

# Using the Mobile Foundation service to set up MobileFirst Server

## Overview

This tutorial provides step-by-step instructions to set up a MobileFirst Server instance on Bluemix by using the **Mobile Foundation** service.

Mobile Foundation is a **Bluemix service** that enables quick and easy stand-up of scalable Developer or Production environments of MobileFirst Foundation v8.0 on **Liberty for Java runtime**.

The Mobile Foundation service offers two plan options:

1. **Developer**: This plan provisions a Mobile Foundation server as a Cloud Foundry app on a Liberty for Java runtime. The plan does not support the use of external databases or define multiple nodes *and is restricted to development and testing only*. The server instance allows you to register any number of Mobile application for development and testing.

**Note:** the Developer plan does not offer a persistent database, as such be sure to backup your configuration as explained in the Troubleshooting section.

2. **Professional 1 Application**: This plan provisions a Mobile Foundation server in a scalable Cloud Foundry app on a Liberty for Java runtime. The plan also requires a dashDB database service, which is created and billed separately. The plan allows users to build and manage a single mobile application. A single mobile application can consist of multiple flavors, such as iOS, Android, Windows, and Mobile Web.

See the service page on Bluemix.net (<https://console.ng.bluemix.net/catalog/services/mobile-foundation/>) for more information regarding billing.

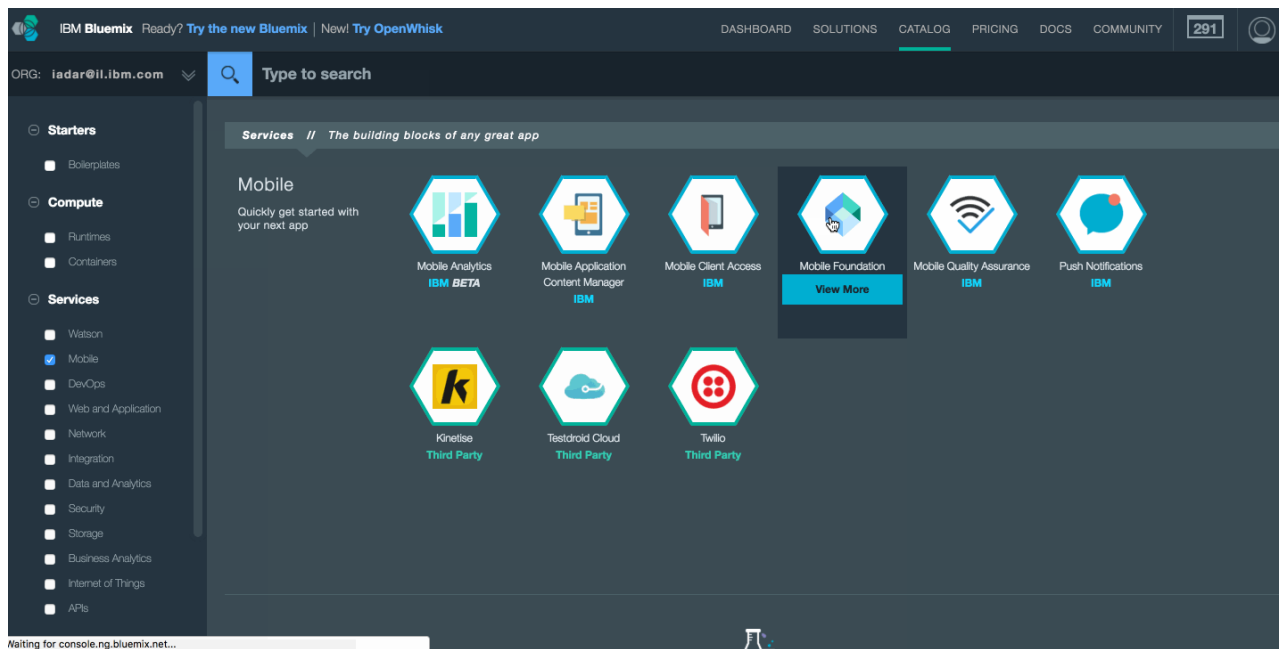
Jump to:

- Setting up the Mobile Foundation Service
- Using the Mobile Foundation Service
- Server configuration
- Advanced server configuration
- Adding Analytics support
- Applying MobileFirst Server Fixes
- Troubleshooting
- Further reading

## Setting up the Mobile Foundation Service

To set up the available plans, first follow these steps:

1. Load bluemix.net (<http://bluemix.net>) and visit the **Catalog** page.
2. From the left sidebar, tick the **Mobile** checkbox under **Services**. Then, click on the **Mobile Foundation** tile to begin the service creation process.



