Registration Android Integration

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0.6	04-02-2016	Vinayakkumar G Udikeri		Dynamic Configuration

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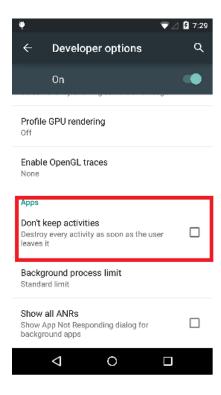
1. Introduction

This document provides an overview of integration Registration Android UI feature in Android Mobile applications.

Source Path: http://161.85.28.146:9000/scm/git/hor-registration-android

2. Prerequisites

- I. Vertical project is configured for Android Studio
- II. Setting->Developer Options->Don't Keep Activities should be unchecked.[If developer mode is on]
- III. Android API version should on 10[Gingerbread]



3. Integration

3.1 **Dependencies**

3.1.1 STANDARD and COPPA flow

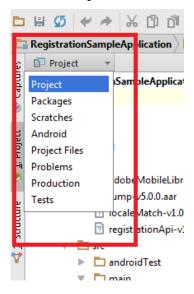
- jump-v5.0.1 .aar
- localeMatch-v1.1.0.aar
- registrationApi-v4.1.0.aar
- tagging-v1.0.0.aar
- ntpClient-v1.0.0.aar
- adobeMobileLibrary-v4.5.1.jar
- org.apache.http.legacy.jar

3.1.2 HSDP flow

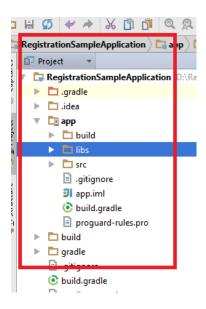
- jump-v5.0.1.aar
- localeMatch-v1.1.0.aar
- registrationApi-v4.1.0.aar
- tagging-v1.0.0.aar
- hsdp-v1.0.2.aar
- ntpClient-v1.0.0.aar
- adobeMobileLibrary-v4.5.1.jar
- org.apache.http.legacy.jar
- jackson-annotations-2.6.0.jar
- jackson-core-2.6.1.jar
- jackson-databind-2.6.1.jar

3.2 Integration jar/aar files

3.2.1 Select Project mode view for Project



Crate lib folder if not exists.

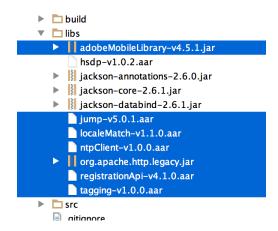


3.2.2 Paste .jar/.aar files to libs directory from reference app.

3.2.2.1 STANDARD and COPPA Flow

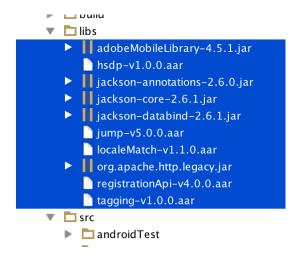
I. jump-v5.0.1.aar

- II. localeMatch-v1.1.0.aar
- III. registrationApi-v4.1.0.aar
- IV. tagging-v1.0.0.aar
- V. ntpClient-v1.0.0.aar
- VI. adobeMobileLibrary-v4.5.1.jar
- VII. org.apache.http.legacy.jar

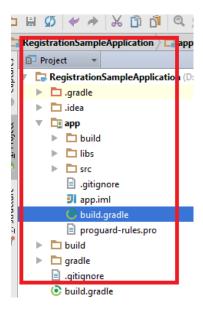


3.2.2.2 **HSDP Flow**

- I. jump-v5.0.1.aar
- II. localeMatch-v1.1.0.aar
- III. registrationApi-v4.1.0.aar
- IV. tagging-v1.0.0.aar
- V. hsdp-v1.0.2.aar
- VI. adobeMobileLibrary-v4.5.1.jar
- VII. org.apache.http.legacy.jar
- VIII. jackson-annotations-2.6.0.jar
- IX. jackson-core-2.6.1.jar
- X. jackson-databind-2.6.1.jar



3.2.3 Select build.gradle file



3.2.4 Refer Registration dependencies along with .aar files in build.gradle as mentioned below

Note: Since Registration Android was built with 'com.android.support:appcompat-v7:23+. version so vertical app support libs should be greater or equal to mentioned versions

STANDARD and COPPA Flow Gradle script:

```
android {
   packagingOptions {
      exclude 'META-INF/DEPENDENCIES.txt'
   exclude 'META-INF/LICENSE.txt'
```

```
exclude 'META-INF/NOTICE.txt'
         exclude 'META-INF/NOTICE'
         exclude 'META-INF/LICENSE'
         exclude 'META-INF/DEPENDENCIES'
         exclude 'META-INF/notice.txt'
         exclude 'META-INF/license.txt'
         exclude 'META-INF/dependencies.txt'
         exclude 'META-INF/LGPL2.1'
repositories {
    flatDir {
        dirs 'libs'
dependencies {
    compile fileTree(dir: 'libs', include: ['*.jar'])
    compile 'com.android.support:appcompat-v7:23+'
    compile(name: 'localeMatch-v1.1.0', ext: 'aar')
compile(name: 'jump-v5.0.1', ext: 'aar')
compile(name: 'registrationApi-v4.1.0', ext: 'aar')
    compile(name: 'tagging-v1.0.0', ext: 'aar')
    compile(name: 'ntpClient-v1.0.0', ext: 'aar')
    compile files('libs/adobeMobileLibrary-v4.5.1.jar')
    compile files('libs/org.apache.http.legacy.jar')
```

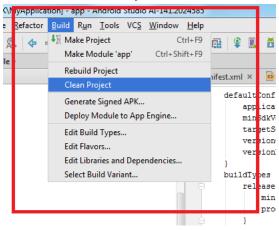
HSDP Flow Gradle script:

```
android {
   packagingOptions {
       exclude 'META-INF/DEPENDENCIES.txt'
       exclude 'META-INF/LICENSE.txt'
       exclude 'META-INF/NOTICE.txt'
       exclude 'META-INF/NOTICE'
       exclude 'META-INF/LICENSE'
       exclude 'META-INF/DEPENDENCIES'
       exclude 'META-INF/notice.txt'
       exclude 'META-INF/license.txt'
       exclude 'META-INF/dependencies.txt'
       exclude 'META-INF/LGPL2.1'
repositories {
   flatDir {
       dirs 'libs'
dependencies {
   compile fileTree(dir: 'libs', include: ['*.jar'])
   compile 'com.android.support:appcompat-v7:23+'
   compile(name: 'localeMatch-v1.1.0', ext: 'aar')
   compile(name: 'jump-v5.0.1', ext: 'aar')
```

```
compile(name: 'registrationApi-v4.1.0', ext: 'aar')
compile(name: 'tagging-v1.0.0', ext: 'aar')
compile(name: 'hsdp-v1.0.2', ext: 'aar')
compile(name: 'ntpClient-v1.0.0', ext: 'aar')
compile files('libs/adobeMobileLibrary-v4.5.1.jar')
compile files('libs/jackson-annotations-2.6.0.jar')
compile files('libs/jackson-core-2.6.1.jar')
compile files('libs/jackson-databind-2.6.1.jar')
```

