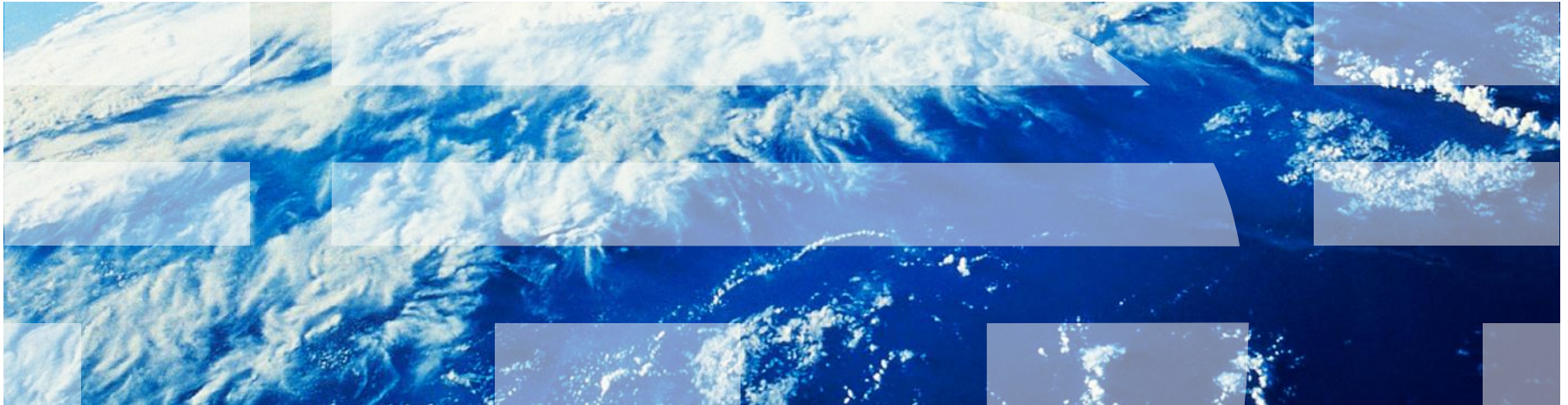


IBM Worklight Foundation V6.2.0 Getting Started

Creating your first Native iOS Worklight application



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For more information

- For more information about developing native iOS applications, see the Worklight user documentation topic: "Developing native applications for iOS"

Agenda

- **Creating a Worklight native API**
- **Creating and configuring an iOS native application**

Creating a Worklight native API (1 of 4)

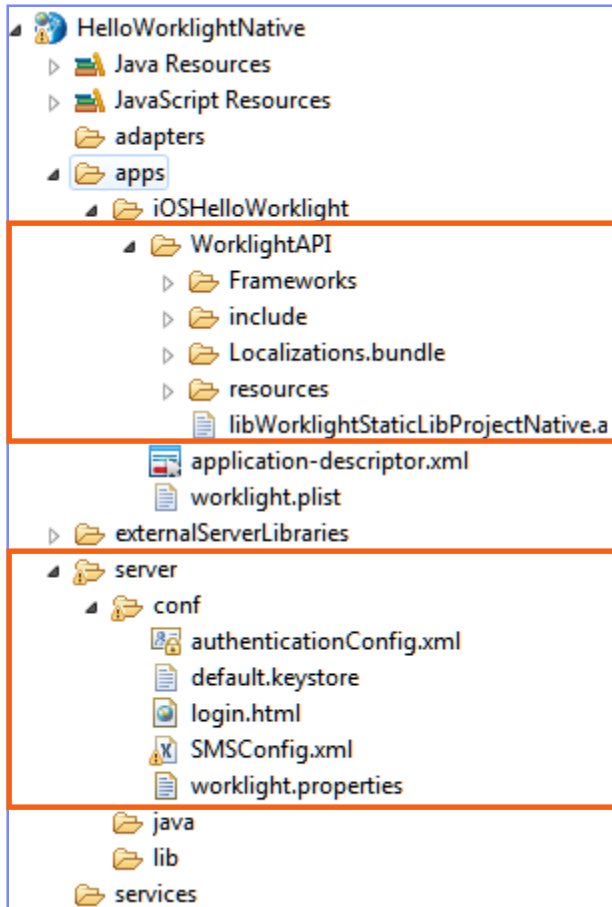
- IBM Worklight® Foundation provides the ability for native iOS applications to communicate with a Worklight Server by using the Worklight native API library.
- To serve a native iOS application, the Worklight Server must be aware of it.
- You can find the Worklight native API folder in the application folder of your Worklight project.
- The Worklight native API folder contains a native API library and configuration file that you must copy to your native iOS project.
- The native application contains the `application-descriptor.xml` file, where you can configure the application metadata.
- In this module, you learn how to create a Worklight native API.
- In the following modules, you learn how to use its components in your native iOS application.