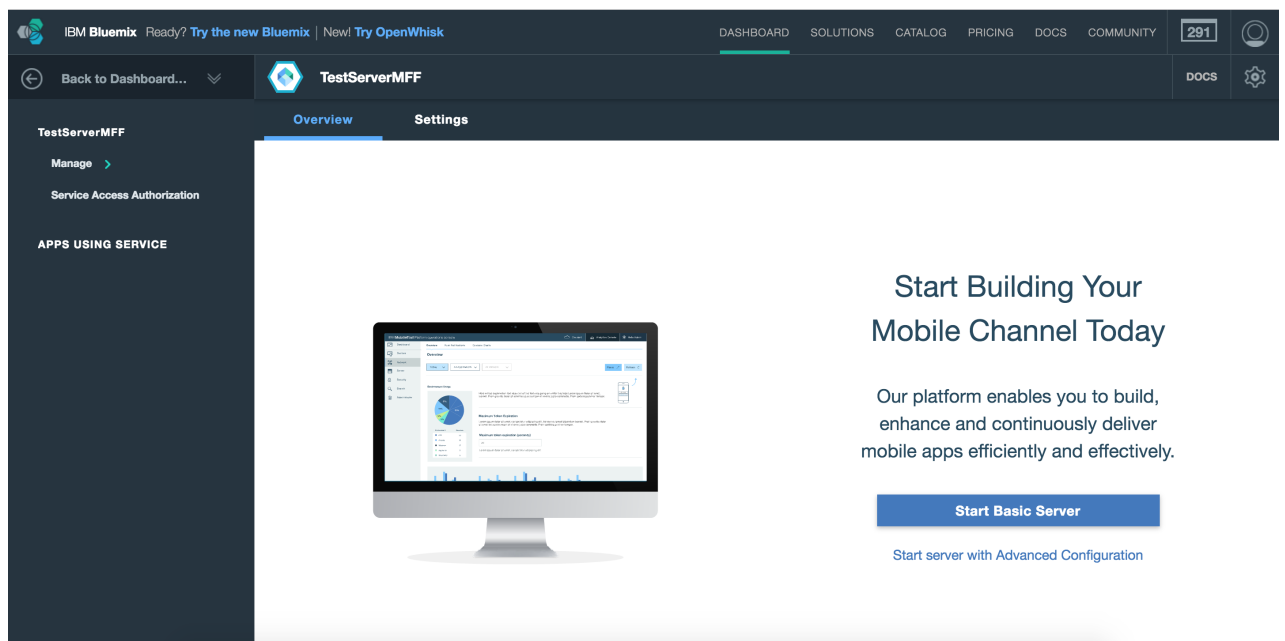
3. Select a **space** to use and optionally set a **Service name**.
4. Select the desired plan option, then click **Create**.

## Setting up the *developer* plan

1. Start the MobileFirst Server.
  - You can either keep the server configuration at its basic level and click on **Start Basic Server**, or
  - Update the server configuration in the Settings tab, and click on **Start advanced server**.

During this step a Cloud Foundry app is generated for the Mobile Foundation service, and the MobileFirst Foundation environment is being initialized. This step can take between 5 to 10 minutes.