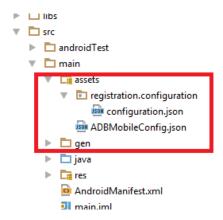
3.2.5 Clean project





3.2.6 Paste Registration related assets in assets folder from reference app

Note: Don't change or rename folder structure



3.2.7 Repeat step 3.2.6

3.2.8 Android Manifest Changes

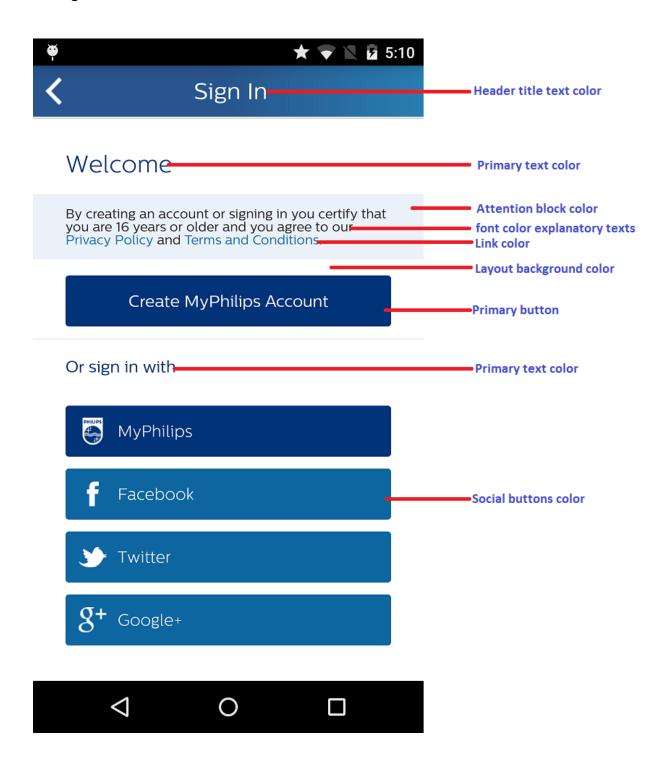
To support Registration Android following changes needs to be done mandatorily

```
i. Needs to mention additional xmlns
     xmlns:tools=http://schemas.android.com/tools
ii. Project should have one application class and should be defined in
     manifest.
      Ex :android:name=".RegistrationApplication"
iii. Asset merging preference
     tools:replace="android:icon,android:theme"
     <?xml version="1.0" encoding="utf-8"?>
      <manifest
     xmlns:android="http://schemas.android.com/apk/res/android"
         xmlns:tools="http://schemas.android.com/tools"
         package="com.philips.cdp.registration.sample">
      <application
     android:name="com.philips.cdp.registration.sample.RegistrationAppl
     ication"
              android:allowBackup="true"
             android:icon="@mipmap/ic launcher"
             android:label="@string/app name"
              android:theme="@style/AppTheme"
              tools:replace="android:icon,,android:label,android:theme">
             <activity
     android:name="com.philips.cdp.registration.sample.RegistrationSamp
     leActivity"
                  android:label="@string/app name">
                  <intent-filter>
                     <action android:name="android.intent.action.MAIN"</pre>
      />
                     <category
     android:name="android.intent.category.LAUNCHER" />
                 </intent-filter>
             </activity>
         </application>
     </manifest>
```

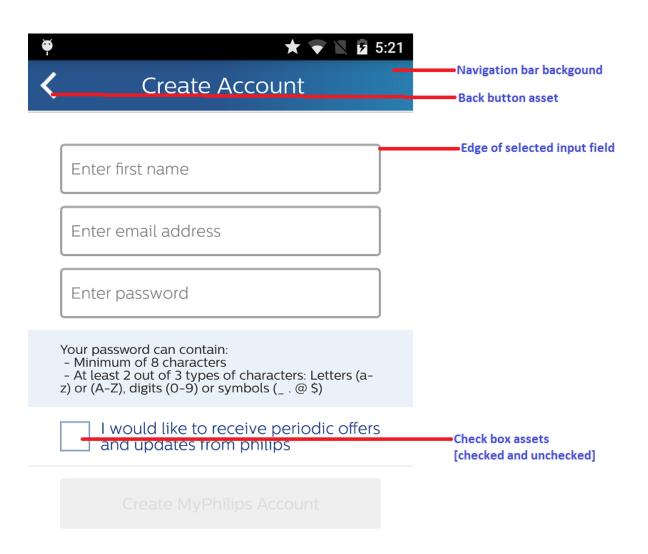
4. Configuration

Registration Android can be configurable in two types UI and Flow configurations

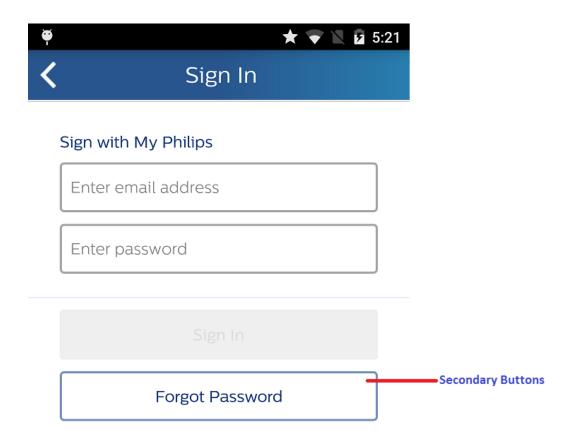
4.1 UI Configurations [registration_config.xml] Configurable elements







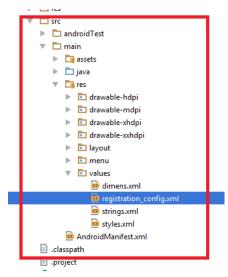






UI Theming ;for altering UI look and feel as per vertical specific follow bellow steps

4.1.1 Copy registration_config.xml from reference app project and paste into project's values folder and alter as per vertical need



