

# Authenticity Protection in Hybrid applications

fork and edit tutorial (<https://github.ibm.com/MFPSamples/DevCenter/tree/master/tutorials/en/foundation/7.0/authentication-security/application-authenticity-protection/application-authenticity-protection-hybrid-applications.html>) | report issue (<https://github.ibm.com/MFPSamples/DevCenter/issues/new>)

This tutorial is a continuation of the Application Authenticity Protection (../) tutorial.

## The application-descriptor.xml file

Add the `securityTest` attribute to the relevant environment element. For example:

```
<iphone bundleId="com.worklight.MyBankApp" applicationId="MyBankApp" securityTest="customTests" version="1.0">
```

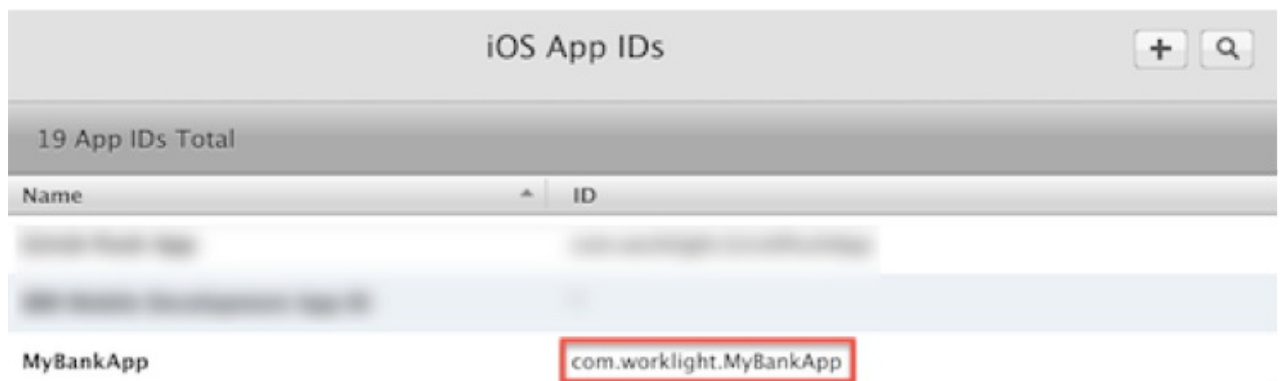
Next, you must make modifications that are specific to each environment.

## iOS

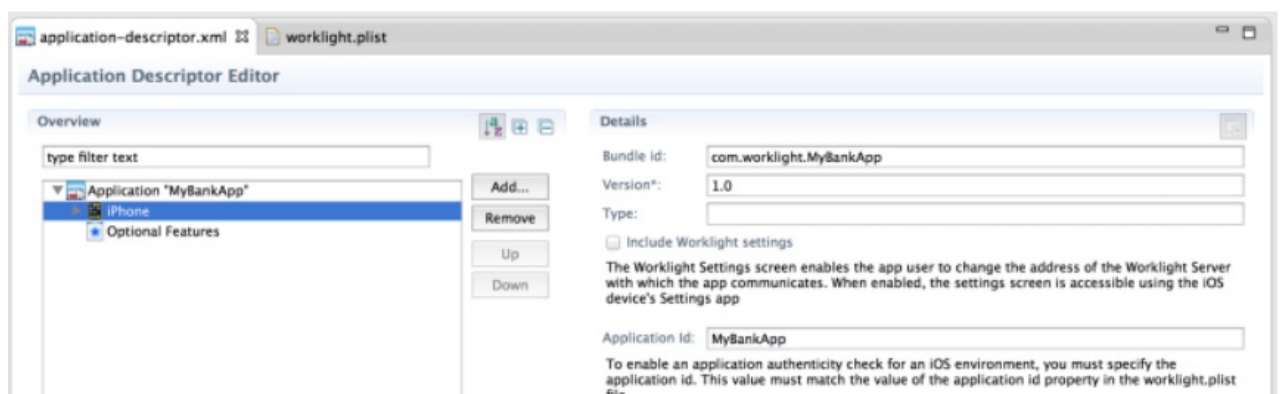
To enable application authenticity protection check for the iPhone/iPad environment, specify the following identifiers in the `application-descriptor.xml` file.

