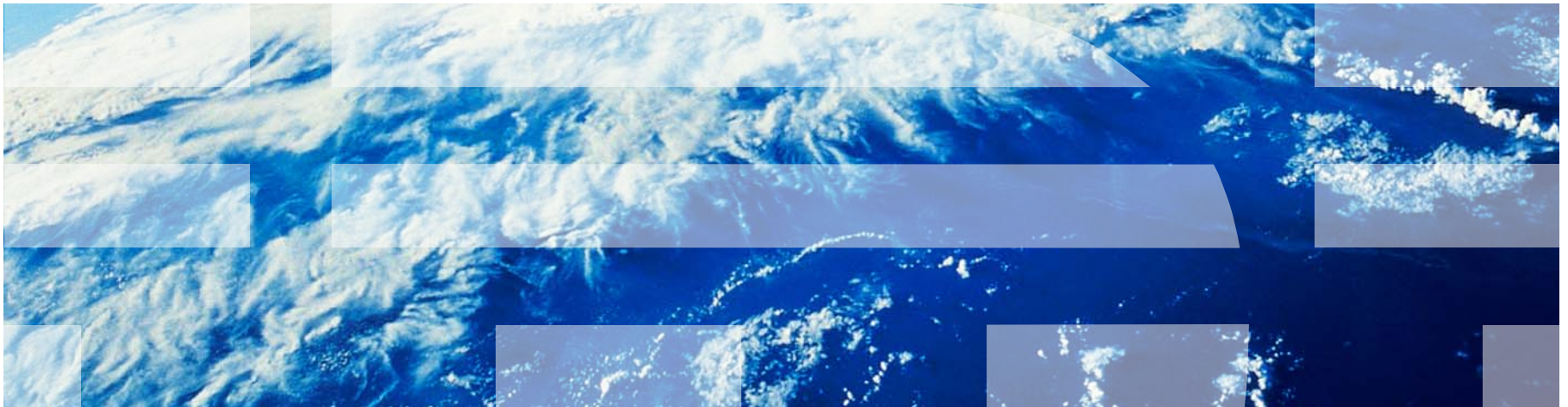


# ***IBM Worklight V6.1.0 Getting Started***

## **Application Authenticity Protection**



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# *Agenda*

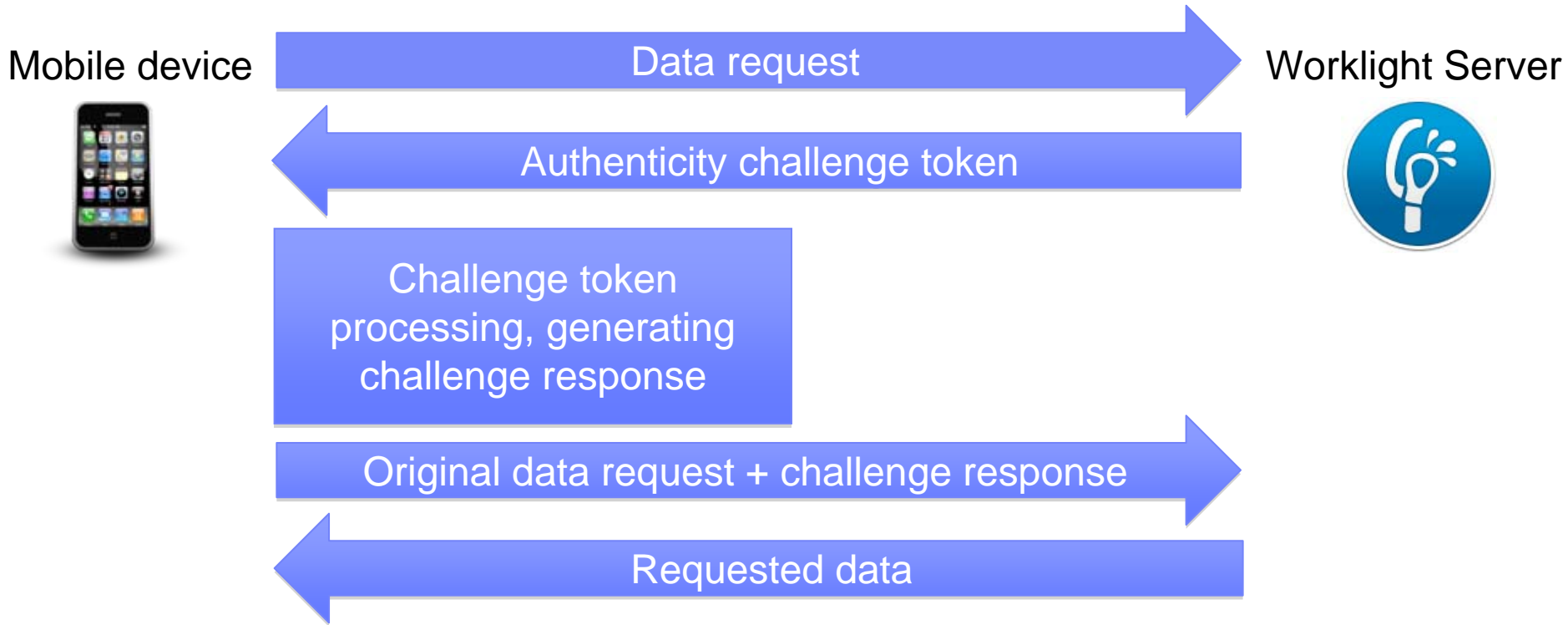
- **Overview**
- Enabling application authenticity check – Hybrid
- Enabling application authenticity check – Native
- Controlling application authenticity from Worklight Console