Color codes need to be defined as follows, if not mentioned default configuration are picked

4.1.1.1 Primary Button

```
Vertical specific configuration:
<!-- All primary buttons -->
<!-- Primary button enabled color -->
<color name="reg_btn_bg_enabled_color">#013378</color>
<!-- Primary button disabled color -->
<color name="reg btn bg disabled_color">#EFEFEF</color>
<!-- Primary button pressed color -->
<color name="reg btn pressed color">#0F204B</color>
Default configuration:
<!-- All primary buttons -->
<!-- Primary button enabled color -->
<color name="reg btn bg enabled color">#013378</color>
<!-- Primary button disabled color -->
<color name="reg btn bg disabled color">#EFEFEF</color>
<!-- Primary button pressed color -->
<color name="reg btn pressed color">#0F204B</color>
```

4.1.1.2 Edge of input field's

```
Vertical specific configuration:
<!-- Edge of selected input field -->
<!-- Edit Text box border highlight color -->
<color name="reg et highlight color">#28558D</color>
```

Default configuration:

<color name="reg et highlight color">#28558D</color>

4.1.1.3 Secondary button color

Vertical specific configuration:

<!-- Secondary buttons (forgot password) -->
<!-- Forgot password button -->
<!-- Forgot password buton border color -->
<color name="reg_btn_forgot_border">#7793B9</color>
<!-- Forgot password highlight border color -->
<color name="reg highlight forgot bg">#7793B9</color>

Default configuration:

<!-- Secondary buttons (forgot password) -->
<!-- Forgot password button -->
<!-- Forgot password buton border color -->
<color name="reg_btn_forgot_border">#7793B9</color>
<!-- Forgot password highlight border color -->
<color name="reg_highlight_forgot_bg">#7793B9</color>

4.1.1.4 Attention block color

Vertical specific configuration:

<!-- Attention block color -->
<!-- Description text background color -->
<color name="reg_text_desc bg">#EBF1F9</color>

Default configuration:

<!-- Description text background color --> <color name="reg text desc bg">#EBF1F9</color>

4.1.1.5 Link color

Vertical specific configuration:

<!-- Link color --> <color name="reg hyperlink highlight color">#1470AA</color>

Default configuration:

<color name="reg hyperlink highlight color">#1470AA</color>

4.1.1.6 Navigation bar color

Vertical specific configuration:

<!-- Navigation bar background -->
<!-- Strating color of Header:background start gradient color -->
<color name="reg_header_bg_start_color">#28558D</color>
<!-- Ending color of Header:background end gradient color -->
<color name="reg header bg end color">#287EB0</color>

Default configuration:

<!-- Navigation bar background -->
<!-- Strating color of Header:background start gradient color -->
<color name="reg header bg start color">#28558D</color>

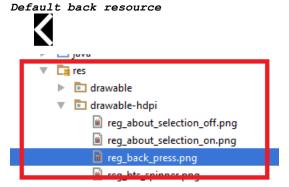
<!-- Ending color of Header:background end gradient color --> <color name="reg header bg end color">#287EB0</color>

4.1.1.7 Navigation bar font color

Vertical specific configuration: <!-- Navigation bar font color --> <!-- Header title text color --> <color name="reg_header_text_color">#FFFFFF</color> Default configuration: <!-- Header title text color --> <color name="reg header text color">#FFFFFF</color>

4.1.1.8 Back button asset

Vertical projects have to give additional resource as per their need Resource name should be reg_back_press and should be placed in hdpi folder



4.1.1.9 Font color explanatory text

```
Vertical specific configuration:
<!-- Font color explanatory texts -->
<!-- Description text color -->
<color name="reg_text_desc_color">#252525</color>

Default configuration:
<!-- Font color explanatory texts -->
<!-- Description text color -->
<color name="reg_text_desc_color">#252525</color>
```

4.1.1.10 Layout background

```
Vertical specific configuration:
    <!-- Background -->
<color name="reg_layout_bg">#FFFFFF</color>

Default configuration:
    <!-- Background -->
<color name="reg_layout_bg">#FFFFFFF</color>
```

4.1.1.11 Primary text color

Vertical specific configuration: <!-- Primary text color --> <color name="reg_text_heading_one_color">#003377</color> Default configuration: <!-- Primary text color --> <color name="reg text heading one color">#003377</color>

4.1.1.12 Warning color

```
Vertical specific configuration:
```

```
<!-- Warning color -->
<color name="reg_error_box_color">#E88200</color>
<color name="reg err msg color">#E88200</color>
```

Default configuration:

```
<!-- Warning color -->
<color name="reg_error_box_color">#E88200</color>
<color name="reg err msg color">#E88200</color>
```

4.1.1.13 Social button color

Vertical specific configuration:

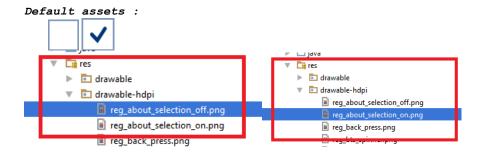
```
<!-- Social button enabled color -->
<color name="reg_btn_social_bg_enabled_color">#0E66A1</color>
<!-- Social button pressed color -->
<color name="reg btn social highlight color">#033D78</color>
```

Default configuration:

```
<!-- Social button enabled color -->
<color name="reg_btn_social_bg_enabled_color">#0E66A1</color>
<!-- Social button pressed color -->
<color name="reg_btn_social_highlight_color">#033D78</color>
```

4.1.1.14 Check box

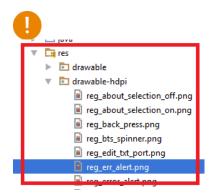
Vertical projects have to give additional resource as per their need resource name should be <code>reg_about_selection_off</code> for unchecked ,<code>reg_about_selection_on</code> for checked and should be placed in <code>hdpi</code> folder



4.1.1.15 Error alert

Vertical projects have to give additional resource as per their need resource name should be reg_error_alert and should be placed in hdpi folder

Default assets:



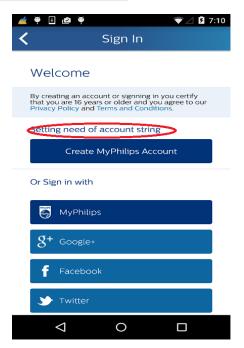
4.1.1.16 Vertical specific texts

4.1.1.16.1 Setting need of account string

Vertical apps may or may not provide why user account is needed.