Specifying the `bundleId` and `applicationId` identifiers

1. Specify the `bundleId` value of the application exactly as it is defined in the **Apple Developer portal**.



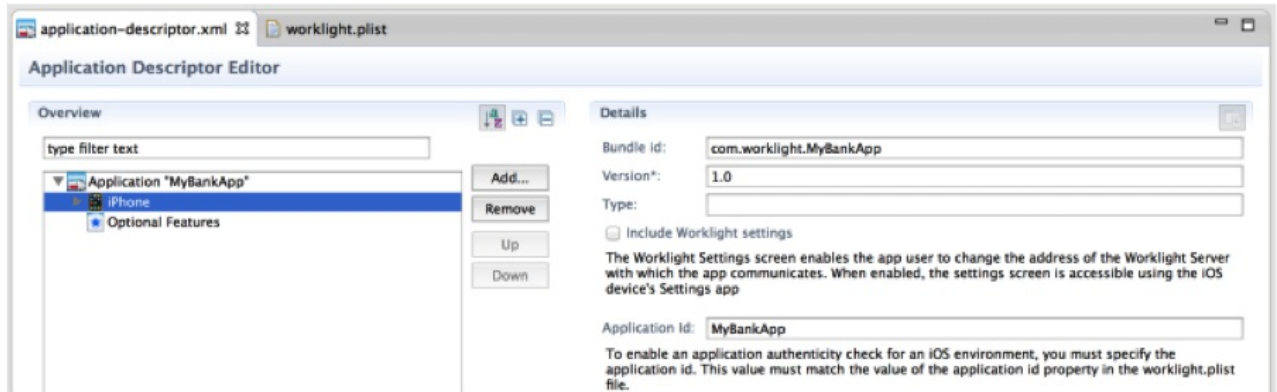
You can add the value either in the Application Description Design view:



Or in the Application Descriptor Source view:

```
<iphone bundleId="com.worklight.MyBankApp" version="1.0">
```

2. Specify the `applicationId` value. The application identifier must match the value of the `application id` property, which is located in the `native\worklight.plist` file. You can add the value either in the Application Description Design view:



Or in the Application Descriptor Source view:

```
<iphone bundleId="com.worklight.MyBankApp" applicationId="MyBankApp" securityTest="customTests" version="1.0">
```

3. In Xcode, verify that the following value exists in the **Other Linker Flags** field: `-ObjC`

## Android

To enable application authenticity protection check for the Android hybrid environment, follow these steps:

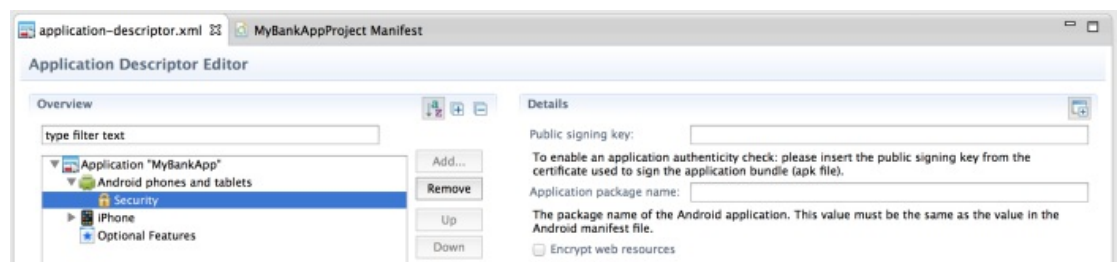
1. Extract the public signing key of the certificate that is used to sign application bundle ( `.apk` file).
  - If the application is built for distribution (production), extract the public key from the certificate that is used to sign the production-ready application.
  - If the application is built in the development environment, you can use the default public key that is supplied by the Android SDK. You can find the development certificate in a keystore that is in a `{user-home}/.android/debug.keystore` file.
  - You can extract the public signing key either manually or by using the wizard that MobileFirst Studio provides.

### Extracting the public signing key by using the wizard

1. Right-click the Android environment folder and select **Extract public signing key**.
2. Specify the location and the password of a keystore file and click **Load Keystore**.  
The default password for **debug.keystore** is `android`.
3. Set the **Key alias** and click **Next**.  
A dialog displays the public key.
4. Click **Finish**. The public key is automatically pasted to the relevant section of the `application-descriptor.xml` file.



5. Add the Application package name by using the Application Descriptor Editor (design view):



6. Take the value of the application package name from the package attribute of the `manifest` node in the `AndroidManifest.xml` file.

If you decide to change the value, make sure that you change it in both locations. You can also directly edit the `application-descriptor.xml` file and add a package name.

```
<android version="1.0">
  <worklightSettings include="false"/>
  <security>
    <encryptWebResources enabled="false"/>
    <testWebResourcesChecksum enabled="false" ignoreFileExtensions="png
, jpg, jpeg, gif, mp4, mp3"/>
    <publicSigningKey>MIGff ...</publicSigningKey>
    <packageName>com.MyBankApp</packageName>
  </security>
</android>
```

## Windows Phone 8

To enable application authenticity check for the Windows Phone 8 hybrid environment, modify the `application-descriptor.xml` file as follows.

- In the Application Descriptor Design view, supply the `applicationId` and `productId` in the Windows Phone 8 Security section:



You can find the `productId` value in the `native\Properties\WAppManifest.xml` file. The `applicationId` value must match the value of the `wlAppId` property, which you can find in the `native\wlclient.properties` file.

- You can also supply these values in the Application Descriptor Source view. For example:

```
<windowsPhone8 version="1.0">
  <uuid>b5542877-7afe-4edc-a817-5341b5027633</uuid>
  <security>
    <productId>fca81480-7b4a-4ed0-b387-078e8fa0c3d5</productId>
  >
    <applicationId>HelloWorld</applicationId>
  </security>
</windowsPhone8>
```