



Visa Checkout

Android Hybrid Mobile App Integration

Effective: June 28, 2017



Copyright

Important Note on Intellectual Property

This document is protected by copyright restricting its use, copying, distribution, and decompilation and is furnished by Visa Inc. for review and informational purposes only or as otherwise specified under and in strict accordance with the applicable agreement between the reader of this document ("You") and Visa Inc. ("Agreement"). Any other use of this document is strictly prohibited and, except as permitted by the Agreement, You may not reproduce any part of this document, store this document in a retrieval system, or transmit this document, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written consent of Visa Inc. Visa and other trademarks are registered trademarks of Visa International Service Association, and are used under license by Visa Inc. All other product names mentioned herein are the trademarks of their respective owners.

THIS PUBLICATION COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN: THESE CHANGES WILL BE

INCORPORATED IN NEW EDITIONS OF THE PUBLICATION. VISA MAY MAKE IMPROVEMENTS AND/OR

CHANGES IN THE PRODUCT(S) AND/OR THE PROGRAM(S) DESCRIBED IN THIS PUBLICATION AT ANY TIME. NOTHING CONTAINED IN THIS DOCUMENT SHOULD BE INTERPRETED IN ANY WAY AS A GUARANTEE OR WARRANTY OF ANY KIND BY VISA INC.

If you have technical questions or questions regarding a Visa service or capability, contact your Visa representative.

Contents

Prefaceiii
What's New in Version 5.2 Android Hybrid Mobile App Integration	iii
Chapter 1 About Hybrid Mobile App Integration	1-1
About the Android Hybrid Mobile App Plugin	1-1
Chapter 2 Quick Start	2-1
Integrating With an Android Hybrid Mobile App	2-1

Preface

What's New in Version 5.2 Android Hybrid Mobile App Integration

This is the first version of the Android Hybrid Mobile App Integration Guide, which describes the steps for enabling Visa Checkout in your hybrid app.

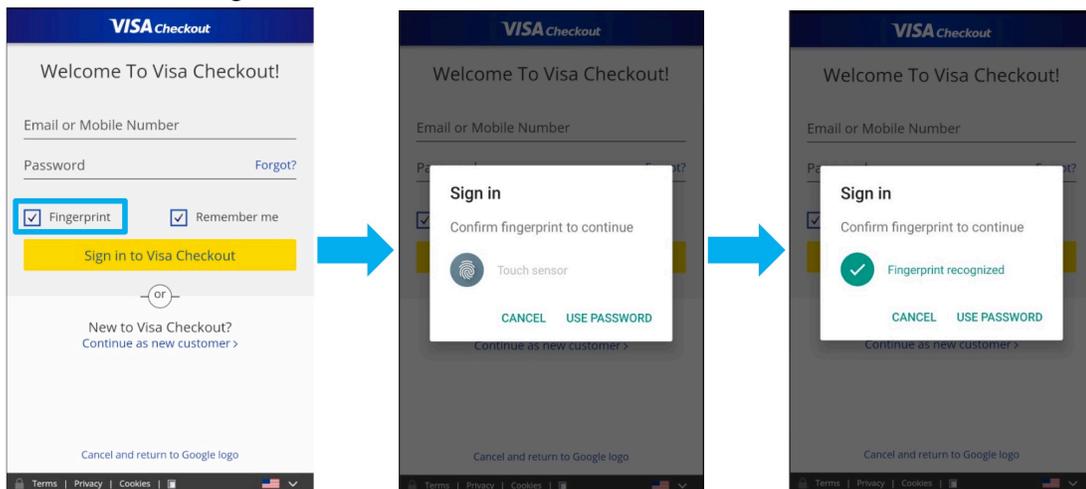
About Hybrid Mobile App Integration

1

About the Android Hybrid Mobile App Plugin

Visa Checkout provides a plugin that enables biometric authentication for your hybrid mobile app, which provides consumers a streamlined two-touch secure checkout experience. With the plugin, consumers can use Visa Checkout with minimal friction during checkout.