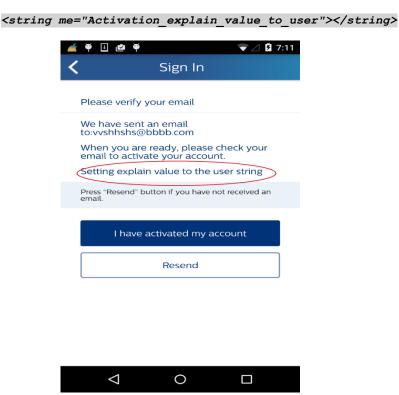
If need to provide then vertical apps needs to add following string in the respective localized **string.xml** file which will be reflected in in following screen

<string name="Welcome_needAccountto_lbltxt">Setting need of
account string </string>



4.1.1.16.2 Setting explain value to the user string

Repeat 4.1.1.16.1 step but use string key as bellow mentioned



4.2 Flow Configurations

4.2.1 Standard

No additional parameter required. Framework will take care of initializing it in Standard flow. Depending on provided configuration.json.

4.2.2 COPPA

Additional parameter for enabling CoppaFlow is essential before init - The coppaFlow value need to set to "true" when the app need to use COPPA flow.[Currently locale is hardcoded to en_US for COPPA please refer sample app]

4.2.3 HSDP

No additional parameter required. Framework will take care of initializing It in HSDP flow. Depending on provided configuration.json

4.3 **Registration Configuration**

Registration can be configured in static or dynamic or hybrid way.

4.3.1 Static Configuration

In Static configuration Vertical Apps must define one **configuration.json** file as mentioned below. Once added then can not be altered by code if any changes need to be done then should go with the new build it self.

The **configuration.json** should be added to the project and json need to update depend on the project.

- JanrainConfiguration
- PILConfiguration
- Flow
- HSDPConfiguration
- SigninProviders

Example RegistrationConfiguration.json:

```
"JanRainConfiguration": {
 "RegistrationClientID": {
  "Testing": "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx,",
  },
"PILConfiguration": {
 "MicrositeID": xxxxxxxxx,
 "RegistrationEnvironment": " Evaluation",
 "Flow":{
      "EmailVerificationRequired": true
      "TermsAndConditionsAcceptanceRequired": "true",
      "MinimumAgeLimit": {
       "NL": 16.
       "GB": 14,
       "default": 16
"HSDPConfiguration": {
  "Development": {
      "ApplicationName": "yourApplicationName",
       "Shared": "your-app's-Shared-Key-for-development",
      "Secret": "your-app's-Secret-Key-for-development",
      "BaseURL": "http://your app BaseURL for development"
    },
"Testing": {
      "Shared": "your-app's-Shared-Key-for-testing",
        "Secret": "your-app's-Secret-Key-for-testing",
      "BaseURL": "http://your app BaseURL for testing"
    }
"SigninProviders": {
 "NL": [
  "myphilips",
  "provider 1",
  "provider 2",
  "provider 3"
 "default": [
  "myphilips",
  "provider_1",
  "provider_2"
```

4.3.1.1 JanRainConfiguration (Mandatory)

JanRainConfiguration is required to be able to connect to janrain services. It requires following fields:

RegistrationClientID: Assign mandatory client id for each environment. For e.g. "Development": "xxxxxxxxxx"

Please contact **Digital Services <digital.services@philips.com>** for Client ID for janrain and Microsite ID

4.3.1.2 PILConfiguration (Mandatory)

PIL configuration requires following three elements:

MicrositeID	MicrositeID of the application.	
Merositers	Mandatory field	
RegistrationEnvironment	The environment want to use. Assign only Development, Testing, Evaluation or Production	
o d	Mandatory Field	
	Add CampaignID only if it using COPPA Flow	
CampaignID	Optional field	

Note: Please contact **Digital Services** <<u>mailto:digital.services@philips.com</u>> for Client ID for janrain and Microsite ID

4.3.1.3 Flow (Optional)

EmailVerificationRequired	If email verification is not needed please assign false to this property, Default value is TRUE
	Optional field
TermsAndConditionsAcceptanceRequired	If email terms and conditions must for app then please assign TRUE to this property, Default value is FALSE
	Optional field
MinimumAgeLimit	If Terms and condition field is assigned true then it is mandatory to define minimum age .
	Mandatory filed if Terms and condition filed is TRUE Else option filed.

4.3.1.4 HSDP Configuration (Optional)

HSDPConfiguration is required to use HSDP services. The elements of HSDP configuration are as below. All the elements are environment specific. The configuration is required for all the environments. If configuration were not provided for any of the environments, application would bypass any communication to HSDP server for that environment. Elements for any environment cannot be provided partially.

ApplicationName	The environment specific application display name	
	Mandatory field	
Shared	An application and environment specific Shared Key to authenticate the application with HSDP Server	
	Mandatory field	
Secret	An application and environment specific Secret Key to authenticate the application with HSDP Server	
	Mandatory Field	
BaseURL	An application and environment specific URL to be used to communicate with HSDP server	
	Mandatory Field	

4.3.1.5 SigninProviders

Add the entire providers array to default, if you need any country specify sign in providers. Add the list of providers with country code, please refer to the example for more details. [Note My Philips is always shown so need to configure other providers only]

Signin Providers supported by registration currently: facebook googleplus twitter

Ex configuration.json for COPPA flow

```
"CampaignID": "xxxxxxxxxxxxxxxxx
},
"Flow":{
    "EmailVerificationRequired": "true"
 },
"SigninProviders": {
"NL": [
   "twitter",
   "facebook"
    "googleplus"
  "default": [
   "facebook"
   "googleplus"
Ex configuration.json for Standard flow
 "JanRainConfiguration": {
  "RegistrationClientID": {
   },
"PILConfiguration": {
  "MicrositeID": xxxxxxxxx,
  "RegistrationEnvironment": " Evaluation",
    "EmailVerificationRequired": "true"
 "SigninProviders": {
   "twitter",
   "facebook",
    "googleplus"
  "default": [
   "facebook",
   "googleplus"
```

4.3.2 Dynamic Configuration

It is possible to change or define entire Registration configuration in code dynamically by following APIs. Which are same as static configuration.

This has been enabled with the RegistrationDynamicConfiguration class

Note: Dynamic configuration are take as priority over the static

4.3.2.1 JanRainConfiguration

For replacing or adding Janarin Configuration ids are quite simple now it can be done in following ways. Registration Framework will take care of replacing and adding ids.

API:

Present in RegistrationDynamicConfiguration class.

