

# IBM MobileFirst Foundation on Bluemix

## Overview

IBM MobileFirst Foundation can be hosted on Bluemix, here is some information about Bluemix.

**IBM Bluemix** is an implementation of IBM's Open Cloud Architecture. It leverages **Cloud Foundry** to enable developers to rapidly build, deploy, and manage their cloud applications, while tapping a growing ecosystem of available services and runtime frameworks.

Learn more about the Bluemix architecture and Bluemix concepts on the Bluemix website (<https://www.ng.bluemix.net/docs/overview/overview.html>).

## How does it work?

In a nutshell: There are 2 ways to run IBM MobileFirst Foundation on Bluemix based on what kind of a license entitlement.

- Bluemix subscription or PayGo license: Mobile Foundation Bluemix Service
- On Prem license: Use IBM provided scripts to setup a MFP instance on IBM Containers or Liberty for Java runtime.

To run IBM MobileFirst Foundation on Bluemix IBM Containers, several components must interact with one another: the first component is an **image** that contains a **Linux distribution with a WebSphere Liberty installation**, with a **MobileFirst Server instance** deployed to it. The image is then stored inside an **IBM Container**, and the IBM Container is managed by **Bluemix**.

To run IBM MobileFirst Foundation on Bluemix Liberty for Java runtime, the components are: an **Cloudfoundry app** that contains a **WebSphere Liberty installation**, with a **MobileFirst Server instance** deployed to it.

## IBM Containers

IBM Containers are objects that are used to run images in a hosted cloud environment. IBM Containers hold everything that an app needs to run.

IBM Container infrastructure includes a private registry for your images, so that you can upload, store, and retrieve them. You can make those images available for Bluemix to manage them. A command line interface is then used to manage your containers on Bluemix - More on this in the following tutorials.

Learn more about IBM Containers ([https://www.ng.bluemix.net/docs/containers/container\\_index.html](https://www.ng.bluemix.net/docs/containers/container_index.html)).

## Liberty for Java runtime

The Liberty for Java runtime is powered by the liberty-for-java buildpack. The liberty-for-java buildpack provides a complete runtime environment for running applications on top of WebSphere Liberty profile. A command line interface is then used to manage your apps on Bluemix.

Learn more about Liberty for Java (<https://new-console.ng.bluemix.net/docs/runtimes/liberty/index.html>).

## Tutorials to follow next

- Create a MobileFirst Server instance using the Mobile Foundation Bluemix service (using-mobile-foundation/).
- Create a MobileFirst Server instance on Bluemix using IBM-provided scripts (mobilefirst-server-using-scripts/).