw3n1FlwUh7ldOGDXaa2rUZD](https://graph.facebook.com/v2.0/1456896298?fields=context.fields(all_mutual_friends.limit(10000))&access_token=CAAD4bKUPbr8BANM04huXUlBZCerqAFqDASdZAOLQ9wlkZCg7hLZBsCOMYS6ICyp8tWPl0L0gCLUSCo7RIZByMCIBQbBbUaLnJmZAk2DzRY2U7PP7gpPFVjxMVPNZAI6Ht5vZA4XaCuo4WZCa7ZBW1PS0AdUbkmOSTpue9JpaKhVL9k7PQnZCESrZB3DmmbdDWuNzjk51kg9AyMPiMhZC4F9bhD7zQQgb3O1LavY7ygDfLVvXRKCw3n1FlwUh7ldOGDXaa2rUZD)

[https://graph.facebook.com/v2.0/535705134?fields=context.fields\(all_mutual_friends.limit\(10000\)\)&access_token=CAAD4bKUPbr8BAOFdEJGiudoQ5ndBbzVAwAAUlj4y6wKkiDecR7IIAk6eLbm96ynlvPZC5Cpu1eJafUdZBrepqgs5PY2vxZCt1C3BrSDZCdP6VERo3KdHZBFtsUG4PuGCBKB2d9CZBg7dDhzH4yqxKXDgDVGvz4sTbmr99fzgaF1okH9U42cW5lcVuH1FGX7fSU5PhWLQIZCDqsido6WZCBvK0tVYdANaP3OyNh8gKGZAhDZCQZDZD](https://graph.facebook.com/v2.0/535705134?fields=context.fields(all_mutual_friends.limit(10000))&access_token=CAAD4bKUPbr8BAOFdEJGiudoQ5ndBbzVAwAAUlj4y6wKkiDecR7IIAk6eLbm96ynlvPZC5Cpu1eJafUdZBrepqgs5PY2vxZCt1C3BrSDZCdP6VERo3KdHZBFtsUG4PuGCBKB2d9CZBg7dDhzH4yqxKXDgDVGvz4sTbmr99fzgaF1okH9U42cW5lcVuH1FGX7fSU5PhWLQIZCDqsido6WZCBvK0tVYdANaP3OyNh8gKGZAhDZCQZDZD)

[https://graph.facebook.com/v2.0/1710703?fields=context.fields\(all_mutual_friends.limit\(10000\)\)&access_token=CAAD4bKUPbr8BAEiYrdN5hLZALZBCSX6xGyMvDqSDuqK4a76EDNsFUEwTFN9pBi0ajZBFvjqQYw6wUSoUAdRjdtfU59NfsetFZCRyTl6hNEurkmPwPA7ZB44PxU0xUKJRgja7cb34gulpWtqaYqBLnaN68DUQwrAd4AYzF6VIHMaZCjn9GANFWzVVY1wl8vhffNFjD9CKyPVeoOorv3lBlq1Ave63rX4xmSavuUAgse7QZDZD](https://graph.facebook.com/v2.0/1710703?fields=context.fields(all_mutual_friends.limit(10000))&access_token=CAAD4bKUPbr8BAEiYrdN5hLZALZBCSX6xGyMvDqSDuqK4a76EDNsFUEwTFN9pBi0ajZBFvjqQYw6wUSoUAdRjdtfU59NfsetFZCRyTl6hNEurkmPwPA7ZB44PxU0xUKJRgja7cb34gulpWtqaYqBLnaN68DUQwrAd4AYzF6VIHMaZCjn9GANFWzVVY1wl8vhffNFjD9CKyPVeoOorv3lBlq1Ave63rX4xmSavuUAgse7QZDZD)