Present in RegistrationClientId class

```
* Set production id

* @return String
*/
public void setProductionId(String productionId) {}

/**

* Set evaluation id

* @return String
*/
public void setEvaluationId(String evaluationId) {}

/**

* Set development id

* @return String
*/
public void setDevelopmentId(String developmentId) {}
```

```
**

* Set testing id

*

* @return String

*/
public void setTestingld(String testingld) {}

/**

* Set stagging id

*

* @return String

*/
public void setStagingld(String stagingld) {}
```

Example:

```
RegistrationClientId registrationClientId = new RegistrationClientId();
registrationClientId.setEvaluationId("Evaluation Id");
registrationClientId.setDevelopmentId("Development Id");
registrationClientId.setStagingId("Stagging Id");
registrationClientId.setTestingId("Testing Id");
registrationClientId.setProductionId("Production Id");
```

RegistrationDynamicConfiguration.getInstance().getJanRainConfiguration().setClientIds(registrationClientId);

4.3.2.2 PILConfiguration

For replacing or adding PIL Configuration ids are quite simple now it can be done in following ways. Registration Framework will take care of replacing and adding ids.

API:

Present in **RegistrationDynamicConfiguration** class.

```
/**

* Get PIL Configuration

*

* @return PILConfiguration

*/
public PILConfiguration getPilConfiguration() {}

/**

* Set PIL Configuration

*

* @param pilConfiguration

*/
public void setPilConfiguration(PILConfiguration pilConfiguration) {}
```

Present in **PILConfiguration** class

```
/**
    * Set Microsite Id
    *
    * @param micrositeId String
```

```
*/
public void setMicrositeId(String micrositeId) {}

/**

* Set Registration Environment

*

* @param registrationEnvironment String

*/
public void setRegistrationEnvironment(final String registrationEnvironment) {}

/**

* Set Registration Environment

*

* @param registrationEnvironment

*

* @param registrationEnvironment

*/
public void setRegistrationEnvironment(final Configuration registrationEnvironment) {}

public void setCampaignID(String campaignID) {}
```

Example:

RegistrationDynamicConfiguration.getInstance().getPilConfiguration().setCampaignID("Campain ID"); RegistrationDynamicConfiguration.getInstance().getPilConfiguration().setMicrositeId("Microsite ID"); RegistrationDynamicConfiguration.getInstance().getPilConfiguration().setRegistrationEnvironment(Configuration);

4.3.2.3 Flow

API:

Present in RegistrationDynamicConfiguration class.

```
* Get Flow

* @return Flow

*/
public Flow getFlow() {}

/**

* Set Flow

*

* @param flow

*/
public void setFlow(Flow flow) {}
```

Present in Flow class

```
/**

* Status of email verification required

*

* @return boolean

*/
public Boolean isEmailVerificationRequired() {}

/**

* Set Email verification status

*

* @param emailVerificationRequired

*/
```

```
public void setEmailVerificationRequired(Boolean emailVerificationRequired) {}
* Status of terms and condition acceptance
* @return boolean
public Boolean isTermsAndConditionsAcceptanceRequired() {}
* Set terms and condition acceptance required or no
* @param termsAndConditionsAcceptanceRequired
public void setTermsAndConditionsAcceptanceRequired(Boolean
termsAndConditionsAcceptanceRequired) {}
* Get min age limit map
* @return Map of Country and Age restrictions
public HashMap<String, String> getMinAgeLimit() {}
* Set Min age Limit
* @param minAgeLimit Map with Key value pair of country code and min age
public void setMinAgeLimit(HashMap<String, String> minAgeLimit) {}
* Get minimium age for country
* @param countryCode Country code
* @return integer value of min age if mapping available else 0
public int getMinAgeLimitByCountry(String countryCode) {}
RegistrationDynamicConfiguration.getInstance().getFlow().setEmailVerificationRequired(false);
RegistrationDynamicConfiguration.getInstance().getFlow().setTermsAndConditionsAcceptanceRequire
HashMap<String, String> ageMap = new HashMap<>();
map.put("Country code", "Age Limit");
RegistrationDynamicConfiguration.getInstance().getFlow().setMinAgeLimit(ageMap);
```

4.3.2.4 HSDP Configuration (Optional)

API:

Example:

Present in RegistrationDynamicConfiguration class.

```
/**

* Get HSDP configuration

*

* @return HSDPConfiguration
```

```
public HSDPConfiguration getHsdpConfiguration() {}

/**

* Set HSDP configuration

*

* @param hsdpConfiguration

*/

public void setHsdpConfiguration(HSDPConfiguration hsdpConfiguration) {}
```

Present in **HSDPConfiguration** class

Present in **HSDPInfo** class

```
* Get Shared Id

*
* @return String shared id
*/
public String getSharedId() {}

/**

* Set shared id
*
* @param sharedId String
*/
public void setSharedId(String sharedId) {}

/**

* Get secret id
*
* @return String
```

```
public String getSecretId() {}
* Set secrete id
* @param secretId String
public void setSecretId(String secretId) {}
* Get base URL
* @return String
public String getBaseURL() {}
* Set base URL
* @param baseURL
public void setBaseURL(String baseURL) {}
* Get Application name
* @return String Application
public String getApplicationName() {}
* Set application name
 @param applicationName
public void setApplicationName(String applicationName) {}
```

Example

HSDPConfiguration hsdpConfiguration = new HSDPConfiguration();

```
HSDPInfo hsdpInfo = new HSDPInfo();
hsdpInfo.setApplicationName("Appname");
hsdpInfo.setBaseURL("url");
hsdpInfo.setSecretId("secrete id");
hsdpInfo.setSharedId("shared id");
```

hsdpConfiguration.setHSDPInfo(Configuration.EVALUATION, hsdpInfo);

RegistrationDynamicConfiguration.getInstance().setHsdpConfiguration(hsdpConfiguration);

4.3.2.5 SigninProviders

API:

Present in RegistrationDynamicConfiguration class.

```
/**

* Get Sign in providers

*

* @return SigninProviders

*/
public SigninProviders getSignInProviders() {}

/**

* Set Social providers

*

* @param socialProviders

*/
public void setSignInProviders(SigninProviders socialProviders) {}
```

Present in SigninProviders class

```
**

* Set providers in Hash map first param is country code and other is enabled providers list in Hash map

* @param providers

*/
public void setProviders(HashMap<String, ArrayList<String>> providers) {}

/**

* Get providers

* @param countryCode Country code

* @return List of providers

*/
public ArrayList<String> getProvidersForCountry(String countryCode) {}
```

Example:

```
//Configure Signin Providers
HashMap<String, ArrayList<String>> providers = new HashMap<String, ArrayList<String>>();
ArrayList<String> values1 = new ArrayList<String>();
ArrayList<String> values2 = new ArrayList<String>();
ArrayList<String> values3 = new ArrayList<String>();
values1.add("googleplus");
values1.add("facebook");
values1.add("twitter");
values2.add("facebook");
values2.add("facebook");
values2.add("twitter");
values3.add("facebook");
values3.add("facebook");
values3.add("facebook");
values3.add("facebook");
values7.add("twitter");

providers.put("NL", values1);
providers.put("US", values2);
providers.put("DEFAULT", values3);
RegistrationDynamicConfiguration.getInstance().getSignInProviders().setProviders(providers);
```

4.3.3 Hybrid Configuration

Hybrid configuration is combination of static and dynamic Vertical app can provide both configuration. Registration framework will prioritize based on being Dynamic configuration higher priorities.