Creating a Worklight native API (2 of 4)

1. In Worklight Studio, create a Worklight project, and add a Worklight Native API.
2. In the **New Worklight Native API** dialog, enter your application name, and select **iOS** for the **Environment** field.
3. Right-click the **Worklight native app** folder and select **Run As > Deploy Native API**.
 - This action is required in order for the Worklight Server to recognize the application if it attempts to connect to the server, similar to Hybrid applications.

Creating a Worklight native API (3 of 4)

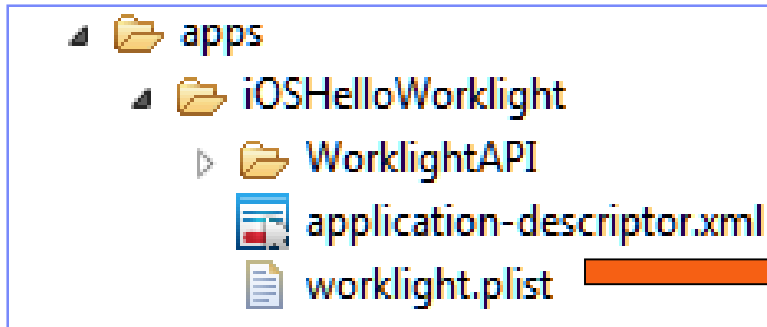
- The Worklight native API contains several components:



- The `WorklightAPI` folder is an IBM Worklight API library that you must copy to your native iOS project.
- You use the `application-descriptor.xml` file to define application metadata and to configure security settings that the Worklight Server enforces.
- The `worklight.plist` file contains connectivity settings that a native iOS application uses. You must copy this file to your native iOS project.
- Like with any Worklight project, you create the server configuration by modifying the files that are in the `server\conf` folder.

Creating a Worklight native API (4 of 4)

- Edit the `worklight.plist` file that holds the server configuration:



Key	Type	Value
▼ Root	Dictionary	(9 items)
protocol	String	http
host	String	
port	String	10080
wlServerContext	String	/HelloWorklightNative/
application id	String	iOSHelloWorklight
application version	String	1.0
environment	String	iOSnative
wlUid	String	wY/mbnwKTDDYQUvuQCdSgg==
platformVersion	String	6.2.0.00.20140515-0417