[https://graph.facebook.com/v2.0/500865275?fields=context.fields\(all_mutual_friends.limit\(10000\)\)&access_token=CAAD4bKUPbr8BAD15Gw5zmMN5BR00pMcz4UsWZAOfYdWmElbnvJX9rqEjROZC6zo0IKvCCEzE2AZCOZBOTLCAXBKUS4p6xz3yls9ff7Ufok](https://graph.facebook.com/v2.0/500865275?fields=context.fields(all_mutual_friends.limit(10000))&access_token=CAAD4bKUPbr8BAD15Gw5zmMN5BR00pMcz4UsWZAOfYdWmElbnvJX9rqEjROZC6zo0IKvCCEzE2AZCOZBOTLCAXBKUS4p6xz3yls9ff7Ufok)

cAMVZAPC10!UaKSiQ1g6D3git2Xej7nrXZBZCdDIRkK3Lp9lmcwT2SLFNFBvzb6wS7vudLGks4N4VKlz7TeiKaKd6oyOrGKqFAasivQ
7xSZB9ZBrJ5kfBI92pMZD

Thanks,
Adam



On Wed, Mar 18, 2015 at 12:45 PM, Simon Cross <si@fb.com> wrote:
Hey Adam,

We've just investigated the call pasted below. I can't give you full details of what's happening to protect the privacy of those two users, but suffice to say the unsupported get request error is valid.

Examples of where this may happen:

- subject user blocks the token user
- Subject user unauthorizes CMB
- Subject user turns off Platform in their FB app settings.

The All Mutual Friends API runs all the realtime privacy checks on behalf of both users, and will return an error if the token user does not have permission to see the subject user.

I'm happy to investigate another example request if you want to see if the same thing is happening there.

S

From: Adam Berlinsky-Schine
Date: Wednesday, March 18, 2015 at 12:06 PM
To: Simon Cross
Cc: Konstantinos Papamiltiadis, Barney Jackson, Eddie O'Neil, Michael Huang
Subject: Re: new FB APIs - Hashed Anon All friends API

Simon,

I understand that, but that makes it impossible for us to obtain all mutual friends during the interim period where we are getting people to upgrade. With our own (developer) accounts, we were able to obtain all friends via the v1 with v2 tokens so we were surprised that it failed when we tried to deploy to production.

Can you also address our question about why we are getting "Unsupported get request. Please read the Graph API documentation at <https://developers.facebook.com/docs/graph-api>"? We are getting this for a very large portion of our all_mutual_friends calls - this is even more of a blocker than the v1/v2 issue.

It would be great if we could chat since we're running out of time to submit our Facebook 2.0 app and have all of our users upgrade before the April 30th deadline. My phone number is (206) 427-3622 and I'm sure you know how to find me on Facebook Messenger.

Thanks,
Adam



On Wed, Mar 18, 2015 at 11:18 AM, Simon Cross <si@fb.com> wrote:
Hey Adam,

This is actually by design. For users who login to an app via v2.0, that user is in a v2.0 state regardless of the API version you call – hence all friends are not available for that user when calling v1 or v2. The fact the user logged into the app via v2.x is a signal that the app is expecting v2.x behavior everywhere. Specifically, we added this to prevent apps having users login to v2 with all its promised of how protecting friends information works, then those apps making v1 calls on the server to side-step that expectation.

This will be the state of all users come 4/30, so it makes sense to start handling this case now.

S

From: Adam Berlinsky-Schine
Date: Wednesday, March 18, 2015 at 9:17 AM
To: Konstantinos Papamiltiadis
Cc: Simon Cross, Barney Jackson, Eddie O'Neil, Michael Huang
Subject: Re: new FB APIs - Hashed Anon All friends API

Thanks Konstantinos. Simon, could you please answer both questions? Getting all friends via the 1.0 API with a 2.0 token was the crux of our migration plan, so that we could continue to get mutual friends between new users who signed up via 2.0 and old users who hadn't reauthenticated until most people upgrade. The "Unsupported get request" issue is preventing us from migrating at all.

Thanks,
Adam

On Tue, Mar 17, 2015 at 10:01 PM, Konstantinos Papamiltiadis <kpapamiltiadis@fb.com> wrote:
Hello Barney,

I would ask for Simon's help here.

I believe you can call v2 with an access token acquired against v1 without any problems; but I don't believe you should expect to get back the complete friends list with an access token obtained against the v2 of the API. I would consider this a bug if it was possible to be honest.

