

From: Peter Cheng <Redacted@google.com>
To: Jim Kolotouros <Redacted@google.com>
Subject: Re: ACHP offsite agenda
Cc: Christian Veer <Redacted@google.com>, Christopher Li <Redacted@google.com>, Bhavin Rokad <Redacted@google.com>

Hi Jim

Not a problem at all. We've made some changes to the deck as per your guidance. Please see comments in line for details on what we've adjusted.

Let us know if you have any more comments or questions.

Cheers

Pete

Peter Cheng | Strategy & Operations | Redacted@google.com | Redacted

On 5 May 2016 at 20:00, Jim Kolotouros <Redacted@google.com> wrote:

thanks for sharing and the hard work on this:

i) I re-added China as something to look out for.

No probs

ii) Chris and I still need to work on the flow in the first half of the slides; the transition from AOSP to compatibility to GMS is still rough and I have not mastered it yet; nor what the precise order for a natural educational progression should be

iii) can we please be more clear with respect to unlicensed vs. uncertified/unapproved? more specifically, be clear that uncertified devices are devices by licensed OEM's who do not get approved by us... and that unlicensed devices are by definition uncertified because people have illegally pre-loaded GMS on their devices. So slide 19/20 can be tinkered with a bit

We have added some extra details on slide 19 to specifically call out the difference. Note that we've gone with the approach of using the umbrella term "Unapproved" which can be broken down into Unlicensed and Uncertified devices.

iv) let's lose slide 26

Slide has been removed

v) slide 28 is too busy and the message is weak... we need to trumpet that there are indeed "asks of the broader team"... e.g., educate retailers! educate carriers! that they should not carry uncertified devices. The bottom right talks about search revenue shares but those are already in place or are in motion. So maybe a color-code system of green/yellow/red of what is being done vs. what is not being done would be helpful so people can go right to the red and know that we need help (at least we need more help with some things than others).

We have re-tweaked slide 28 (now slide 27) to remove some of the clutter. Hoping that this makes it a bit clearer. The message here is that we need the team to prioritize these issues in their partner discussions, educate them, give them some kind of carrot and failing that, be willing to use a stick. We've also added in some traffic lights as you suggested, but will need to defer to your view on what color they should be.

thanks...

On Thu, May 5, 2016 at 5:06 PM, Peter Cheng <Redacted@google.com> wrote:

Hi Jim

Ex. No.

UPX0125

1:20-cv-03010-APM

Please find the updated deck [here](#) for your review. Chris, Bhavin and I worked to incorporate the additional slides into a new section labelled "current challenges" which speaks to Healthy Android and security/letter updates. We also moved the section "Things to keep an eye on" directly after this as we felt that it was a natural follow up to the challenges.

Please let us know if you have any questions or comments. I will be on a flight tomorrow afternoon, but Bhavin will be around, and it looks like Chris is OOO all day. Bhavin and I will also be online on Monday in London if you need any changes made.

Thanks very much

Pete

Peter Cheng | Strategy & Operations | [Redacted@google.com](#) | **Redacted**

On 5 May 2016 at 08:57, Jim Kolotouros <[Redacted@google.com](#)> wrote:

can we please set-up some time to see how the non-certified device slide, along with the call to action, feeds into the master slides?
thanks!

Redacted

On Thu, Apr 28, 2016 at 11:56 AM, Jim Kolotouros <[Redacted@google.com](#)> wrote:

all verbal on EU and Russia. Placeholder is fine; we can add to slide 24. (let's make a copy of the original that is dedicated for use @ the offsite).
thanks.

On Thu, Apr 28, 2016 at 11:53 AM, Christian Veer <[Redacted@google.com](#)> wrote:

Security updates we can also split by OEM, Carrier and markets.
Would put the "how can you help?" at the end.

Shall we have actual slides on EU & Russia or just a placeholder with little content so can do it verbally?

Redacted

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ANDROID OVERVIEW

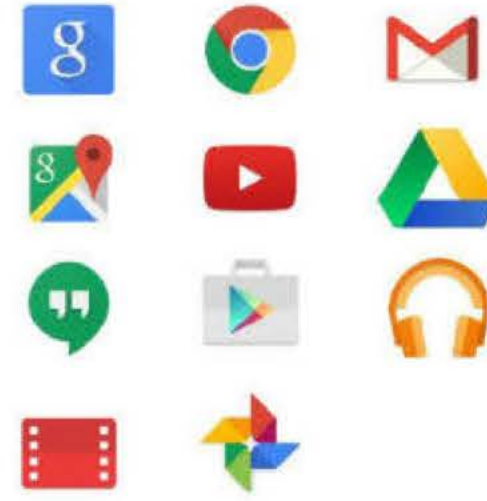
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WE BELIEVED GOOGLE APPLICATIONS WOULD ENHANCE THE USER EXPERIENCE ON SMARTPHONES

What is GMS?

- **GMS is a collection of Google applications** for Android
 - Most GMS apps are optional and available a la carte
 - Some GMS apps are only available in a bundle; but there is no obligation for OEM's to pre-load these
- GMS works beautifully on *compatible* Android smartphones / tablets and is intended to provide the best possible mobile experience on smartphones (not feature phones)
- App updates are administered by Google Play
 - E.g., Google Maps cannot be updated on a device if Play is also not installed
- **There is not a single agreement with any OEM that requires them to pre-load any GMS app on their device**

GMS MANDATORY APPS



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GOOGLE PLAY SERVICES / GMS CORE IS AN IMPORTANT ELEMENT OF PLAY

What is Google Play Services / GMS Core?