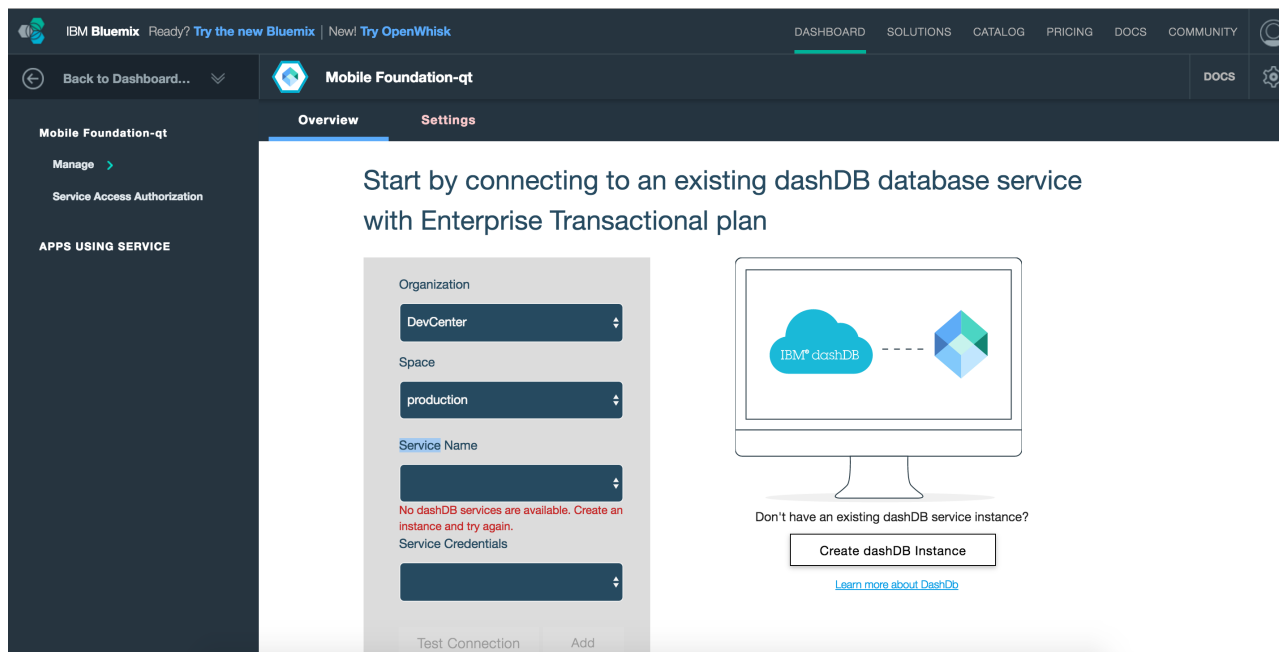
2. With the instance ready, you can now use the service.



## Setting up the *Professional 1 Application* plan

1. The plan requires an external dashDB transactional database instance

(<https://console.ng.bluemix.net/catalog/services/dashdb/>). After you have set up your dashDB *Transactional plan* instance (DashDB Enterprise Transactional 2.8.500 or Enterprise Transactional 12.128.1400), select your credentials in the plan entry page:

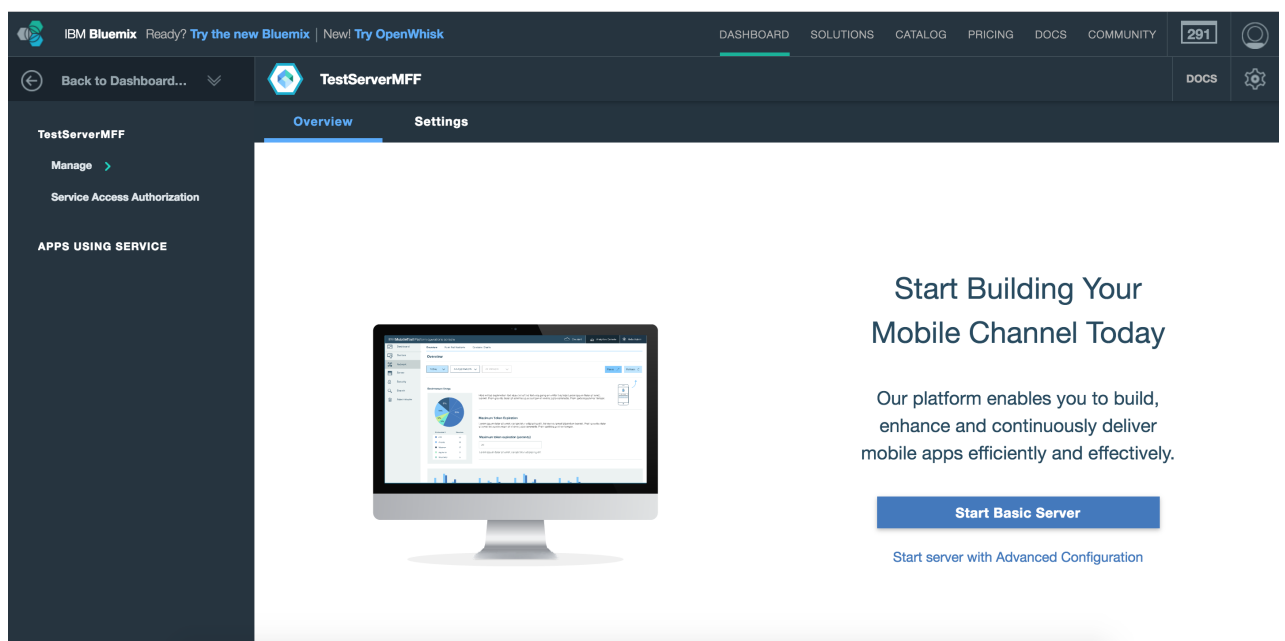


## 2. Start the MobileFirst Server.

- You can either keep the server configuration at its basic level and click on **Start Basic Server**, or
- Update the server configuration in the Settings tab, and click on **Start advanced server**.

