Using a MobileFirst Hybrid application as a container for server-generated pages

This tutorial covers the following topics:

- Migrating applications to IBM MobileFirst Platform Foundation
- Running your application on the Android emulator
- Running your application on the iOS emulator
- Sample application

Migrating applications to IBM MobileFirst Platform Foundation

- By using mobile web technology, you can deploy applications to the widest variety of devices.
- The existence of public application stores, such as Apple iTunes and Google Play, changes the way
 applications are hosted and marketed. These changes make traditional methods of distribution less
 relevant.
- IBM MobileFirst Platform Foundation provides the solution to build cross-platform applications that can be distributed through the application stores by using the hybrid application programming model.
- In the hybrid model, developers typically package the application HTML, CSS, and JavaScript™ code as part of the application that is deployed to the application store.
- This tutorial shows the remote loading of dynamic content capability, where the HTML, CSS, and JavaScript code is hosted externally from the natively packaged hybrid.

Creating MobileFirst applications

CLI

From a terminal window, use the following CLI commands to add a project and application:

mfp create UsingApplicationAsAContainer
cd UsingApplicationAsAContainer
mfp add hybrid UsingApplicationAsAContainer

Next, add a required environment, for example Android:

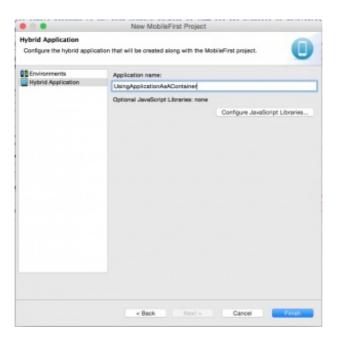
cd UsingApplicationAsAContainer
mfp add environment android

Studio

In MobileFirst Studio, create a new project, "UsingApplicationAsAContainer"



A project might host multiple applications. However, in this tutorial, you use only one app: UsingApplicationAsAContainer



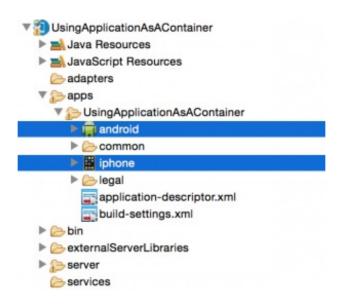
You can set the target environments either while you are working in the **MobileFirst Project** wizard, or later.



IBM MobileFirst environments

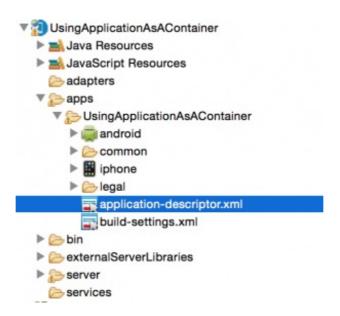
- IBM MobileFirst Foundation provides a model for organizing the application project structure for each target environment (for example, Android, iPhone, iPad).
- You select your target environment through the MobileFirst Environment wizard.





IBM MobileFirst Common environment

- The simplest way to use MobileFirst apps as containers for server-generated pages is through the Common environment.
- Open the application-descriptor.xml file and edit the mainFile tag to point to http://m.ibm.com.



```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
 1
     <application xmlns="http://www.worklight.com/application-descriptor" id="UsingApplicationAsAContainer"
 2
       <displayName>UsingApplicationAsAContainer</displayName>
 3
       <description>UsingApplicationAsAContainer</description>
 4
       <author>
 5
          <name>application's author</name>
 6
          <email>application author's e-mail
 7
          <homepage>http://mycompany.com</homepage>
 8
          <copyright>Copyright My Company</copyright>
 9
       </author>
10
       <mainFile>http://m.ibm.com</mainFile>
11
       <features/>
12
       <thumbnailImage>common/images/thumbnail.png</thumbnailImage>
13
       <iphone bundleId="com.UsingApplicationAsAContainer" version="1.0">
14
          <worklightSettings include="false"/>
15
          <security>
16
            <encryptWebResources enabled="false"/>
17
            <testWebResourcesChecksum enabled="false" ignoreFileExtensions="png, jpg, jpeg, gif, mp4, mp
18
          </security>
19
       </iphone>
20
       <android version="1.0">
21
          <worklightSettings include="false"/>
22
          <security>
23
            <encryptWebResources enabled="false"/>
24
            <testWebResourcesChecksum enabled="false" ignoreFileExtensions="png, jpg, jpeg, gif, mp4, mp
25
            <publicSigningKey/>
26
            <packageName/>
27
          </security>
28
       </android>
29
     </application>
30
```

Running your application on the Android emulator

- 1. Build the Android environment.
- 2. Deploy the application.
- 3. Right-click the generated Android project and click **Run As > Android Application**.

You can see that the http://m.ibm.com URL is displayed in your Android emulator.



Running your application on the iOS emulator

- 1. Deploy the application to your iOS emulator.
- 2. Right-click the IOS environment and click Run As > Xcode project.



Sample application

Click to download (https://github.com/MobileFirst-Platform-Developer-Center/UsingApplicationAsAContainer) the sample.