## ***Overview (1 of 4)***

- The HTTP services (APIs) that Worklight® Server offers can be accessed by any entity by issuing an HTTP request.
- As described in previous modules, it is possible to protect relevant services with various security tests.
- The application authenticity check ensures that the application that tries to connect to a Worklight Server is the authentic one and was not tampered with or modified by some third-party attacker.
- Application authenticity is available only with the IBM Worklight Consumer Edition or the IBM Worklight Enterprise Edition. It does not work with the free IBM Worklight Developer Edition.
- Application authenticity is available for iOS and Android platforms.

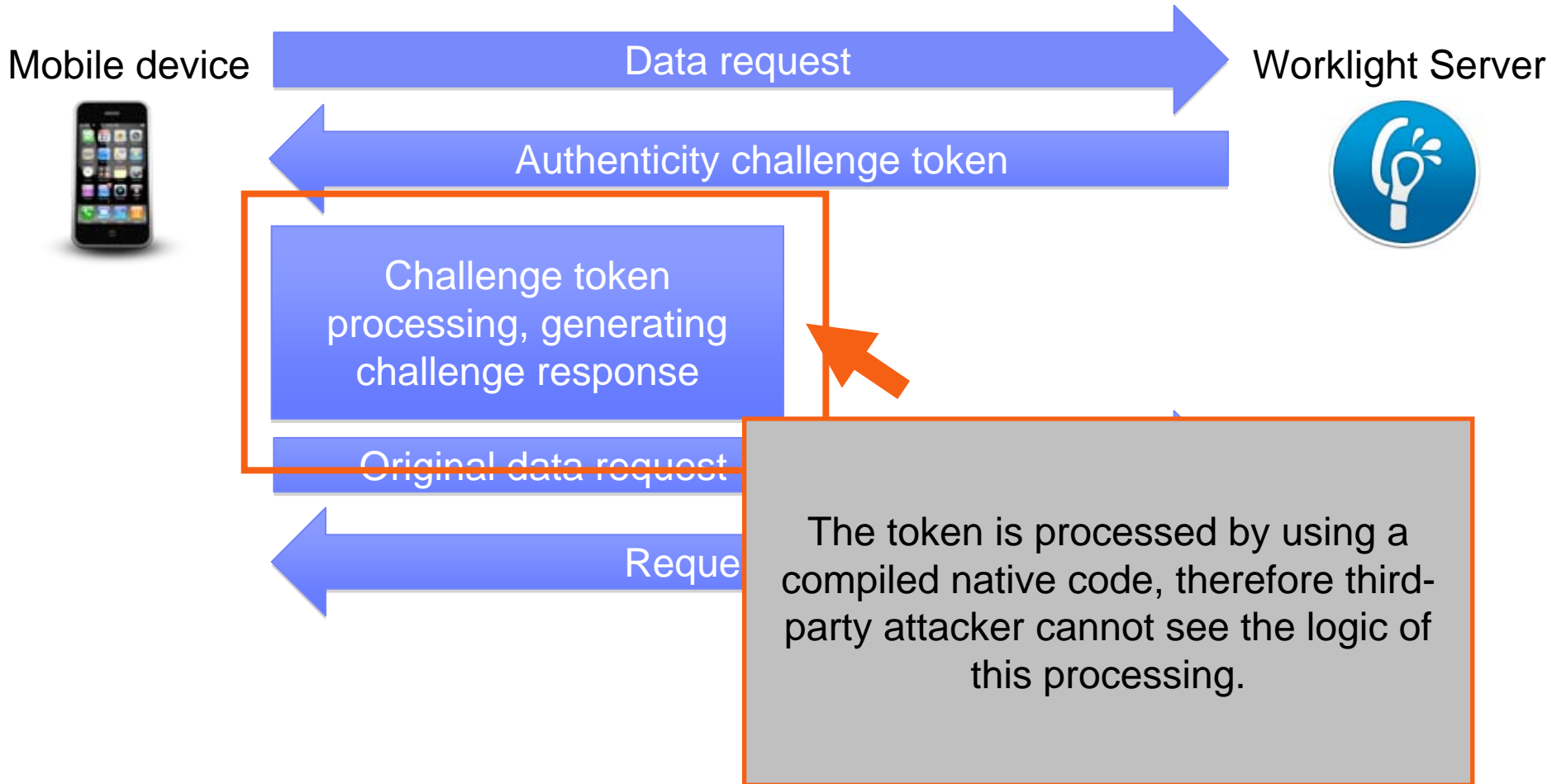
# Overview (2 of 4)

