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`.

The application-descriptor.xml file

Modify the `application-descriptor.xml` file of your application by adding a security test and a public signing key.

Adding the security test

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

```
<android version="1.0" securityTest="MyCustomAuthenticityTest">
```

Adding the public signing key

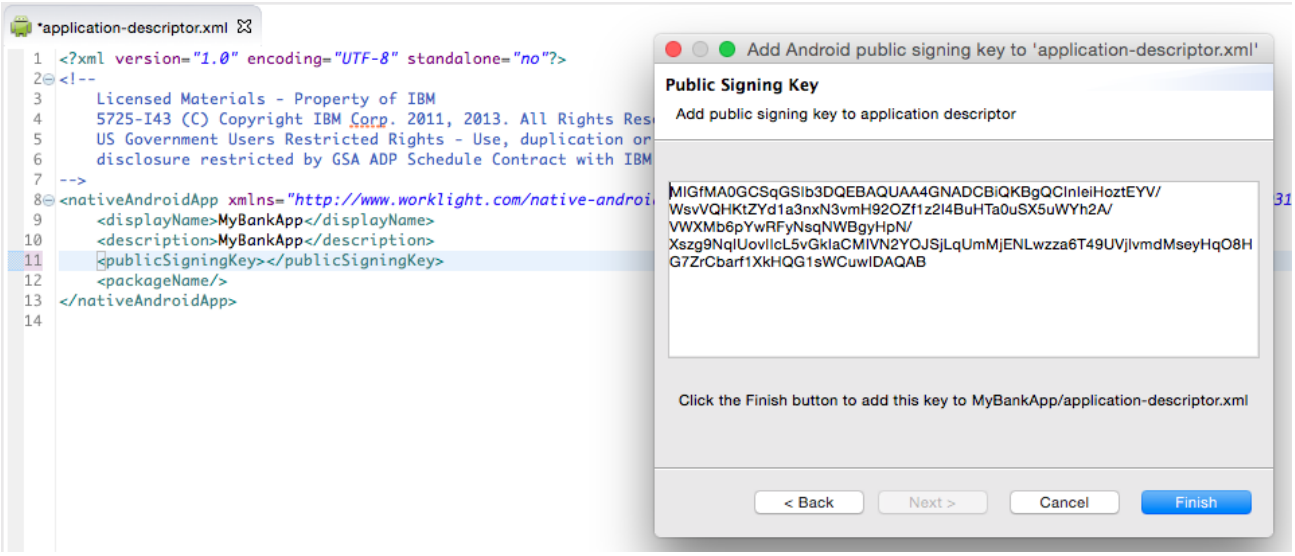
1. Extract the public signing key of the certificate that is used to sign application bundle (`.apk` file).
    - If the application is built for distribution (production), extract the public key from the certificate that is used to sign the production-ready application.
    - If the application is built 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.
    For more information about how to sign your Android application look here (http://developer.android.com/tools/publishing/app-signing.html).

    #### Extracting the public signing key by using the wizard (Eclipse)

    1. Right-click the Android NativeAPI 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** 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, make sure that you change it in both locations.

You can also edit the `application-descriptor.xml` file directly to add the package name:

```
<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>
```