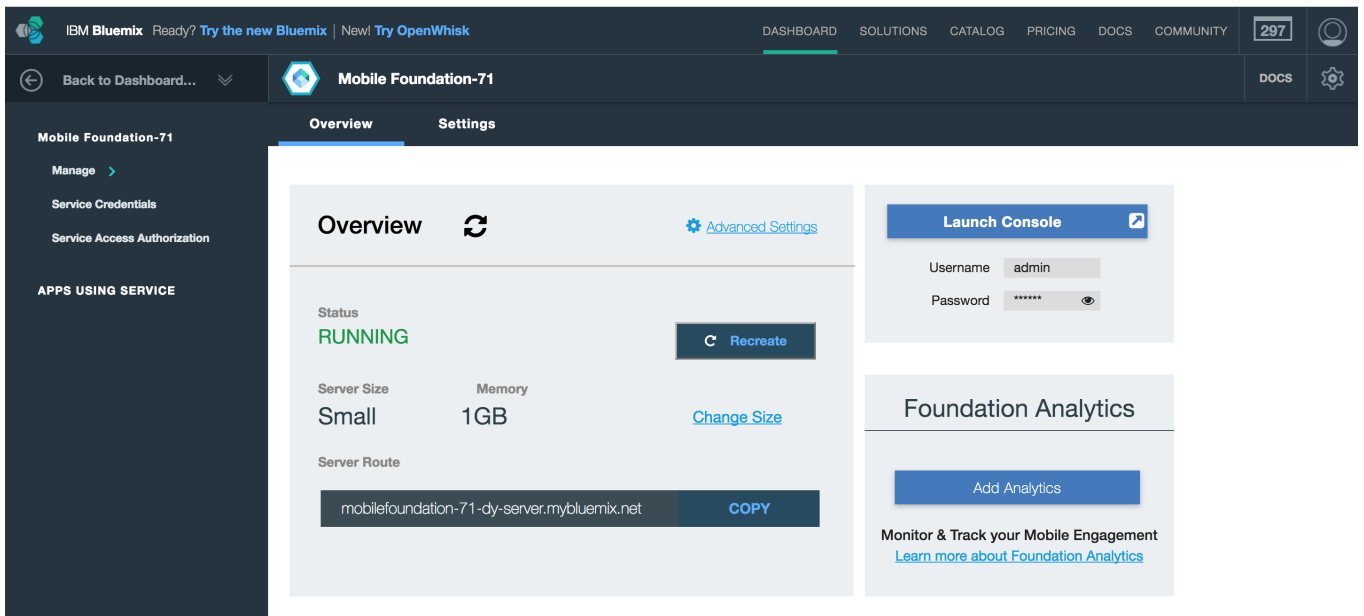
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## 3. With the instance ready, you can now use the service.



