Setting Up MobileFirst Server on Bluemix using Scripts for Liberty for Java

Overview

Follow the instructions below to configure a MobileFirst Server instance on a Liberty for Java runtime on Bluemix. (MobileFirst Analytics instance can be run on IBM containers only). To achieve this you will go through the following steps:

- Setup your host computer with the required tools (Cloud Foundry CLI)
- Setup your Bluemix account
- Build a MobileFirst Server and push it to the Bluemix as a Cloud Foundry application.

Finally, you will register your mobile apps as well as deploy your adapters.

Notes:

- Windows OS is currently not supported for running these scripts.
- The MobileFirst Server Configuration tools cannot be used for deployments to Bluemix.

Jump to:

- Register an account at Bluemix
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Register an account at Bluemix

If you do not have an account yet, visit the Bluemix website (https://bluemix.net) and click **Get Started Free** or **Sign Up**. You need to fill up a registration form before you can move on to the next step.

The Bluemix Dashboard

After signing in to Bluemix, you are presented with the Bluemix Dashboard, which provides an overview of the active Bluemix **space**. By default, this work area receives the name "dev". You can create multiple work areas/spaces if needed.

Set up your host machine

To manage the Bluemix Cloud Foundry app, you need to install the Cloud Foundry CLI.
You can run the scripts using the macOS Terminal.app or a Linux bash shell.

Install the Cloud Foundry CLI (https://github.com/cloudfoundry/cli/releases?
cm_mc_uid=85906649576514533887001&cm_mc_sid_50200000=1454307195).

Download the ibm-mfpf-container-8.0.0.0 archive

To set up IBM MobileFirst Foundation on Liberty on Java, you must first create a file layout that will later be

pushed to Bluemix.

Follow the instructions in this page (http://www-01.ibm.com/support/docview.wss?uid=swg2C7000005) to download the IBM MobileFirst Server 8.0 for IBM Containers archive (.zip file, search for: *CNBL0EN*).

The archive file contains the files for building an file layout (**dependencies** and **mfpf-libs**), the files for building and deploying a MobileFirst Operational Analytics Container (**mfpf-analytics**) and files for configuring a MobileFirst Server Cloud Foundry app (**mfpf-server-libertyapp**).

> **Click to read more about the archive file contents**

Setting Up the MobileFirst Server

You can choose to run the scripts interactively or by using the configuration files: A good place to start is to run the scripts interactively once, which will also record the arguments (**recorded-args**). You can later use the args files to run the scripts in a non interactive mode.

> **Note:** Passwords are not recorded and you will have to manually add the passwords to the argument files.

- Using the configuration files - run the scripts and pass the respective configuration file as an argument.
- Interactively - run the scripts without any arguments.

If you choose to run the scripts interactively, you can skip the configuration but it is strongly suggested to at least read and understand the arguments that you will need to provide.

MobileFirst Foundation Server

> Using the configuration files

> Running the scripts

Launch the MobileFirst Console by loading the following URL: `http://APP_HOST.mybluemix.net/mfpconsole` (it may take a few moments).

Add the remote server by following the instructions in the Using MobileFirst CLI to Manage MobileFirst Artifacts (../../application-development/using-mobilefirst-cli-to-manage-mobilefirst-artifacts/#add-a-new-server-instance) tutorial.

With MobileFirst Server running on IBM Bluemix, you can now start your application development.

Applying changes

You may need to apply changes to the server layout after you have deployed the server once, e.g: you want to update the analytics URL in **/usr/config/mfpfproperties.xml**. Make the changes and then re-run the following scripts with the same set of arguments.

1. ./prepareserver.sh
2. ./startserver.sh

Adding analytics server configuration to MobileFirst Server

If you have setup a Analytics server and want to connect it to this MobileFirst Server then edit the fie **mfpfproperties.xml** in the folder **package_root/mfpf-server-libertyapp/usr/config** as specified below. Replace the tokens marked with <> with correct values from yur deployment.

```
    <jndiEntry jndiName="${env.MFPF_RUNTIME_ROOT}/mfp.analytics.url" value="'https://<AnalyticsCon
tainerGroupRoute>:443/analytics-service/rest'"/>
    <jndiEntry jndiName="${env.MFPF_RUNTIME_ROOT}/mfp.analytics.console.url" value="'https://<Anal
yticsContainerPublicRoute>:443/analytics/console'"/>
    <jndiEntry jndiName="${env.MFPF_RUNTIME_ROOT}/mfp.analytics.username" value="'<AnalyticsUs
erName>'"/>
    <jndiEntry jndiName="${env.MFPF_RUNTIME_ROOT}/mfp.analytics.password" value="'<AnalyticsPas
sword>'"/>


    <jndiEntry jndiName="${env.MFPF_PUSH_ROOT}/mfp.push.analytics.endpoint" value="'https://<Analy
ticsContainerGroupRoute>:443/analytics-service/rest'"/>
    <jndiEntry jndiName="${env.MFPF_PUSH_ROOT}/mfp.push.services.ext.analytics" value="com.ibm.m
fp.push.server.analytics.plugin.AnalyticsPlugin"/>
    <jndiEntry jndiName="${env.MFPF_PUSH_ROOT}/mfp.push.analytics.user" value="'<AnalyticsUserNa
me>'"/>
    <jndiEntry jndiName="${env.MFPF_PUSH_ROOT}/mfp.push.analytics.password" value="'<AnalyticsPa
ssword>'"/>
```

Applying MobileFirst Server Fixes

Interim fixes for the MobileFirst Server on Bluemix can be obtained from IBM Fix Central
(http://www.ibm.com/support/fixcentral).
Before you apply an interim fix, back up your existing configuration files. The configuration files are located in the **package_root/mfpf-server-libertyapp/usr** folders.

1. Download the interim fix archive and extract the contents to your existing installation folder,
   overwriting the existing files.
2. Restore your backed-up configuration files into the /**mfpf-server-libertyapp**/**usr** folders, overwriting
   the newly installed configuration files.

You can now build and deploy the updatd server.

Removing the database service configuration from Bluemix

If you ran the **prepareserverdbs.sh** script during the configuration of the MobileFirst Server image, the configurations and database tables required for MobileFirst Server are created. This script also creates the database schema for the MobileFirst Server.

To remove the database service configuration from Bluemix, perform the following procedure using Bluemix dashboard.

1. From the Bluemix dashboard, select the dashDB service you have used. Choose the dashDB
   service name that you had provided as parameter while running the **prepareserverdbs.sh** script.
2. Launch the dashDB console to work with the schemas and database objects of the selected
   dashDB service instance.
3. Select the schemas related to IBM MobileFirst Server configuration. The schema names are ones
   that you have provided as parameters while running the **prepareserverdbs.sh** script.
4. Delete each of the schema after carefully inspecting the schema names and the objects under them.
   The database configurations are removed from Bluemix.