But like I said, I would rather ask Simon to keep me honest here.

kp

From: Barney Jackson <barney@coffeemeetsbagel.com>
Date: Tuesday, March 17, 2015 at 10:42 AM
To: Konstantinos Papamiltiadis <kpapamiltiadis@fb.com>
Cc: Eddie O'Neil <ekoneil@fb.com>, Simon Cross <si@fb.com>, Adam Berlinsky-Schine <adam@coffeemeetsbagel.com>, Michael Huang <michaelh@fb.com>
Subject: Re: new FB APIs - Hashed Anon All friends API

Hi Konstantinos,

The appsecret_proof seems to have done the trick, thank you again. Interesting that we didn't get the standard OAuth "#100 This method must be called with appsecret_proof." Exception with this as we've seen in other cases though.

We are also experiencing two new issues which I hope you could help us with.

1. With the all_mutual_friends API, about half the time requests are returned as:

```
{"error": {"message": "Unsupported get request. Please read the Graph API documentation at https://developers.facebook.com/docs/graph-api", "type": "GraphMethodException", "code": 100}}
```

As here:

[https://graph.facebook.com/v2.0/641975429?fields=context.fields\(all_mutual_friends.limit\(10000\)\)&access_token=CAAD4bKUPbR8BAE1ZCPz2rr3EMZC3ZBmxRZA92AnBZA4v2qzOtC26QjmEL89sLOoZBmMMNiUZC57iF4CHrlRT7rPEKDa9vpQyDaA7FwsTNgjxbPgdUbwegR8TPMhFJl7g9OZATYjlPd7U2UDiFgprZBG9a7O1tSrONTIPugLgVNQXr1RZBpP0kbYqKJ07U8AR5HZCk4ieSdLZBQ6vcpiobJ9VPjVb&appsecret_proof=4795f51094cd30d63c11cb4492362d0a92b9164e9f8704e6712f541c75926ec7](https://graph.facebook.com/v2.0/641975429?fields=context.fields(all_mutual_friends.limit(10000))&access_token=CAAD4bKUPbR8BAE1ZCPz2rr3EMZC3ZBmxRZA92AnBZA4v2qzOtC26QjmEL89sLOoZBmMMNiUZC57iF4CHrlRT7rPEKDa9vpQyDaA7FwsTNgjxbPgdUbwegR8TPMhFJl7g9OZATYjlPd7U2UDiFgprZBG9a7O1tSrONTIPugLgVNQXr1RZBpP0kbYqKJ07U8AR5HZCk4ieSdLZBQ6vcpiobJ9VPjVb&appsecret_proof=4795f51094cd30d63c11cb4492362d0a92b9164e9f8704e6712f541c75926ec7)

2. With the /me/friends/ API, we're seeing inconsistencies in what returns all friends vs. only app user friends between our regular users, users with FB developer accounts for our app, and the FB "Test Users" (under Roles) for our app. Take for example a call to v1.0/me/friends with an access token generated in v2.0:

My account (developer) - 788370643:

All friends returned, as expected.

My CMB testing account - 100006514429166:

Response is from v2.0 instead of v1.0, with only 1 friend out of 3 returned despite all 3 being CMB app users.

An Facebook Test User - 1382602362059924:

Only the 5 CMB app users returned of 15 total friends.

I was wondering if there's restrictions for calling v1.0 endpoints like /me/friends/ with an access token generated from v2.0, or vice versa? Is the access token version specific?

Hopefully you can point out anything that we're doing wrong here and let us know how we can get these working as expected.

Many thanks,

Barney

On 13 March 2015 at 05:16, Konstantinos Papamiltiadis <kppapamiltiadis@fb.com> wrote:

Hello Barney,

You need to make the API call with appsecret_proof. Once you do this, the API will return the correct results.

Let us know if that works,

kp

On 11 Mar 2015, at 17:14, Barney Jackson <barney@coffeemeetsbagel.com> wrote:

Hi guys,

Thanks for the help last time. Unfortunately we've come across another potential issue after we started to use the new APIs in production this afternoon:

The "All Mutual Friends API" is returning no (or fewer) results at least half the time when called between two users. We have several examples where when logged in as User A on facebook looking at mutual friends with user B we see multiple other users, but a query in the graph explorer or through the All Mutual Friends API does not return these same users. E.g.:

For two of our staff, uids 602692 and 1473780004, who are not friends on Facebook we know that they do have 4 mutual friends (who are also all staff). However a call to /v2.2/1473780004?fields=context.fields(all_mutual_friends) with an access token for 602692 only returns {"id": "1473780004"}.