- Play Store provides a set of Google APIs that help support functionality of all Android applications (aka GMS Core APIs, Google Play Services)
 - Ads
 - Maps
 - Analytics
 - Location, etc.,
- Used by GMS, and hundreds of thousands of 3rd party apps
- 826 out of the top 1000 Android apps use 1 or more GMS Core APIs (Facebook, WhatsApp, Twitter, and many other apps)

GmsCore API Usage (3P)

• Only apps evaluated by Marmot (mostly limited to apps in active in Google Play Store)

Nr Applications using GmsCore API

	Count
All	536,142
gms.ads	414,506
gms.common	351,567
gms.maps	164,252
gms.gcm	146,041
gms.analytics	97,374
gms.location	91,457
gms.plus	74,466
gms.games	52,085
gms.auth	35,121
gms.appstore	21,438
gms.internal	14,634
gms.b	4,449
gms.a	1,472
gms.wallet	437
gms.drive	4263
gms.cast	3,953
gms.wearable	1,822

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REVIEW OF HYPOTHETICAL SCENARIOS

SCENARIO	YES	NO	NOTES
Can a mobile phone without Google Play and GMS core APIs run other Android apps?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Yes, as long as the apps don't require any APIs from GMS Core or they find ways to replicate API functionality (themselves or other 3P APIs)
Can someone effectively utilize GMS Core APIs without Google Play installed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No, the APIs require and use Play's infrastructure
If a device has Google Play illegally sideloaded, can it access GMS Core APIs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Can access GMS Core APIs, but we cannot validate the authenticity of the Core API functionality. This is why enforcing unlicensed devices is important.
Does Apple offer its own version of iOS "GMS Core APIs"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	iOS has a similar API model, but there are less APIs and they do not offer as deep functionality

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GMS REQUIRES SIGNING A SET OF AGREEMENTS WITH GOOGLE - ACC AND MADA ARE THE TWO MAIN ONES

Android Compatibility Commitment (ACC)



Compatibility: Company will **only distribute Android devices that are Android-Compatible Devices**. i.e., if a device uses Android (even without GMS), it must be compatible (pass the compatibility test suite; comply with CDD). Exceptions are granted on a case-by-case basis

Mobile Application Distribution Agreement (MADA)



Pre-load + Placement: Pre-load i) GMS mandatory apps, and ii) search widget, Play store, and Google Collection on the default home screen (i.e., invoked by the home button)

What does Google get

but...

Companies do not need to sign any other agreements, such as MADA, although almost all OEMs take this step. Carriers and retailers do not/cannot sign the ACC

MADA gives OEMs a device-by-device choice. OEM can pre-load any other application in addition to Google services; there's no obligation for an OEM to load GMS on any device. **Zero exclusivity within the MADA**

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ANDROID AGREEMENT OVERVIEW - REVENUE SHARE OFFERED TO LIMITED SET OF PARTNERS

FOR LIMITED SET OF PARTNERS

	ACC: Android Compatibility Commitment	MADA Mobile Application Distribution Agreement	MSDA Mobile Search Distribution Agreement
PURPOSE	Ensure all applications work consistently across all compatible devices	OEM partners are given an opportunity to create a basic out-of-box experience	Allow partners to receive share of mobile search revenue
PARTNER COMMITMENT	Partner will only distribute Android devices that are Android-Compatible devices (with or without GMS)	Satisfy the pre-load, placement, and branding requirements set forth by Google	Other search services are not pre-loaded on the default home screen & search defaults are set to Google

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GMS CORE APIS ARE A PILLAR OF 3P APP DEVELOPMENT

Products > Google APIs for Android

Google APIs for Android

Simplify your Android development, grow your user base, and monetize more effectively with Google services.

HOME GUIDES REFERENCE



GMS CORE APIS

- A set of APIs that developers often use in their applications. Example: ads, maps, location, analytics, sign-in, cloud messaging
- All key mobile API features from individual Google products (eg, maps / places) have migrated their product APIs to GMS core

DEVICES WITHOUT GMS CORE APIS


- Must replicate functionality of GMS Core APIs or find replacement from another 3P
- GMS Core needs Google Play to function properly - it is part of Google Play and uses Play's infrastructure to deliver first- and third-party Play apps
- Possible to get access to GCore via unauthorized Play install - must be diligent about unlicensed devices

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GMS CORE API USAGE - 86% OF TOP 1000 APPS USE GMS CORE APIS

NUMBER OF GMS CORE API CALLS

	8
	9
	7
	9
	3

NOTABLE APPS WITH NO GMS CORE INTERACTION



 Print services


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WHAT IS A CLIENT ID AND WHO GETS IT?

CLIENT ID OVERVIEW

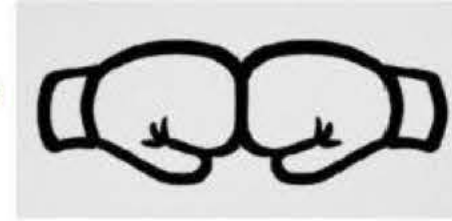


Google

- Only **one** client ID per mobile device
- Search revenue is aggregated at the client ID level
- Individual revenue share terms are set for each partner / client ID and paid out accordingly
- Individual apps can have their own Client ID's (eg, Opera)

ASSIGNMENT OF CLIENT ID

SAMSUNG



verizon wireless

- Carriers and OEMs hash it out by device / region for whose client ID is on the device
- Google does not get involved in these discussions

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