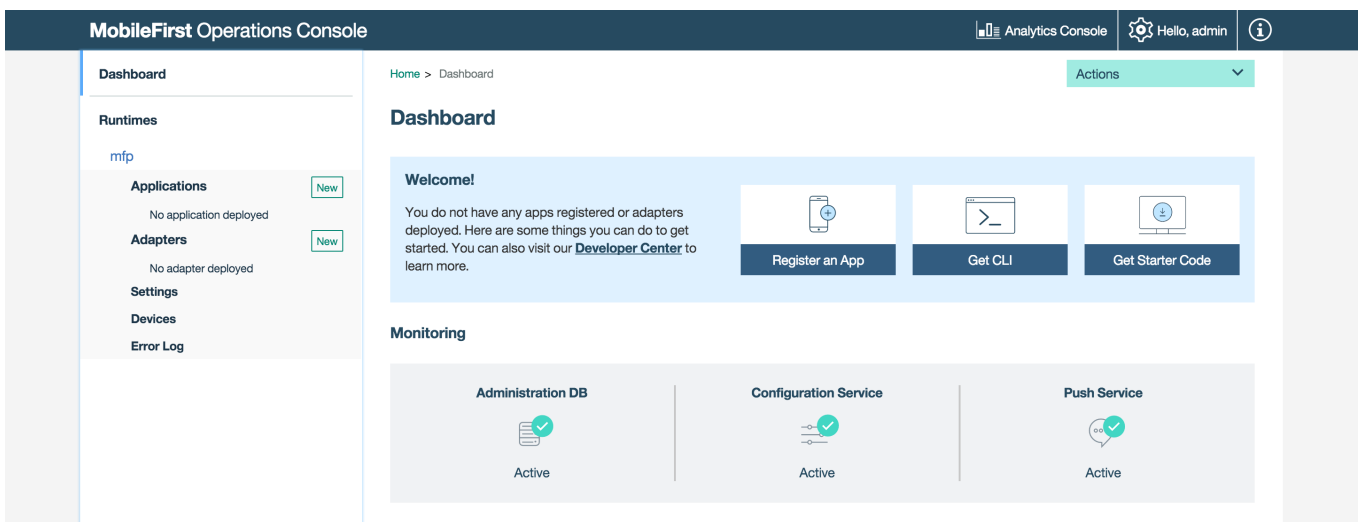
# Using the Mobile Foundation Service

With the MobileFirst Server now running, you are presented with the following Dashboard:



Click on **Add Analytics** to add MobileFirst Foundation Operational Analytics support to your server instance. Learn more in the Adding Analytics support section.

Click on **Launch Console** to open the MobileFirst Operations Console. The default user name is "admin" and the password can be revealed by clicking on the "eye" icon.



## Server configuration

The basic server instance consists of:

- A single node (server size: "small")
- 1GB memory
- 2GB storage capacity

## Advanced server configuration

Through the **Settings** tab, you can further customize the server instance with:

- Varying node, memory, and storage combinations
- MobileFirst Operations Console admin password
- LTPA keys
- JNDI configuration

- User registry
- TrustStore
- Operational Analytics configuration
- DashDB Enterprise Transactional 2.8.500 or Enterprise Transactional 12.128.1400 database selection (available in the *Professional 1 Application* plan)
- VPN

Server Size	S	M	L	XL	XXL
Memory (GB)	1	2	4	8	16
Storage (GB)	64	128	256	512	1024

## Adding Analytics support

You can add MobileFirst Foundation Operational Analytics support to your Mobile Foundation service instance by clicking on **Add Analytics** from the service's Dashboard page. This action provisions an IBM Container with an instance of MobileFirst Foundation Operational Analytics server.

- When using the **Developer** plan this action will also automatically hook the Analytics service instance to your MobileFirst Server instance.
- When using the **Professional 1 Application** plan this action will require additional input from you to select: amount of available Nodes, available Memory and a storage volume.

Once the operation finishes, reload the MobileFirst Operations Console page in your browser to access the Analytics console.

Learn more about analytics in the MobileFirst Operational Analytics category ([../analytics](#)).

## Applying MobileFirst Server Fixes

Updates to the Mobile Foundation Bluemix services are applied automatically without a need for human intervention, other than agreeing to perform the update. When an update is available, a banner is displayed in the service's Dashboard page with instructions and action buttons.

## Troubleshooting

The Developer plan does not offer a persistent database, which could cause at times loss of data. To quickly onboard in such cases, be sure to follow these best practices:

- Every time you make any of the following server-side actions:
  - Deploy an adapter or update any adapter configuration or property value

- Perform any security configuration such scope-mapping and alike

Run the following from the command-line to download your configuration to a .zip file:

```
$curl -X GET -u admin:admin -o export.zip http://<App Name>.mybluemix.net/mfpadmin/management-apis/2.0/runtimes/mfp/export/all
```

- In case you recreate your server or lose your configuration, run the following from the command-line to import the configuration to the server:

```
$curl -X POST -u admin:admin -F file=@./export.zip http://<App Name>.mybluemix.net/mfpadmin/management-apis/2.0/runtimes/mfp/deploy/multi
```

## Further reading

Now that the MobileFirst Server instance is up and running:

- Familiarize with the MobileFirst Operations Console ([../product-overview/components/console](#)).
- Experience MobileFirst Foundation with these Quick Start tutorials ([../quick-start](#)).
- Read through all available tutorials ([../all-tutorials/](#)).