Has anything changed here at all? Is there a case when the API would not return the mutual friends between two users even though there are mutual friends?

Thanks,

Barney

On 19 February 2015 at 18:07, Eddie O'Neil <ekoneil@fb.com> wrote:
For reference, here are the API docs:

https://developers.facebook.com/docs/graph-api/securing-requests#appsecret_proof

Eddie

From: Simon Cross <si@fb.com>
Date: Thursday, February 19, 2015 at 6:00 PM
To: Barney Jackson <barney@coffeemeetsbagel.com>
Cc: Adam Berlinsky-Schine <adam@coffeemeetsbagel.com>, Konstantinos Papamiltiadis <kpapamiltiadis@fb.com>, Eddie O'Neil <ekoneil@fb.com>, Michael Huang <michaelh@fb.com>
Subject: Re: new FB APIs - Hashed Anon All friends API

Hey Barney - as the error says you need to call this with an appsecret proof.

You can construct this by making a sha1_sum of your app secret and the user token.

I'm on mobile so can't link to the docs, but a google will find it on our site.

S

Sent from my iPhone

On 19 Feb 2015, at 15:13, Barney Jackson <barney@coffeemeetsbagel.com> wrote:

Hi Simon,

We are currently unable to get the hashed_friends API to work on any of our apps through the Graph API explorer, getting the error "#100 This method must be called with appsecret_proof". It would be very useful for us to be able to play with this outside of our application code, can you advise please?

Thanks,

Barney

On 11 February 2015 at 17:35, Simon Cross <si@fb.com> wrote:
In fact you should have access now.

Let us know if you have any problems.

Simon

From: Adam Berlinsky-Schine
Date: Wednesday, February 11, 2015 at 4:17 PM
To: Simon Cross
Cc: Konstantinos Papamiltiadis, Eddie O'Neil, Michael Huang, Barney Jackson
Subject: Re: new FB APIs - Hashed Anon All friends API

Thank you!

On Wed, Feb 11, 2015 at 4:14 PM, Simon Cross <si@fb.com> wrote:
Hey Adam sorry for the delay – I've added those apps to our system and you should see the
hashed_friends_api capability show up in your app dashboard later today or early
tomorrow.

Simon

From: Adam Berlinsky-Schine
Date: Wednesday, February 11, 2015 at 4:10 PM
To: Simon Cross
Cc: Konstantinos Papamiltiadis, Eddie O'Neil, Michael Huang, Barney Jackson
Subject: Re: new FB APIs - Hashed Anon All friends API

Hey Simon, could you please add those test apps? We'd like to start development on this.

Thanks,
Adam

On Thu, Feb 5, 2015 at 9:45 AM, Adam Berlinsky-Schine <adam@coffeemeetsbagel.com>
wrote:
Thank you! Can you whitelist our test apps 472914916075007 and 108220949331630?

Thanks,
Adam

On Thu, Feb 5, 2015 at 12:39 AM, Simon Cross <si@fb.com> wrote:
Hey Adam,

Heads up that we've just shipped the Hashed Friends API and made it available to your app
ID: 273145509408031

The docs are here: https://developers.facebook.com/docs/graph-api/reference/v2.2/user/hashed_friends – only visible to people listed in the roles section of
your app.

Please start testing this API as soon as you're able – and feel free to give feedback or ask any questions you have.

I hope this, along with the All Mutual Friends API https://developers.facebook.com/docs/graph-api/reference/v2.2/user.context/all_mutual_friends means you have everything you need to upgrade to Graph API v2.0.

Thanks,

Simon

From: Adam Berlinsky-Schine
Date: Tuesday, January 27, 2015 at 8:53 PM
To: Konstantinos Papamiltiadis
Cc: Simon Cross, Eddie O'Neil, Michael Huang
Subject: Re: new FB APIs - Hashed Anon All friends API

Thank you. The general principal does sound like it works for us. Look forward to trying it out.