When **Fingerprint** and **Remember me** are checked, an existing consumer can use fingerprint authentication to log into Visa Checkout:



A new consumer can check **Fingerprint** and **Remember me** when enrolling in Visa Checkout. The consumer can choose to cancel fingerprint authentication and enter a password at any time. A consumer also can uncheck **Fingerprint** to disable it without disabling **Remember me**; however, both must be checked to enable fingerprint authentication.

Integrating With an Android Hybrid Mobile App

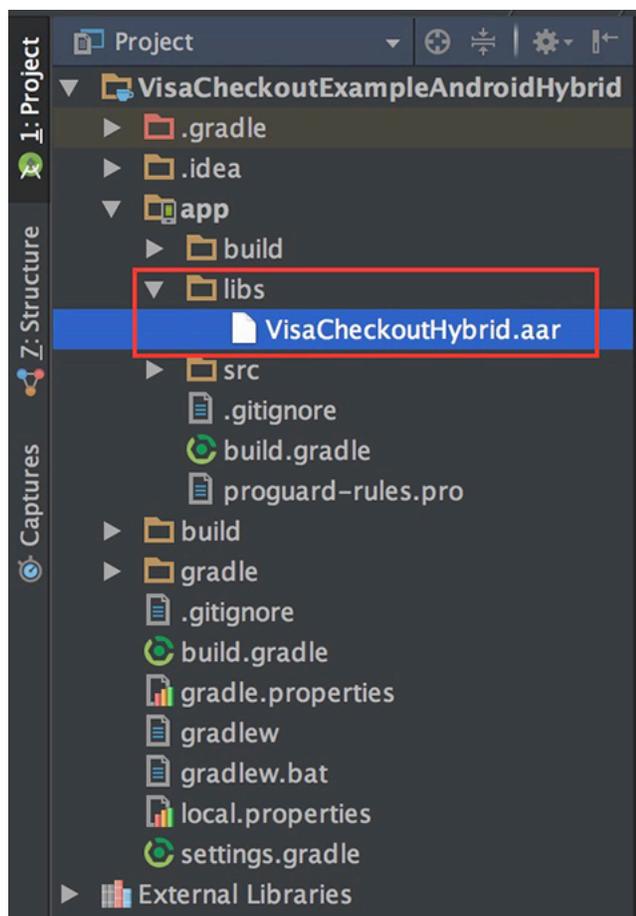
To integrate with an Android hybrid mobile app, you must first add `VisaCheckoutHybrid.aar` to your `libs` folder, update your application's `build.gradle` file, and ensure that the `USE_FINGERPRINT` permission is set. Then you can call `VisaCheckoutPlugin.configure()` from the activity that sets itself up to display the **Visa Checkout** button.

Prerequisites

You must already have created a hybrid mobile app.

Procedure

1. Add `VisaCheckoutHybrid.aar` to your `libs` folder:



2. Update the `android` and `dependencies` sections of your application's `build.gradle` file.
 1. Add the following lines to the `android` section:

```
repositories {  
    flatDir { dirs 'libs' }  
}
```

2. Add the following line to the dependencies section:

```
compile (name: 'VisaCheckoutHybrid', ext: 'aar')
```

After completing this step, your application's `build.gradle` file should look similar to the following:

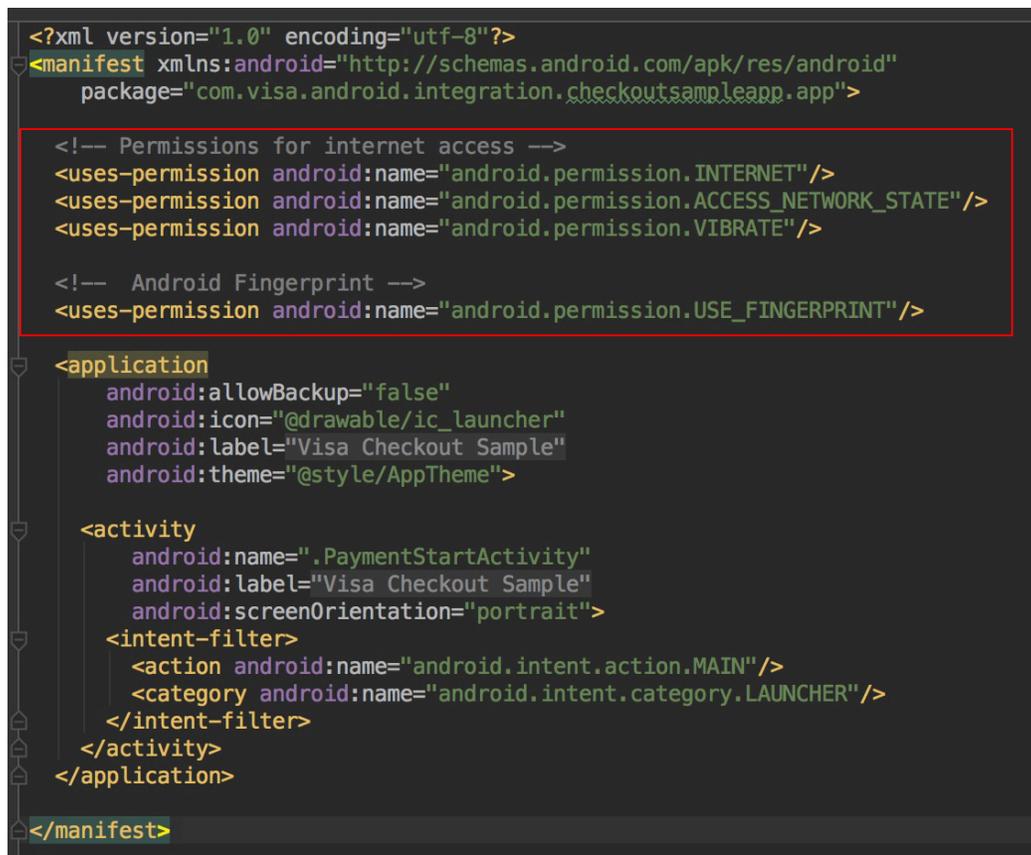


```

1  apply plugin: 'com.android.application'
2
3  android {
4      compileSdkVersion 25
5      buildToolsVersion "25.0.3"
6      defaultConfig {...}
14     buildTypes {...}
20
21     repositories {
22         flatDir { dirs 'libs' }
23     }
24 }
25
26 dependencies {
27     compile fileTree(dir: 'libs', include: ['*.jar'])
28     androidTestCompile('com.android.support.test.espresso:espresso-core:2.2.2', {exclude group: 'com
31     compile 'com.android.support:appcompat-v7:25.3.1'
32     compile 'com.android.support.constraint:constraint-layout:1.0.2'
33     testCompile 'junit:junit:4.12'
34     compile (name: 'VisaCheckoutHybrid', ext: 'aar')
35 }

