Application Authenticity Protection in Native Android applications

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

Adding required files

From the MobileFirst project's Native API folder, copy the following folders to your native's project `lib` folder: `armabi`, `armabi-v7a`, `mips`, `x86`.

application-descriptor.xml

Adding the security test

Modify the `application-descriptor.xml` file of your application.
Add the *securityTest* attribute to the Android or iPhone/iPad environment element. For example:

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

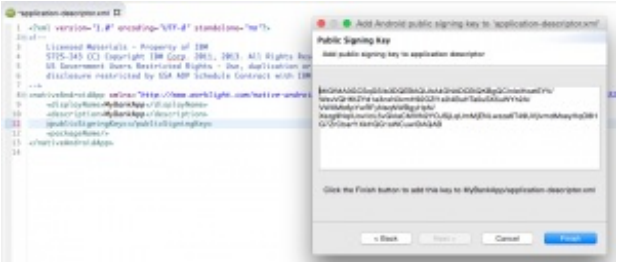
Adding the public signing key

Extract the public signing key of the certificate that is used to sign application bundle (*.apk* file).

- If building the application for distribution (production), extract the public key from the certificate that is used to sign the production ready application.
- If building an application in the development environment, the default public key that is supplied by the Android SDK can be used. The development certificate can be found in a keystore that is in a **{user-home}/.android/debug.keystore** file.

The public signing key can be extracted either manually or by using the wizard that MobileFirst Studio provides.
To use the wizard:

- Right-click the Android NativeAPI folder and select **Extract public signing key**.
- Specify the location and the password of a keystore file, and click **Load Keystore**. The default password for `debug.keystore` is “android”.
- Set the **Key alias** and click **Next**.
- A dialog opens that displays the public key.
- Click **Finish** to automatically paste the public signing key to the relevant section of the `application-descriptor.xml` file.



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

Take the Application package name value from the package attribute of the *manifest* node in the **AndroidManifest.xml**.
If you decide to change the value to another, verify that you change it in both locations.

The `application-descriptor.xml` file can also be edited directly to add the *packageName*:

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