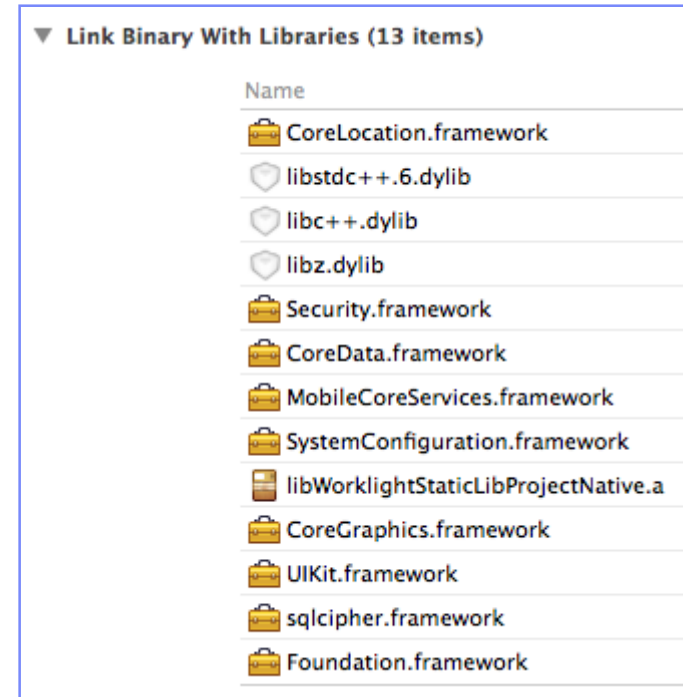
- *protocol* – The communication protocol to the Worklight Server, which is either `http` or `https`.
- *host* – The hostname of the Worklight Server.
- *port* – The port of the Worklight Server.
- *wlServerContext* – The context root path of the application on the Worklight Server.
- *application id* – The application ID as defined in the `application-descriptor.xml` file.
- *application version* – The application version.
- *environment* – The target environment of the native application (“`iOSnative`”).
- *wlUid* – This property is used by MTWW to identify this as a Worklight application.
- *wlPlatformVersion* – The Worklight Studio version.

Agenda

- Creating a Worklight native API
- Creating and configuring an iOS native application

Creating and configuring an iOS native application

- Create an Xcode project or use an existing one.
- Copy the previous `WorklightAPI` folder and the `worklight.plist` file from Eclipse to the root of your native project.
- In Xcode's **Build Phases**, link the following libraries in your native iOS application:
`SystemConfiguration.framework,`
`sqlcipher.framework,`
`MobileCoreServices.framework,`
`CoreData.framework,`
`CoreLocation.framework,`
`Security.framework,` `libz.dylib,`
`sqlcipher.framework,` `libc++.dylib` and `libstdc++.6.dylib`.
- **Note:** The framework `sqlcipher.framework` might already be linked.



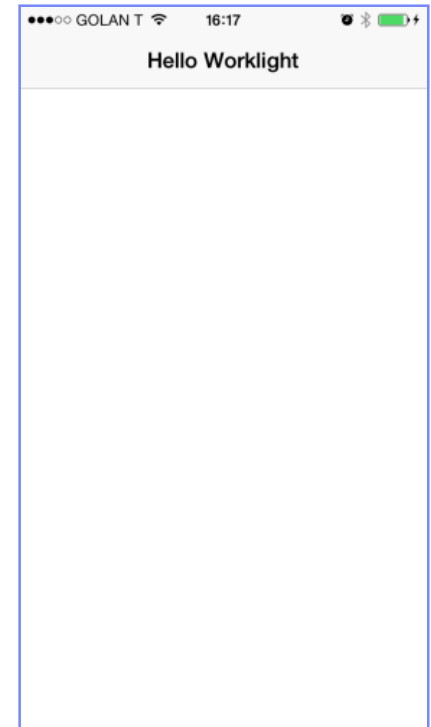
Creating and configuring an iOS native application

- Add the following in Xcode's **Build Settings**:
 1. In **Header Search Paths**:
`$(SRCROOT)/WorklightAPI/include`
 2. In **Other Linker Flags**:
`-ObjC`
 3. In the **Deployment** section, select a value for the iOS **Deployment Target** field that is greater than or equal to 5.0.

For more information, see the Worklight user documentation topic “**Developing native applications for iOS**”.

Creating and configuring an iOS native application

- After you run the application in Xcode, the final result will be a native application that contains the Worklight API library.
- In the next training module, Native Worklight API will be implemented and demonstrated.
- A sample project with pre-defined Worklight API library is supplied for this training module.



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