```

3. Ensure that the `INTERNET`, `ACCESS_NETWORK_STATE`, `VIBRATE` and `USE_FINGERPRINT` permissions are set:



```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.visa.android.integration.checkoutsampleapp.app">

    <!-- Permissions for internet access -->
    <uses-permission android:name="android.permission.INTERNET"/>
    <uses-permission android:name="android.permission.ACCESS_NETWORK_STATE"/>
    <uses-permission android:name="android.permission.VIBRATE"/>

    <!-- Android Fingerprint -->
    <uses-permission android:name="android.permission.USE_FINGERPRINT"/>

    <application
        android:allowBackup="false"
        android:icon="@drawable/ic_launcher"
        android:label="Visa Checkout Sample"
        android:theme="@style/AppTheme">

        <activity
            android:name=".PaymentStartActivity"
            android:label="Visa Checkout Sample"
            android:screenOrientation="portrait">
            <intent-filter>
                <action android:name="android.intent.action.MAIN"/>
                <category android:name="android.intent.category.LAUNCHER"/>
            </intent-filter>
        </activity>
    </application>

</manifest>

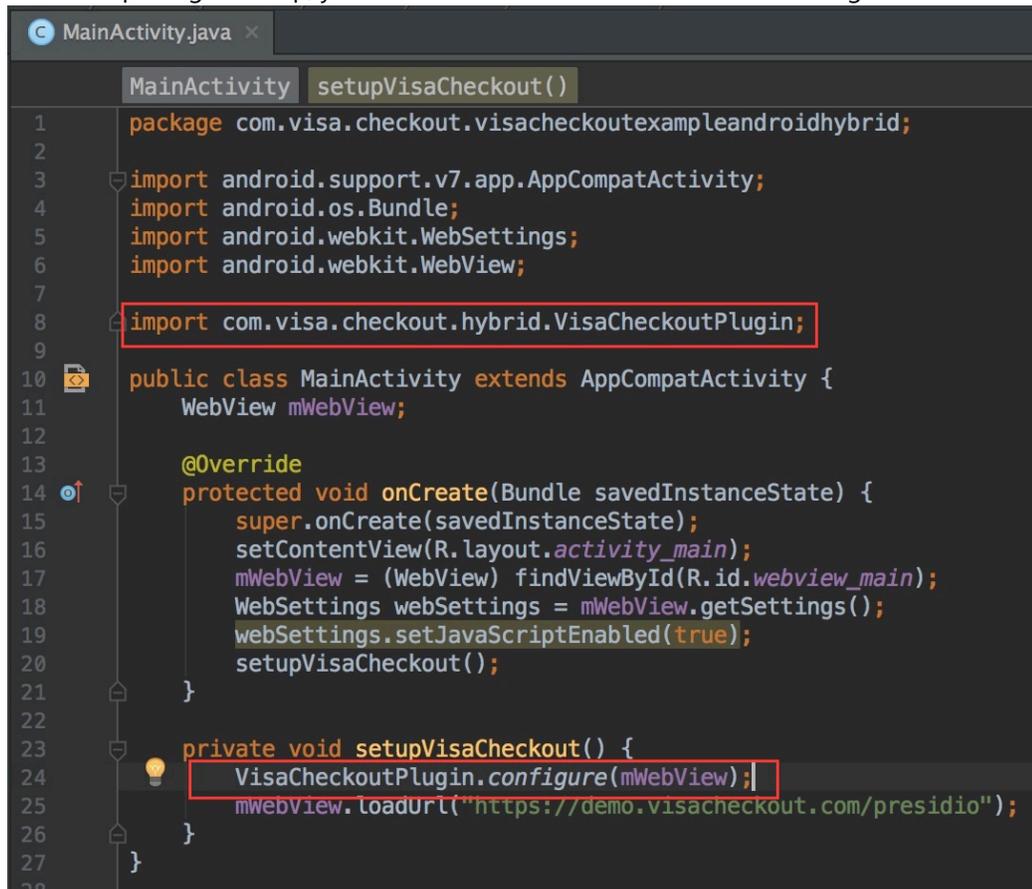
```

4. Add the following lines to your activity that configures the web view:

```
- import com.visa.checkout.hybrid.VisaCheckoutPlugin;
```

- `VisaCheckoutPlugin.configure(mWebView);`

After completing this step, your web view will look similar to the following:



```
1 package com.visa.checkout.visacheckoutexampleandroidhybrid;
2
3 import android.support.v7.app.AppCompatActivity;
4 import android.os.Bundle;
5 import android.webkit.WebSettings;
6 import android.webkit.WebView;
7
8 import com.visa.checkout.hybrid.VisaCheckoutPlugin;
9
10 public class MainActivity extends AppCompatActivity {
11     WebView mWebView;
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17         mWebView = (WebView) findViewById(R.id.webview_main);
18         WebSettings webSettings = mWebView.getSettings();
19         webSettings.setJavaScriptEnabled(true);
20         setupVisaCheckout();
21     }
22
23     private void setupVisaCheckout() {
24         VisaCheckoutPlugin.configure(mWebView);
25         mWebView.loadUrl("https://demo.visacheckout.com/presidio");
26     }
27 }
28
```