- Authenticity check flow



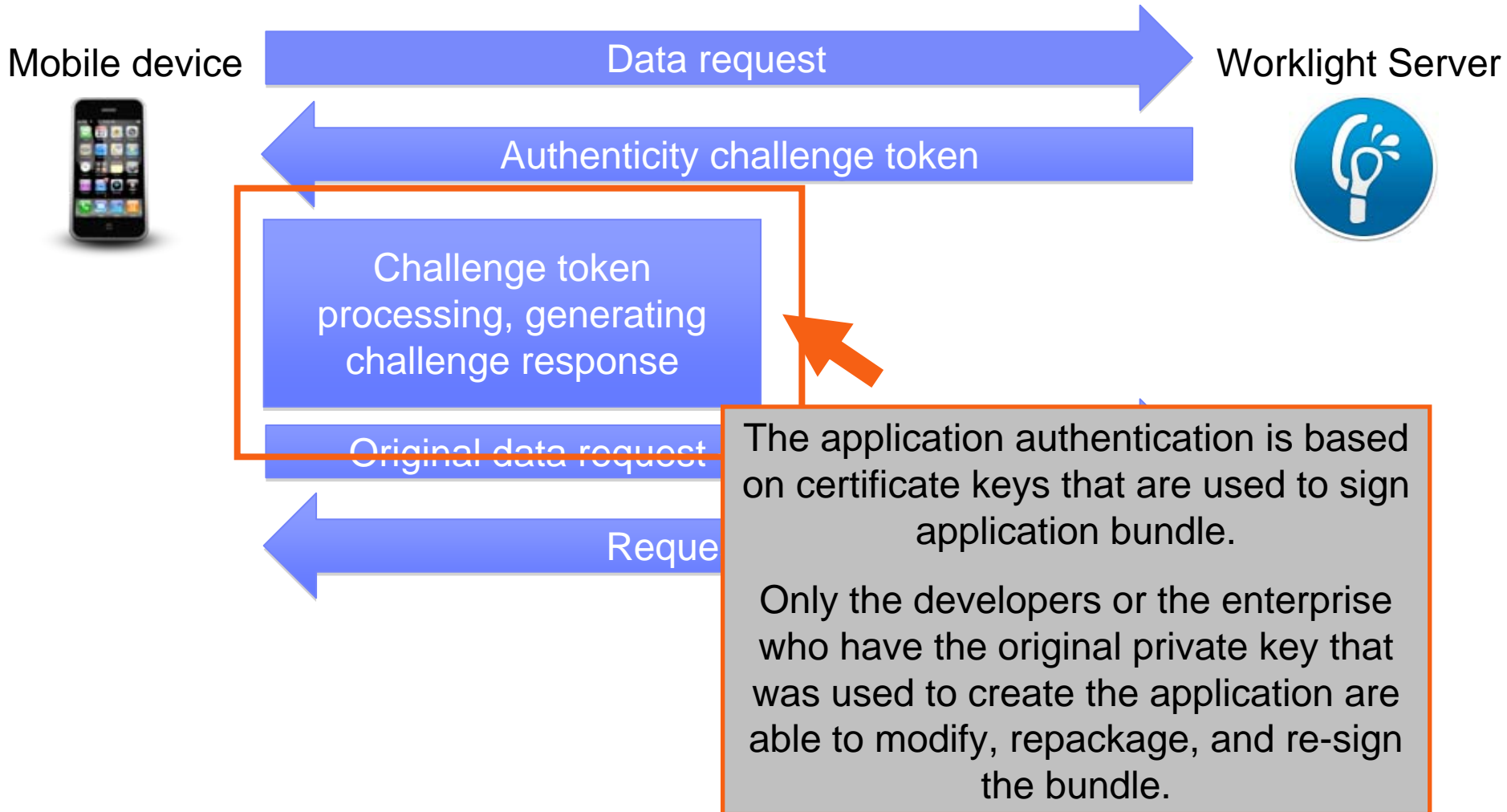
# Overview (3 of 4)

