Android:

1. Foreground:

on.(‘notification’) called: 1 time

data.additionalData.foreground: True

data.additionalData.coldstart: False

Notification Center: None

1. Background:
2. Click from app Icon

on.(‘notification’) called: 1 time

data.additionalData.foreground: False

data.additionalData.coldstart: False

Notification Center: Clear all when close app

1. Click from Notification

on.(‘notification’) called: 2 times

data.additionalData.foreground: 1. False 2. False

data.additionalData.coldstart: 1. False 2. True

Notification Center: Clear all when close app

1. Click from App Switcher

on.(‘notification’) called: 1 time

data.additionalData.foreground: False

data.additionalData.coldstart: False

Notification Center: Clear all when close app

1. Tetermined:
2. Click from app Icon

on.(‘notification’) called: 1 time

data.additionalData.foreground: False

data.additionalData.coldstart: False

Notification Center: Clear all when close app

1. Click from Notification

on.(‘notification’) called: 2 times

data.additionalData.foreground: 1. False 2. False

data.additionalData.coldstart: 1. False 2. True

Notification Center: Clear all when close app

Analysis:

On Android, when a notification come and the user clicks on the Icon to launch the app, the app will call the on(‘notification’) handler only once for all of the notifications, which include former unclicked notifications. When a notification come and the user clicks on the notification to launch the app, the app will call the on(‘notification’) handler only twice for the current clicked notification, and call the on(‘notification’) handler once for former unclicked notification. Above all, whenever a push notification come, no matter the users launch the app by clicking on the icon or by clicking the Notification, the app will call the on(‘notification’) handler of all of the notifications including the former unclicked notifications at least once. And after that, the app will clear all the notifications in the notification center. That is because the “android.clearNotifications” parameter’s default value is true, which will clears all pending notifications when the app is closed. So I think on Android we don’t need further changes on the Push Notification Module.

IOS:

1. Foreground:

on.(‘notification’) called: 1 time

data.additionalData.foreground: True

data.additionalData.coldstart: False

Notification Center: None

1. Background:
2. Click from app Icon

on.(‘notification’) called: 1 time

data.additionalData.foreground: False

data.additionalData.coldstart: False

Notification Center: Still in the Notification Center

1. Click from Notification

on.(‘notification’) called: 2 times

data.additionalData.foreground: 1. False 2. False

data.additionalData.coldstart: 1. False 2. False

Notification Center: Just clear the clicked Notification

1. Click from App Switcher

on.(‘notification’) called: 1 time

data.additionalData.foreground: False

data.additionalData.coldstart: False

Notification Center: Still in the Notification Center

1. Tetermined:
2. Click from app Icon

on.(‘notification’) called: 0 time

Notification Center: Still in the Notification Center

1. Click from Notification

on.(‘notification’) called: 1 time

data.additionalData.foreground: False

data.additionalData.coldstart: True

Notification Center: Just clear the clicked Notification

Analysis:

On IOS, there are two problems:

1. When the app is terminated, the user click on the app Icon, the on(‘notification) handler will not be called. The related issue: <https://github.com/phonegap/phonegap-plugin-push/issues/158#thread-subscription-status>
2. The notifications in the notification center will not be cleared when click on the app Icon. I think one of the solution can be every time the user of the app, show all the unfinished notifications, and then when the user close the app clear all the notifications in the notification center. (just like Android)

The gcmSandbox in IOS:

The document says that the gcmSandbox should be set according to development or production:

* If you build your app as development and set gcmSandbox: false it will fail.
* If you build your app as production and set gcmSandbox: true it will fail.
* If you build your app as development and set gcmSandbox: true but haven't uploaded the development certs to Google it will fail.
* If you build your app as production and set gcmSandbox: false but haven't uploaded the production certs to Google it will fail.