

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.

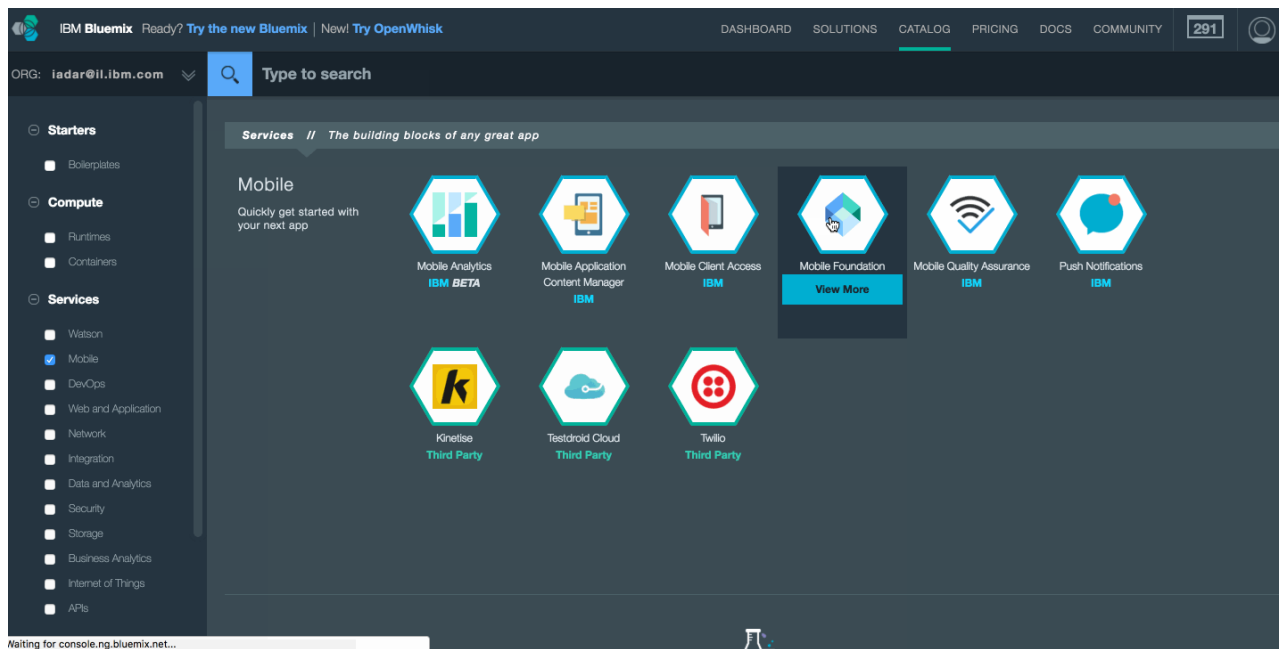
Jump to:

- 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.