- Authenticity check flow



# Overview (4 of 4)

- Authenticity check flow



# Agenda

- Overview
- Enabling application authenticity check – Hybrid
- Enabling application authenticity check – Native
- Controlling application authenticity from Worklight Console



## Enabling application authenticity check – Hybrid (1 of 5)

- First step in enabling application authenticity is to modify your **authenticationConfig.xml** file by adding the relevant authentication realm to your security tests.
- If you use **<mobileSecurityTest>**, you must add the **<testAppAuthenticity/>** child-element to it.
- If you use **<customSecurityTest>**, you must add the **<test realm="wl\_authenticityRealm"/>** child-element to it.

```
<mobileSecurityTest name="mobileTest">  
  <testAppAuthenticity/>  
  <testUser realm="MyUserAuthRealm"/>  
  <testDeviceId provisioningType="auto" />  
</mobileSecurityTest> == <customSecurityTest name="mobileTest">  
  <test realm="wl_authenticityRealm" step="1"/>  
  <test realm="wl_antixsrfRealm" step="1"/>  
  <test realm="wl_remoteDisableRealm" step="1"/>  
  <test realm="MyUserAuthRealm" isInternalUserID="t  
  <test realm="wl_deviceAutoProvisioningRealm" isIn  
</customSecurityTest>
```

## Enabling application authenticity check – Hybrid (2 of 5)

- Second step is to modify the **application-descriptor.xml** file of your application.
- Add the securityTest attribute to the environment element. For example:

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

- To enable application authenticity check for the **iOS environment**, you must specify the **bundleId** of your application exactly as you defined it in the Apple Developer portal. For example:



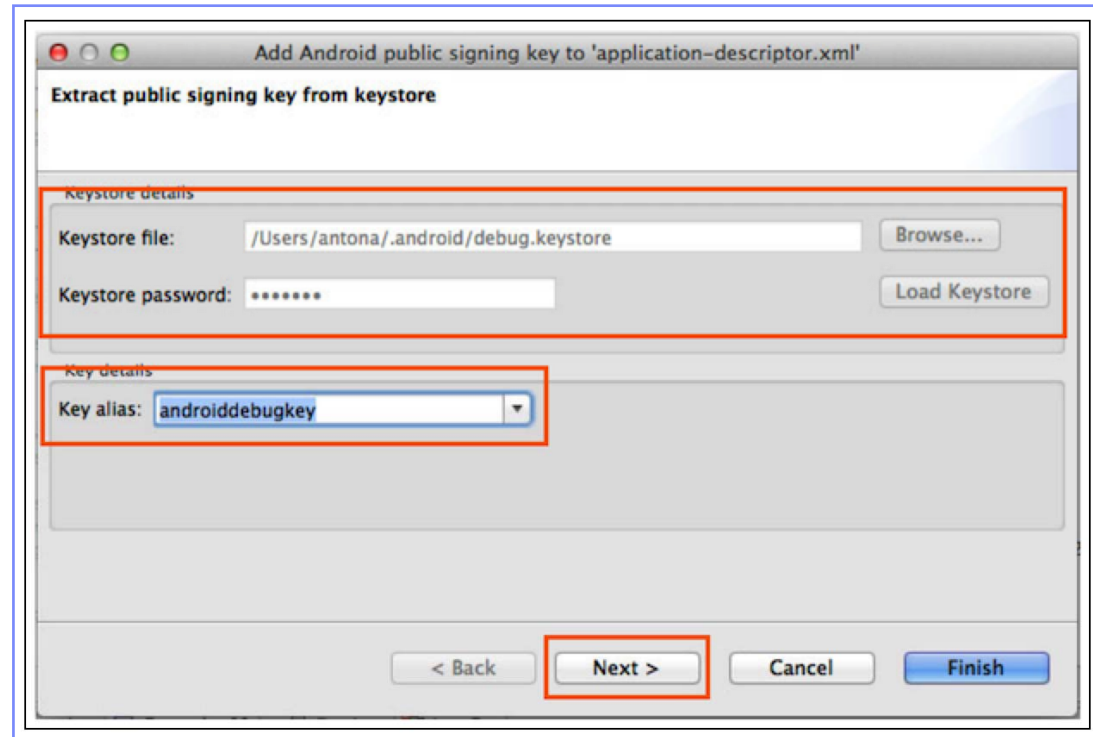
```
<mainFile>starbucks.html</mainFile>  
<thumbnailImage>common/images/thumbnail.png</thumbnailImage>  
<iphone bundleId="com.worklight.AntonDevApp" version="1.0">  
  <worklightSettings include="true"/>  
  <security>  
    <encryptWebResources enabled="false"/>  
    <testWebResourcesChecksum enabled="false" ignoreFileE  
  </security>  
</iphone>
```