5. Janrain Initialization

Janrain Initialization should be done from onCreate() of Application class of vertical projects along with Tagging setting and UI priority

5.1 **UI Priority function**

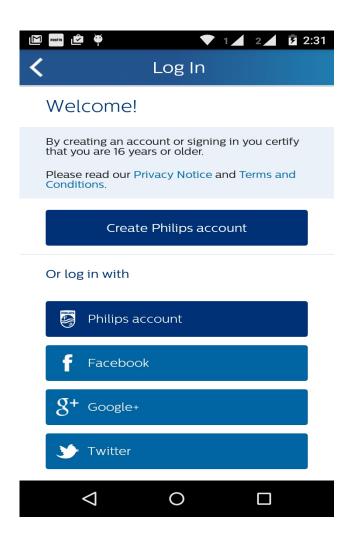
UI priority function enables app to launch Create account at TOP or BOTTOM.Needs to set during initialization. By default Create account is TOP.

Possible selection is out of

```
public enum RegistrationFunction {
    Registration,
    SignIn
}
```

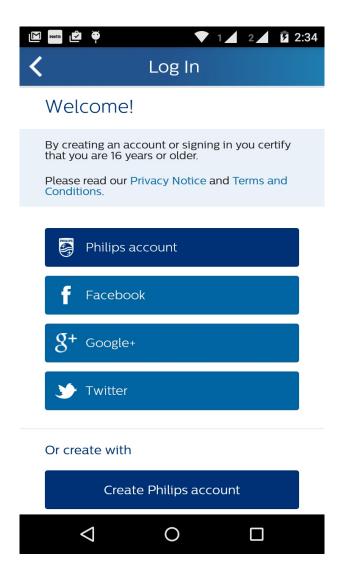
5.1.1 Create account on Top

//REGISTRATION UI PRIORITY(CREATE OR SIGNIN
RegistrationHelper.getInstance().setPrioritisedFunction(RegistrationFunction.R
egistration);



5.1.2 Sign In On top

RegistrationHelper.getInstance().setPrioritisedFunction(RegistrationFunction.SignIn);



5.2 STANDARD and HSDP configuration initialization

```
public class XXXXX extends Application {
    @Override
   public void onCreate() {
    super.onCreate();
    //TAGGING
   Tagging.enableAppTagging(true);
   Tagging.setTrackingIdentifier("integratingApplicationAppsId");
   Tagging.setLaunchingPageName("demoapp:home");
    //REGISTRATION UI PRIORITY(CREATE OR SIGNIN
```

5.3 **COPPA configuration initialization**

```
public class XXXXX extends Application {
   private RegistrationHelper mRegistrationHelper;
   @Override
   public void onCreate() {
   super.onCreate();
 //TAGGING
 Tagging.enableAppTagging(true);
 Tagging.setTrackingIdentifier("integratingApplicationAppsId");
 Tagging.setLaunchingPageName("demoapp:home");
 //REGISTRATION UI PRIORITY(CREATE OR SIGNIN
RegistrationHelper.getInstance().setPrioritisedFunction(RegistrationFunction.R
egistration);
 //COPPA FLOW NEEDS TO SET WITH TRUE VALUE
     RegistrationHelper.getInstance().setCoppaFlow(true);
 //REGISTRATION INITIALIZATION
 RegistrationHelper.getInstance().intializeRegistrationSettings(this,
                           Locale.getDefault());
 //TAGGING INITIALIZATION
 Tagging.init(RegistrationHelper.getInstance().getLocale(), this);
```

5.4 Custom Language in Registartion UI

This is addition API provided in Registration if App need Specific Language UI to be displayed .Its Will be part of App initialization . If not set then Which ever Locale sent for Janrain Initialization is set to UI

```
RegistrationHelper.getInstance().setUiLocale(String lobguageCode,String countryCode);

EX:

public class XXXXX extends Application {
    private RegistrationHelper mRegistrationHelper;

@Override
```

```
public void onCreate() {
              super.onCreate();
      //TAGGING
     Tagging.enableAppTagging(true);
     Tagging.setTrackingIdentifier("integratingApplicationAppsId");
     Tagging.setLaunchingPageName("demoapp:home");
      //REGISTRATION UI PRIORITY(CREATE OR SIGNIN
{\tt Registration Helper.getInstance().setPrioritisedFunction(RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunction.RegistrationFunctionFunctionFunctionFunctionFunction.RegistrationFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFunctionFu
egistration);
      //COPPA FLOW NEEDS TO SET WITH TRUE VALUE
                     RegistrationHelper.getInstance().setCoppaFlow(true);
//CUSTOM UI Language
RegistrationHelper.getInstance().setUiLocale("fr","FR");
       //REGISTRATION INITIALIZATION
      RegistrationHelper.getInstance().intializeRegistrationSettings(this,
                                                                                                  Locale.getDefault());
      //TAGGING INITIALIZATION
      Tagging.init(RegistrationHelper.getInstance().getLocale(), this);
```

6. Launching Registration component

- As Activity
- As Fragment

6.1 Activity

6.1.1 Launching with out orientation

Should call **RegistrationLaunchHelper.launchRegistrationActivity(this)**; which takes Contact as param

6.1.2 Launching with orientation lock

Should call

RegistrationLaunchHelper.launchRegistrationActivityWithFixedOrientation(this,Activit yInfo.SCREEN_ORIENTATION_SENSOR_LANDSCAPE);

Params Context and Orientation integer

Supported orientation

- ActivityInfo.SCREEN ORIENTATION PORTRAIT
- ActivityInfo.SCREEN ORIENTATION LANDSCAPE
- ActivityInfo.SCREEN ORIENTATION SENSOR PORTRAIT