Adam

Sent from my iPhone

On Jan 26, 2015, at 11:24 PM, Konstantinos Papamiltiadis <kpapamiltiadis@fb.com> wrote:

Hello Adam.

Simon pointed out to me that the new API will actually return a hashed ID for all user's friends while the me/friends will return fbids and app scoped ids for app users as it stands right now.

I will be able to provide more info later this week, but I hope the general principle of what we are trying to do here works for you.

Apologies for the confusion,
kp

From: Konstantinos Papamiltiadis <kpapamiltiadis@fb.com>
Date: Friday, January 23, 2015 at 11:03 AM
To: Simon Cross <si@fb.com>, Adam Berlinsky-Schine <adam@coffeemeetsbagel.com>
Cc: Eddie O'Neil <ekoneil@fb.com>, Michael Huang <michaelh@fb.com>
Subject: Re: new FB APIs - Hashed Anon All friends API

Hello Adam,

As promised... We have now approval from our internal stakeholders to move ahead with a new API – working name Hashed Anon All Friends API. The new API as well as the relevant docs will be ready next week.

How would this API work... For each of the FB logged in users, the API will return:

FBIDs: App friends that logged in before your migration to V2:

App Scoped IDs: App friends that logged in after your migration to V2:

Anonymous one-way hashed IDs: Non-app friends

This API will hopefully let you understand some of the structure of the graph in order to determine which non-app friends to recommend to a given user, and thus which pairs of users to call the All Mutual Friends API on behalf of. These hashed IDs will be in an entirely new namespace (I.e. Different to anything you have today). Its purely for matching 2nd and 3rd order mutual friends etc.

The following example may help...

<5556ECED-310D-43CA-BFC4-C324D0C17985.png>

For u1, we'd emit hashed IDs for: u8, u5, u4 & app scoped ID for u3

For u2, we'd emit hashed IDs for: u6 , u4 & app scoped ID for u3 and u7

For u7, we'd emit hashed IDs for: u5 & app scoped ID for u2

Thus, the app could determine that u1 and u2 are related:

* via u3 (2nd order via app-user)

* via u4 (2nd order via non-app user)

* u5 and u7 (3rd order).

Note, the relationship via u6 would not be known as u6 is not friends with ≥ 2 app-users.

Based on the above, the number of API calls you will need to make against the Mutual Friends API will be drastically reduced as well, which has been a concern of yours as well.

Let me know if that would work.

kp

From: Simon Cross <si@fb.com>
Date: Tuesday, January 20, 2015 at 5:57 PM
To: Adam Berlinsky-Schine <adam@coffeemeetsbagel.com>
Cc: Eddie O'Neil <ekoneil@fb.com>, Konstantinos Papamiltiadis <kpapamiltiadis@fb.com>, Michael Huang <michaelh@fb.com>
Subject: Re: new FB APIs

Hey Adam,

We're working on specing and building it out now - hope to have an update for you next week.

Note, you'll need to use this indexing api and the All Mutual Friends api in concert, so it might make sense to begin integrating that now in any place you'd want to surface mutual friends between two people in your UI.

S

Sent from my iPhone

On 20 Jan 2015, at 09:26, Adam Berlinsky-Schine <adam@coffeemeetsbagel.com> wrote:

Cool - when will that be available?

Adam

On Tue, Jan 20, 2015 at 8:34 AM, Eddie O'Neil <ekoneil@fb.com> wrote:

Hi Adam – we're aware of the $O(n^2)$ issue and are building an “index API” that you can use to know which IDs to call for any given friend.

That should dramatically reduce the # of API calls needed to read this info.

Eddie

From: Adam Berlinsky-Schine <adam@coffeemeetsbagel.com>
Date: Monday, January 19, 2015 at 2:35 PM
To: Konstantinos Papamiltiadis <kpapamiltiadis@fb.com>
Cc: Michael Huang <michaelh@fb.com>, Eddie O'Neil <ekoneil@fb.com>, Simon Cross <si@fb.com>
Subject: Re: new FB APIs

Okay, thank you. I'll wait to implement anything until that's available.

Adam

On Mon, Jan 19, 2015 at 2:32 PM, Konstantinos Papamiltiadis <kpapamiltiadis@fb.com> wrote:
We are looking into this, and we may have something to address it shortly.

