

# 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>.



```

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

```

## Running your application on the Android emulator

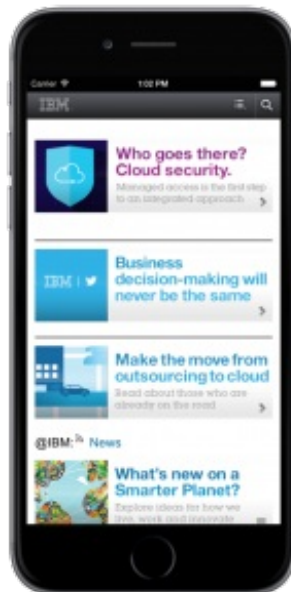
1. Build the Android environment.
2. Deploy the application.
3. Right-click the generated Android project and click **Run As > Android Application**.

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.