• ActivityInfo.SCREEN ORIENTATION SENSOR LANDSCAPE

6.2 Fragment

- · Launching as fragment
- Back handling
- · Updating title

6.2.1 Launching as fragment

Should write and call following method to launch as fragment which take container Id and FragmentActivity as params.

launchRegistrationFragment(R.id.fl_reg_fragment_container, this);

```
/**
 * Launch registration fragment
private void launchRegistrationFragment(int container, FragmentActivity
fragmentActivity) {
   try {
       FragmentManager mFragmentManager =
fragmentActivity.getSupportFragmentManager();
       RegistrationFragment registrationFragment = new
RegistrationFragment();
       registrationFragment.setOnUpdateTitleListener(this);
       FragmentTransaction fragmentTransaction =
mFragmentManager.beginTransaction();
       fragmentTransaction.replace(container, registrationFragment,
              RegConstants. REGISTRATION FRAGMENT TAG);
       fragmentTransaction.commitAllowingStateLoss();
    } catch (IllegalStateException e) {
```

6.2.2 Backstack handling

```
Should follow following code to handle back stack
```

6.2.3 Updating Title

Vertical projects should implement **RegistrationTitleBarListener** and should be referenced during launching of Registration fragment. Which override following methods

- updateRegistrationTitle : Triggered when fragment count is only 1 and Vertical app should write logic to update title and showing hamburger menu
- updateRegistrationTitleWithBack: Triggered when fragment count is greater than 1 and vertical app should update title and show back button
- updateRegistrationTitleWithOutBack : Triggred when welcome screen comes and need to do same activity as above two methods.

Ex:

```
@Override
public void updateRegistrationTitle(int titleResourceID) {
   // Update title and show hamberger
   //ivBack.setVisibility(View.INVISIBLE);
   ivBack.setVisibility(View.VISIBLE);
   TextView tvTitle = ((TextView)
findViewById(R.id.tv reg header title));
   tvTitle.setText(getString(titleResourceID));
@Override
public void updateRegistrationTitleWithBack(int titleResourceID) {
   // update title and show back
   ivBack.setVisibility(View.VISIBLE);
   TextView tvTitle = ((TextView)
findViewById(R.id.tv reg header title));
   tvTitle.setText(getString(titleResourceID));
@Override
public void updateRegistrationTitleWithOutBack(int titleResourceID) {
   // update title and show back
   ivBack.setVisibility(View.INVISIBLE);
   TextView tvTitle = ((TextView)
findViewById(R.id.tv reg header title));
   tvTitle.setText(getString(titleResourceID));
```

7. Call-back's

- On Click of Continue button in Welcome screen
- On Click of Terms & Conditions in Home screen
- On Click of Privacy policy in Home screen
- On Logout Success
- On Logout Failed
- On Logout success due to invalid access token

Vertical project should implement UserRegistrationListener which have

```
@Override
public void onUserRegistrationComplete(Activity activity) {
//Called on click of continue button
@Override
public void onPrivacyPolicyClick(Activity activity) {
//Called on click of privacy policy
@Override
public void onTermsAndConditionClick(Activity activity) {
   // Called on click of terms and condition
@Override
public void onUserLogoutSuccess() {
//Called on logout success
@Override
public void onUserLogoutFailure() {
//on logout failed
@Override
public void onUserLogoutSuccessWithInvalidAccessToken() {
//on login success on invalid access token
```

And needs to register and unregister listener as follows

```
In onCrate of implementing Activity

RegistrationHelper.getInstance().registerUserRegistrationListener(this)

In onDestoy of calling Activity.

RegistrationHelper.getInstance().unRegisterUserRegistrationListener(this)
```

8. APP tagging

App tagging is supported in Registration Android and tested against

Adobe JAR version: v4.5.1 - Android

ADBMobileConfig.json:

```
{
    "version" : "1.0",
    "acquisition": {
        "server": "c00.adobe.com"
    },

    "analytics" : {
        "referrerTimeout": 5,
        "rsids" : "philipsmobileappsdev",
```

Tagging has following params to be set during initialization

```
public class RegistrationApplication extends Application {
   private RegistrationHelper mRegistrationHelper;
   @Override
   public void onCreate() {
       super.onCreate();
      //Tagging
       Config.setContext(getApplicationContext());
       //Janrain Initialization
       mRegistrationHelper = RegistrationHelper.getInstance();
        //Params context and locale should be passed from application
       //Coppa flow should be set to true
       mRegistrationHelper.setCoppaFlow(false);
       //Tagging specific
       //Enabling or disabling registration tagging
       AppTagging.enableAppTagging(true);
       //Mandatory to set
       AppTagging.setTrackingIdentifier("IntegratingApplicationAppId");
       //Optional may set or may not set
       AppTagging.setLaunchingPageName("RegistrationLaunchingPageName");
       mRegistrationHelper.intializeRegistrationSettings(this,
               Locale.getDefault());
```

9. COPPA specific API's

There are 3 API which can be used in COPPA specific flow for fulfilling need.

1. **public** CoppaStatus getCoppaEmailConsentStatus() {}

This API provides current consent status which can be any one of flowing values $\ensuremath{\mathsf{Val}}$

- kDICOPPAConsentPending,
- kDICOPPAConsentNotGiven,
- kDICOPPAConsentGiven,
- kDICOPPAConfirmationPending,
- kDICOPPAConfirmationNotGiven,
- kDICOPPAConfirmationGiven;
- public void fetchCoppaEmailConsentStatus(final Context context, final FetchCoppaEmailConsentStatusHandler handler) {}

This API provide email consent from server and give consent status in callback.

Params :

Context : Application cotext.

FetchCoppaEmailConsentStatusHandler :

Call back handler which has following methods which is triggered on completion of fetching activity $\$

void didCoppaStatusFetchingSucess(CoppaStatus var1);

void didCoppaStatusFectchingFailedWIthError(CaptureAPIError var1);

3. public void resendCoppaEmailConsentForUserEmail(final String email, final ResendCoppaEmailConsentHandler resendCoppaEmailConsentHandler) {}

This API provide resending email capability $\bar{}$

Params :

Email: Email id

 $\textbf{\textit{ResendCoppaEmailConsentHandler}} : \texttt{Callback} \ \texttt{handler}$

void didResendCoppaEmailConsentSucess();

void didResendCoppaEmailConsentFailedWithError(CoppaResendError var1);

10. HSDP specific API's

HSDP UUID and access token can be accessed from the DIUserProfile.java

10.1 HSDP UUID

```
User user = new User(context);
user.getUserInstance(context).getHsdpUUID();
```

10.2 HSDP Access Token

```
User user = new User(context);
user.getUserInstance(context).getHsdpAccessToken();
```

11. Library version's

Use following methods to get respective versions of registration

11.1 Janrain Library

Jump.getJumpVersion()