## ***Enabling application authenticity check – Hybrid (3 of 5)***

- To enable application authenticity check for the **Android environment**, you must extract the public signing key of the certificate that is used to sign application bundle ( `.apk` file).
- Worklight Studio provides tools to simplify this process.
- If you are building an application for distribution (production), you must extract the public key from the certificate that you are using to sign your production ready application.
- If you are building an application in the development environment, you might use the public key from a default development certificate that is supplied by the Android SDK.
- The development certificate can be found in a keystore that is in a **`{user-home}/.android/debug.keystore`** file.

## Enabling application authenticity check – Hybrid (4 of 5)

- You can either extract the public key manually or use the wizard that is Worklight Studio provides.
- To use the wizard:
  1. Right-click your Android environment and select **Extract public signing key**.
  2. Specify the location and the password of a keystore file, and click **Load Keystore**.
  3. The default password for **debug.keystore** is “android”.
  4. Set the **Key alias** and click **Next**.



## Enabling application authenticity check – Hybrid (5 of 5)

- A dialog opens that displays the public key.
- After you click **Finish**, the public key is automatically pasted to the relevant section of the **application-descriptor.xml** file.
- After you updated the required elements, rebuild and redeploy your application to a Worklight Server.



# Agenda

- Overview
- Enabling application authenticity check – Hybrid
- Enabling application authenticity check – Native
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## ***Enabling application authenticity check – Native***

- When you enable App Authenticity in a native application:
  - For the **iOS environment**
    - In Eclipse, the steps to follow are the same as done in the previous slides, plus the following extra step:
    - After the project is opened in Xcode, in the **Other Linker Flags** field, enter the following value: **-ObjC**
  - For the **Android environment**
    - In Eclipse, the steps to follow are the same as done in the previous slides. No other steps are required.

# *Agenda*

- Overview
- Enabling application authenticity check – Hybrid
- Enabling application authenticity check – Native
- Controlling application authenticity from Worklight Console



## ***Controlling Application Authenticity from Worklight Console (1 of 2)***

- Worklight Console provides means for enabling and disabling application authenticity realm.
- This feature might be useful for example for development and QA environments.
- You can set three modes:
  - **Enabled, blocking** – This mode means that the application authenticity check is enabled. If the application fails the check, it will not be served by a Worklight Server.
  - **Enabled, serving** – This mode means that the application authenticity check is enabled. If the application fails the check, it will still be served by a Worklight Server.
  - **Disabled** – This mode means that application authenticity check is disabled.

# Controlling Application Authenticity from Worklight Console (2 of 2)

HelloWorklight HelloWorklight
✕ Delete

Last deployed at: 2013-11-04 16:28

|  |                        |  |   |  |
|--|------------------------|--|---|--|
|  | <span>✕</span> iPhone  | Version 1.0 <span style="color: green;">●</span> Active <span style="float: right;">▼</span> | Security Test: customTests<br>App Authentication: <span style="color: orange;">⚠</span> Enabled, servicing <span style="float: right;">▼</span><br>Device Authentication: Default<br>User Authentication: Default |  |
|  |                        | <input type="checkbox"/> Lock this version <span style="font-size: small;">?</span>          |   |  |
|  | <span>✕</span> iPad    | Version 1.0 <span style="color: green;">●</span> Active <span style="float: right;">▼</span> | Security Test: Default<br>App Authentication: <span style="color: red;">⚠</span> Access Disabled <span style="float: right;">▼</span><br>Device Authentication: Default<br>User Authentication: Default           |  |
|  |                        | <input type="checkbox"/> Lock this version <span style="font-size: small;">?</span>          |   |  |
|  | <span>✕</span> Android | Version 1.0 <span style="color: green;">●</span> Active <span style="float: right;">▼</span> | Security Test: customTests<br>App Authentication: <span style="color: green;">✔</span> Enabled, blocking <span style="float: right;">▼</span><br>Device Authentication: Default<br>User Authentication: Default   |  |
|  |                        | <input type="checkbox"/> Lock this version <span style="font-size: small;">?</span>          |   |  |

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