From: Adam Berlinsky-Schine
<adam@coffeemeetsbagel.com>
Date: Monday, January 19, 2015 at 10:20 PM
To: Konstantinos Papamiltiadis
<kpapamiltiadis@fb.com>
Cc: Michael Huang <michaelh@fb.com>, Eddie O'Neil
<ekoneil@fb.com>, Simon Cross <si@fb.com>
Subject: Re: new FB APIs

Thanks Konstantinos. What about my feedback that I'd be calling this API N^2 times? You said you had a solution coming soon for that?

Adam

On Mon, Jan 19, 2015 at 2:06 PM, Konstantinos Papamiltiadis <kpapamiltiadis@fb.com> wrote:
Hello Adam,

Thanks for the reminder, the Mutual Friends API is now available for you to use. Your app ID has already been whitelisted, but please do let us know once you start your integration as we would like to verify how you are using it.

Some more info on the API.

1/ API

Endpoint: [graph.facebook.com/v2.2/{USER_B_ID}?fields=name,id,context.fields\(all_mutual_friends\)&access_token=USER_A_TOKEN](https://graph.facebook.com/v2.2/{USER_B_ID}?fields=name,id,context.fields(all_mutual_friends)&access_token={USER_A_TOKEN}) – where both user A and B must be app users

Note that this API is available in v2.0, v2.1 and v2.2, but not v1.0. By default it returns a total count, and up to 5 mutual friends. If you want more mutual friends, you can specify a limit param:

...?fields=name,id,context.fields(all_mutual_friends.limit(200))

2/ Sample response:

NOTE: we only return the ID field if the mutual friend is an app user. We return a token in all cases. The token will eventually be usable to redirect the user to the FB profile

for that person i.e. www.facebook.com/<TOKEN> but that's not done yet.

```
        "name": "Carl Sjogreen",
        "id": "5943",
        "context": {
            "all_mutual_friends": [
                {
                    "data": [
                        {
                            "name": "Arthur Rudolph",
                            "token": "AS14nbpfmyXr44MjWp8Ge1_RmM1UjACrq0MH758lCzqG9DC25kophaa6jvUVZEYqpkFXU9kMcTXY-nxc-N8acQ",
                            "picture": {
                                "data": {
                                    "is_silhouette": false,
                                    "url": "https://fbcdn-profile-a.akamaihd.net/hprofile-ak-xaf1/v/t1.0-1/c0.5.50.50/p50x50/1928902_665659915031_7800815_n.jpg?oh=cf5d0386a572d440c75fc7da70b2dbda&oe=5539B823&_gda_=1428955376_232d7d0dd9758afadcbaa4936f949760"
                                }
                            }
                        },
                        {
                            "id": "9074",
                            "name": "Mike Vernal",
                            "token": "ASnSiFqA0ZaebCx4Jok5bin237ez66NvcFeqKe4Ze24m4PTNJITfcA9_2FHZ2uXoupOxMvAFTRpStcmeLugRjvhe",
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                                }
                            }
                        },
                        {
                            "id": "11230",
                            "name": "Spencer Lazar",
                            "token": "ASmf9WPcAYUcSzKZYYI9d4Ovo5ZiN11A7-Uazvxq55Cpyc971SdzpLvKe2kkBqaAdRU_xMuTBtORMLITOMaT9So",
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                                "data": {
                                    "is_silhouette": false,
                                    "url": "https://fbcdn-profile-a.akamaihd.net/hprofile-ak-xaf1/v/t1.0-1/c8.0.50.50/p50x50/1959792_10101273193691431_1742964517_n.jpg?oh=bd9cdef942497b46d90d54d898f865cd&oe=5537CE18&_gda_=1430135507_e1ee33a42ffb8c50f9f3191a7f4525bc"
                                }
                            }
                        },
                        {
                            "id": "11674",
                            "name": "Jonathan Matus",
                            "token": "ASn9N1X_vVUeUr09CT3OeUJSufq3S3_M1s1GsdsaTZYPaCCTgeKBSDFerRtCKh1CZQBjfilXftAOE7smi5ddwVp6",
                            "picture": {
                                "data": {
                                    "is_silhouette": false,
                                    "url": "https://fbcdn-profile-a.akamaihd.net/hprofile-ak-xaf1/v/t1.0-1/c8.0.50.50/p50x50/1959792_10101273193691431_1742964517_n.jpg?oh=bd9cdef942497b46d90d54d898f865cd&oe=5537CE18&_gda_=1430135507_e1ee33a42ffb8c50f9f3191a7f4525bc"
                                }
                            }
                        }
                    ]
                }
            ]
        }
    }
}
```

```
        "url": "https://fbcdn-profile-
a.akamaihd.net/hprofile-ak-xpa1/v/t1.0-
1/p50x50/10603543_10101773261092351_8075915437065
151803_n.jpg?oh=8d41771ebe86c501feb97e56a673d58b&
oe=556B842E&__gda__=1429703571_c79cc0934c3d703c44
fe77b92e9427a6"
    }
},
{
    "id": "15150",
    "name": "Zoran Martinovic",
    "token": "ASnm0XryCoUFSd-
0YxEXSZfQMw52Jxf_sJfu2ZIrqIDhTOQ2dv_bBhnS-
U6ZuGkrsXdf-zstP0NcMIGEWjvoL8ac",
    "picture": {
        "data": {
            "is_silhouette": false,
            "url": "https://fbcdn-profile-
a.akamaihd.net/hprofile-ak-xpa1/v/t1.0-
1/c11.11.141.141/s50x50/66942_762747565601_109063
9_n.jpg?oh=ec23095d699be1d55cf511d9ea1138c6&oe=55
33F271&__gda__=1433120160_2f43bc8695455e4f959921c
96a02a6c0"
        }
    }
},
{
    "paging": {
        "cursors": {
            "before": "MTAxMDE4NDkzNTI2OTkxNjE=",
            "after": "MTUxNTA="
        },
        "next": "https://graph.intern.facebook.com/v2.0/5943?pretty=0&fields=context.fields(all_mutual_friends.limit(5).after(MTUxNTA))",
        "summary": {
            "total_count": 109
        }
    }
}
}
```

