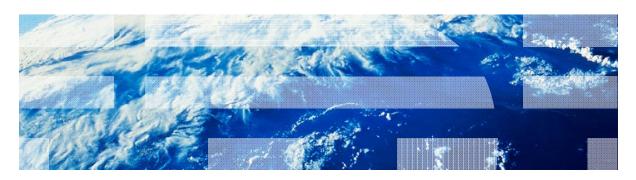


IBM Worklight V6.0.0 Getting Started

Application Authenticity Protection





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Agenda

- Overview
- Enabling application authenticity check
- Controlling application authenticity from Worklight Console



- 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.



Authenticity check flow

Mobile device

Authenticity challenge token

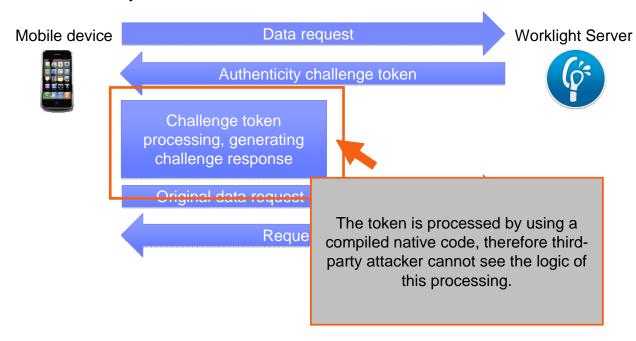
Challenge token
processing, generating
challenge response

Original data request + challenge response

Requested data

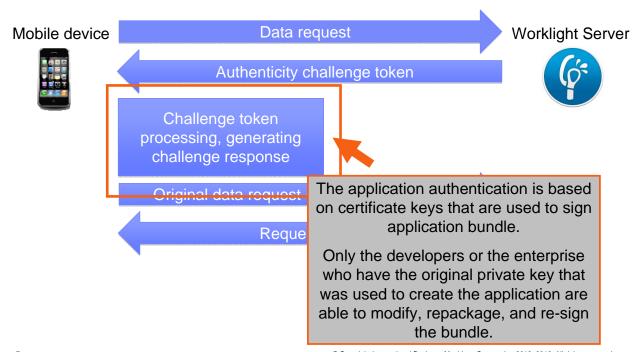


Authenticity check flow





Authenticity check flow





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- 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.



- Second step is to modify the application-descriptor.xml file of your application.
- To enable application authenticity check for iOS environment, you must specify the **bundleld** of your application exactly as you defined it in Apple Developer portal.

For example:

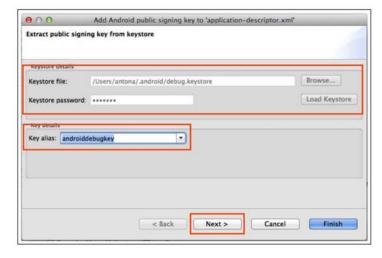




- To enable application authenticity check for Android environment, you must extract the public signing key of the certificate that is used to sign application bundle (.apk file).
- Worklight Studio provides tooling to simplify this process.
- If you are building an application for distribution (production), 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.

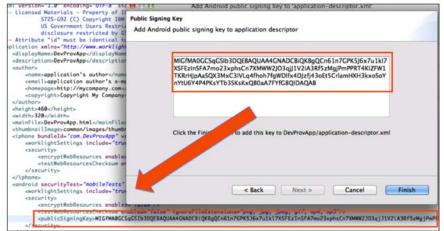


- You can either extract the public key manually or use the wizard that is Worklight Studio provides.
- To use the wizard:
 - Right-click your Android environment and select Extract public signing key.
 - Specify the location and the password of a keystore file, and click Load Keystore.
 - The default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





- A dialog opens that displays the public key.
- 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.





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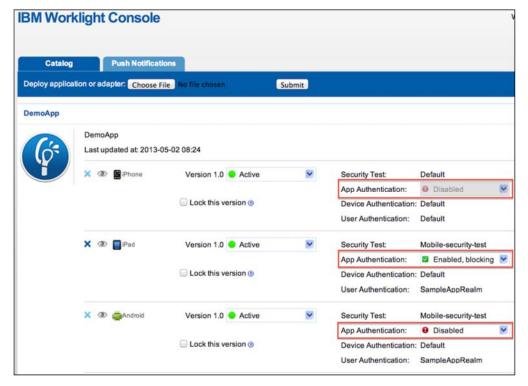


Controlling Application Authenticity from Worklight Console

- 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





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