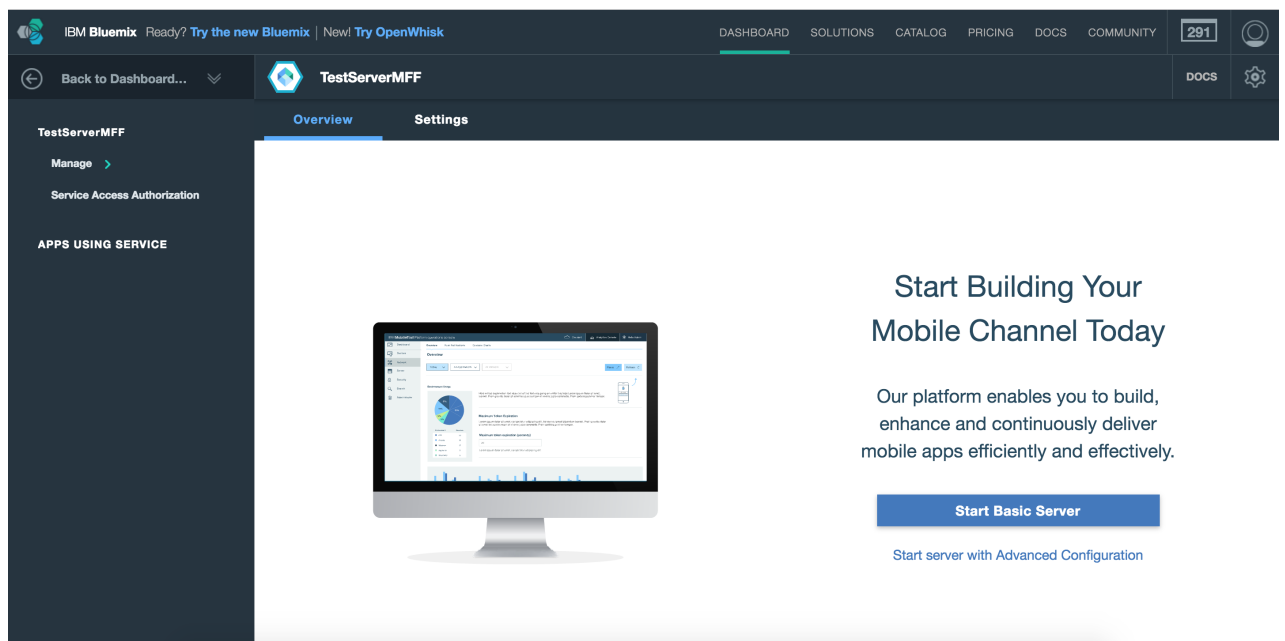
3. Select a **space** to use and optionally set a **Service name**.
4. Select the desired plan option, then click **Create**.

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.

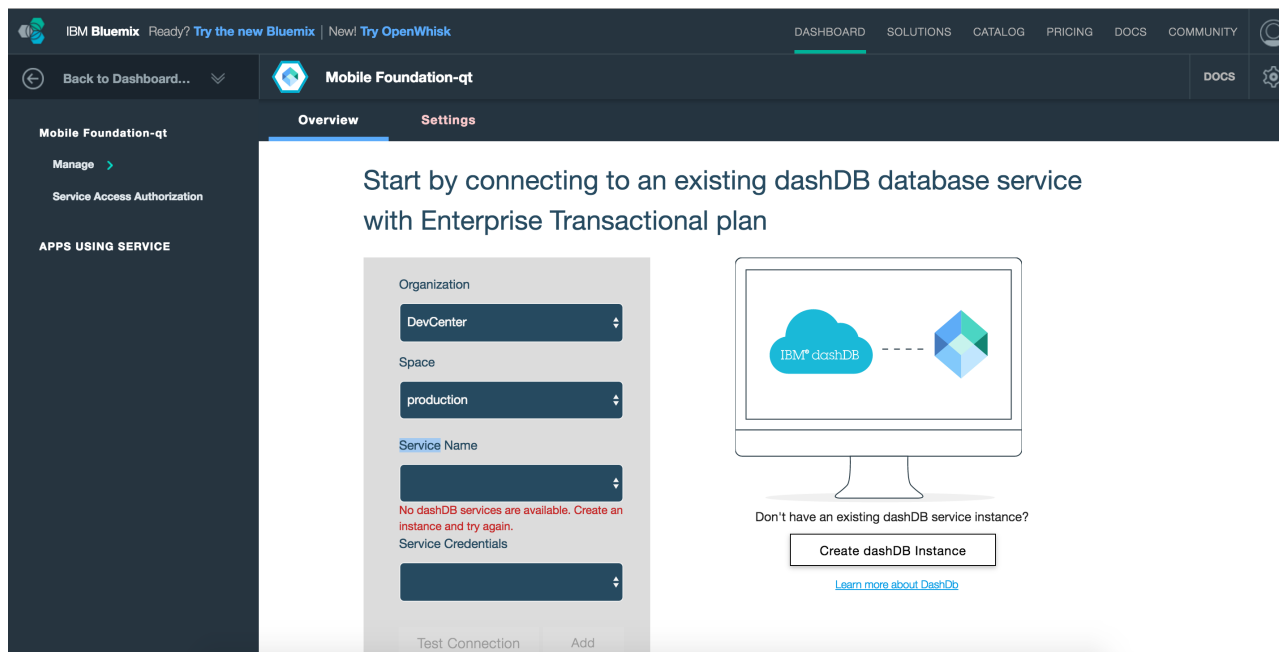
2. With the instance ready, you can now use the service.