Looking forward to your feedback,
kp

From: Adam Berlinsky-Schine
[<adam@coffeemeetsbagel.com>](mailto:adam@coffeemeetsbagel.com)
Date: Monday, January 19, 2015 at 9:48 PM
To: Konstantinos Papamiltiadis
[<kpapamiltiadis@fb.com>](mailto:kpapamiltiadis@fb.com)
Cc: Michael Huang <michaelh@fb.com>, Eddie O'Neil
[<ekoneil@fb.com>](mailto:ekoneil@fb.com), Simon Cross <si@fb.com>
Subject: Re: new FB APIs

Hi guys, do you have an update on when I can expect the new API?

Adam

On Mon, Jan 12, 2015 at 5:18 PM, Adam Berlinsky-Schine
[<adam@coffeemeetsbagel.com>](mailto:adam@coffeemeetsbagel.com) wrote:

Got it, thanks. In that case, the N^2 calls is the only concern I have with the outline you've given me so far.

Thanks,
Adam

On Mon, Jan 12, 2015 at 5:13 PM, Konstantinos Papamiltiadis <kpapamiltiadis@fb.com> wrote:
+ Michael Huang who I believe has also been in touch with you in the past to close the loop

Hello Adam,

Good feedback. We are exploring the development of an API that would solve the issue with the number of calls. More on this in the coming days...

For non-app friends the Mutual API will return the name and picture. I think the distinction we made below is related to the scenario a mutual friend is an app user (the API will return ID) Vs a non-app user (the API will return the token).

I made a note for the two additional IDs.

Thanks a lot,
konstantinos

From: Adam Berlinsky-Schine
<adam@coffeemeetsbagel.com>
Date: Monday, January 12, 2015 at 12:49 PM
To: Konstantinos Papamiltiadis
<kpapamiltiadis@fb.com>
Cc: Eddie O'Neil <

...

[Message clipped]

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Adam Berlinsky-Schine
Chief Technology Officer
Coffee Meets Bagel
<https://coffeemeetsbagel.com/>

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Chief Technology Officer

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