11.2 Locale Match Library

PILLocaleManager.getLacaleMatchVersion()

11.3 **Registration Library**

RegistrationHelper.getRegistrationApiVersion()

12. Supporting apps with Over 65K Methods

This is special case if app which has more than 65K methods do follow below link for reference .

https://developer.android.com/tools/building/multidex.html

According to this do following changes in gradle and application class

In Gradle file:

```
android {
   compileSdkVersion 21
   buildToolsVersion "21.1.0"

   defaultConfig {
    ...
```

```
minSdkVersion 14
    targetSdkVersion 21
    ...

// Enabling multidex support.
    multiDexEnabled true
}
    ...
}

dependencies {
    compile 'com.android.support:multidex:1.0.1'
}
```

In Application Class:

```
@Override
public void onCreate() {
    MultiDex.install(this);
    Super.onCreate();
}'
```

13. Progaurd rules for Registration API component

As per Android Documentations mentioned in link http://developer.android.com/tools/help/proguard.html code will be behave unexpected way due to arbitrary rules .So following are progaurd rules one which needs to be added in vertical apps progaurd file to work registration as desired.

Note: Here all the configuration is mentioned pick one is needed as per your project flow

13.1 Hockey SDK

```
-keep public class javax.net.ssl.**
-keepclassmembers public class javax.net.ssl.** {*;}
-keep public class org.apache.http.**
-keepclassmembers public class org.apache.http.** {*;}
-keepclassmembers class net.hockeyapp.android.UpdateFragment {*;}
-renamesourcefileattribute SourceFile
-keepattributes SourceFile,LineNumberTable
```

13.2 Tagging

```
-keep public class com.adobe.mobile.** {*;}
-keep public class com.philips.cdp.tagging.** {*;}
```

13.3 **Jump**

```
-keep public class com.janrain.android.** {*;}
```

13.4 Localematch

```
-keep public class com.philips.cdp.localematch.** {*;}
```

13.5 Registration API

```
-keep public class com.philips.cdp.registration.** {*;}
```

13.6 Network APIs

```
-dontwarn org.apache.**
-keep class org.apache.http.** { *; }
-keep class android.net.http.** { *; }
```

13.7 **HSDP**

```
-keep class com.philips.dhpclient.** {*;}
-keep class com.fasterxml.jackson.annotation.** {*;}
-keep class com.fasterxml.jackson.core.** {*;}
-keep class com.fasterxml.jackson.databind.** {*;}
```

13.8 Other platform specific

```
#GSM
-keep class com.google.android.gms.* { public *; }
-dontwarn com.google.android.gms.**
```

Status: Proposed

```
-dontwarn org.w3c.dom.bootstrap.DOMImplementationRegistry

#webkit
-keep class android.net.http.SslError
-keep class android.webkit.WebViewClient

-dontwarn android.webkit.WebView
-dontwarn android.net.http.SslError
-dontwarn android.webkit.WebViewClient

#notification
-dontwarn android.app.Notification
```

13.9 Example for STANDARD and COPPA configuration

```
##Registration API specific
##General network
-keep public class javax.net.ssl. **
-keepclassmembers public class javax.net.ssl.** {*;}
-keepclassmembers public class org.apache.http.** {*;}
-dontwarn org.apache.*
-keep class org.apache.http.** { *; }
-keep class android.net.http.** { *; }
#Hockey app and enabling excpetion catching
-keepclassmembers class net.hockeyapp.android.UpdateFragment {*;}
-renamesourcefileattribute SourceFile
-keepattributes SourceFile,LineNumberTable
#Tagging lib and jar
-keep public class com.adobe.mobile.** {*;}
-keep public class com.philips.cdp.tagging.** {*;}
#Janrain lib
-keep public class com.janrain.android.** {*;}
#Locale match
-keep public class com.philips.cdp.localematch.** { *;}
#Registration API
-keep public class com.philips.cdp.registration.** {*;}
#GSM
-keep class com.google.android.gms.* { public *; }
-dontwarn com.google.android.gms. **
-dontwarn org.w3c.dom.bootstrap.DOMImplementationRegistry
#webkit
-keep class android.net.http.SslError
-keep class android.webkit.WebViewClient
```

```
-dontwarn android.webkit.WebView
-dontwarn android.net.http.SslError
-dontwarn android.webkit.WebViewClient
#notification
-dontwarn android.app.Notification
```

13.10 Example for HSDP configuration

```
##Registration API specific
##General network
-keep public class javax.net.ssl. **
-keepclassmembers public class javax.net.ssl.** {*;}
-keepclassmembers public class org.apache.http.** {*;}
-dontwarn org.apache. **
-keep class org.apache.http.** { *; }
-keep class android.net.http.** { *; }
#Hockey app and enabling excpetion catching
-keepclassmembers class net.hockeyapp.android.UpdateFragment {*;}
-renamesourcefileattribute SourceFile
-keepattributes SourceFile,LineNumberTable
#Tagging lib and jar
-keep public class com.adobe.mobile.** {*;}
-keep public class com.philips.cdp.tagging.** {*;}
#Janrain lib
-keep public class com.janrain.android.** {*;}
#Locale match
-keep public class com.philips.cdp.localematch.** {*;}
#Registration API
-keep public class com.philips.cdp.registration.** {*;}
#HSDP Lib
-keep class com.philips.dhpclient.** {*;}
-keep class com.fasterxml.jackson.annotation.** {*;}
-keep class com.fasterxml.jackson.core.** {*;}
-keep class com.fasterxml.jackson.databind.** {*;}
#GSM
-keep class com.google.android.gms.* { public *; }
-dontwarn com.google.android.gms. **
-dontwarn org.w3c.dom.bootstrap.DOMImplementationRegistry
#webkit
-keep class android.net.http.SslError
-keep class android.webkit.WebViewClient
-dontwarn android.webkit.WebView
-dontwarn android.net.http.SslError
-dontwarn android.webkit.WebViewClient
```

#notification -dontwarn android.app.Notification

14. Reference APP link

http://161.85.28.146:9000/scm/git/hor-registration-release-android

This is very important to check out reference app and follow integration

- All dependencies can be referred as it is.
- Configuration can be followed [all sample configurations are provided in sample]
- Fair idea about how to integrate

Note: Please libs contains all the dependant jar and aar files. Pick appropriate jar or aars as mentioned in 3.2.2 section depending on flow required in project.