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:

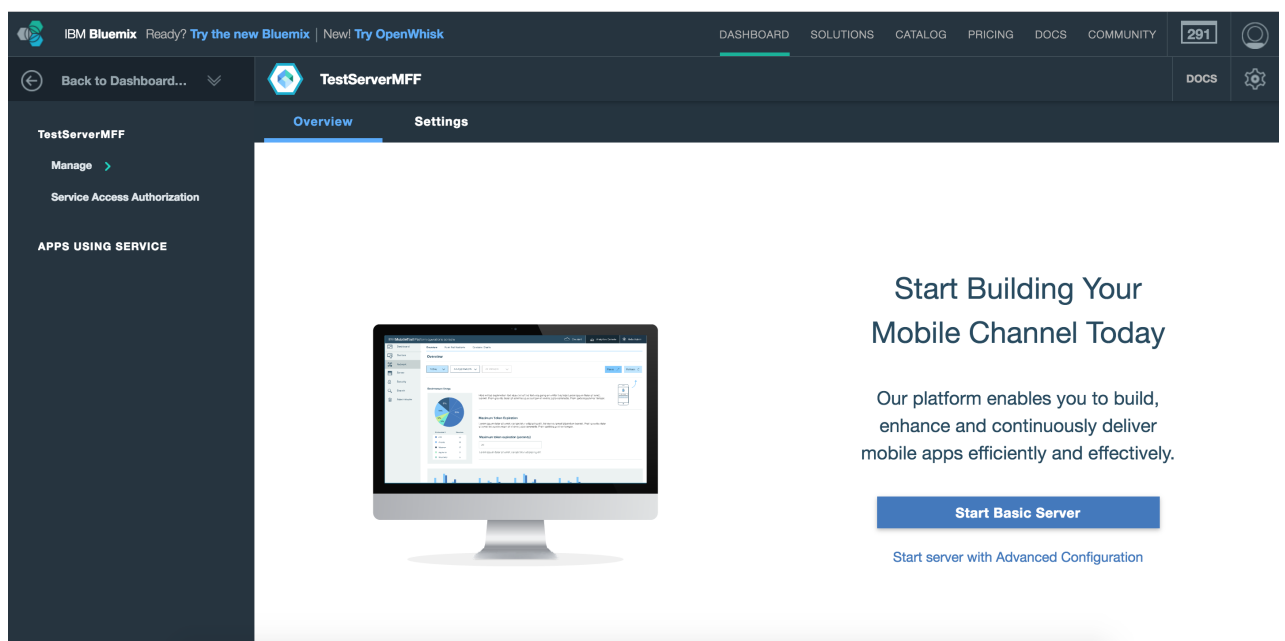


2. Start the MobileFirst Server.

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- 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:

IBM Bluemix Ready? [Try the new Bluemix](#) | New! [Try OpenWhisk](#)

DASHBOARD SOLUTIONS CATALOG PRICING DOCS COMMUNITY 297

Back to Dashboard... Mobile Foundation-71 DOCS

Overview Settings

Mobile Foundation-71

Manage

Service Credentials

Service Access Authorization

APPS USING SERVICE

Overview

Status: **RUNNING** [Recreate](#)

Server Size: Small Memory: 1GB [Change Size](#)

Server Route: mobilefoundation-71-dy-server.mybluemix.net [COPY](#)

[Advanced Settings](#)

[Launch Console](#)

Username: admin Password: *****

Foundation Analytics

[Add Analytics](#)

Monitor & Track your Mobile Engagement [Learn more about Foundation Analytics](#)

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.

MobileFirst Operations Console Analytics Console Hello, admin

Dashboard

Home > Dashboard Actions

Dashboard

Welcome!

You do not have any apps registered or adapters deployed. Here are some things you can do to get started. You can also visit our [Developer Center](#) to learn more.

[Register an App](#) [Get CLI](#) [Get Starter Code](#)

Monitoring

Administration DB Active

Configuration Service Active

Push Service Active

Dashboard

Runtimes

mfp

Applications [New](#)

No application deployed

Adapters [New](#)

No adapter deployed

Settings

Devices

Error Log

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/](#)).