

# Using the MobileFirst Operations Console

## Overview

The MobileFirst Foundation Operations Console is a web-based UI which enables simplified work flows for both the developer and the administrator to create, monitor, secure and administer applications & adapters.

### As a developer

- Develop applications for any environment and register them to MobileFirst Server.
- See all your deployed applications and adapters at a glance. See the Dashboard.
- Manage and configure registered applications, including Direct Update, remote disablement, and security parameters for application authenticity and user authentication.
- Set up push notification by deploying certificates, creating notification tags, and sending notification.
- Create and deploy adapters.
- Download samples.

### As an IT administrator

- Monitor various services.
- Search for devices that access MobileFirst Server and manage their access rights.
- Update adapter configurations dynamically.
- Adjust client logger configurations through log profiles.
- Track how product licenses are used.

### Jump to:

- Accessing the console
- Navigating the console

## Accessing the console

The MobileFirst Operations Console can be accessed in the following ways:

### From a locally installed MobileFirst Server

#### Desktop Browser

From your browser of choice, load the URL `http://localhost:9080/mfpconsole` (`http://localhost:9080/mfpconsole`). The username/password are *admin/admin*.

#### Command-line

From a **Command-line** window, with the MobileFirst CLI installed, run the command: `mfpdev server console`.

### From a remotely installed MobileFirst Server

#### Desktop Browser

From your browser of choice, load the URL `http://the-server-host:server-port-`

number/mfpconsole.

The host server can be either a customer-owned server, or the IBM Bluemix service, IBM Mobile Foundation (../../bluemix/).

## Command-line

From a **Command-line** window, with the MobileFirst CLI installed,

1. Add a remote server definition:

### *Interactive Mode*

Run the command: `mfpdev server add` and follow the on-screen instructions.

### *Direct Mode*

Run the command with the following structure: `mfpdev server add [server-name] --URL [remote-server-URL] --login [admin-username] --password [admin-password] --contextroot [admin-service-name]`. For example:

```
mfpdev server add MyRemoteServer http://my-remote-host:9080/ --login TheAdmin --password ThePassword --contextroot mfpadmin
```

2. Run the command: `mfpdev server console MyRemoteServer`.

Learn more about the various CLI commands in the [Using CLI to manage MobileFirst artifacts \(../../application-development/using-mobilefirst-cli-to-manage-mobilefirst-artifacts/\)](#) tutorial.

## Navigating the console

### Dashboard

The Dashboard provides a glance view of the deployed projects.

**MobileFirst Operations Console**

Home > Dashboard

**Dashboard**

**Welcome!**

You do not have any apps registered or adapters deployed. To get started, click these buttons to register an application, access the command-line interface, or download code samples. To learn more, visit the [Developer Center](#).

**Monitoring**

**Administration DB** (Active)

**Live Update** (Active)

**Push Service** (Active)

**Runtime Status**

Monitor the runtimes on this server. Synchronization errors might indicate a problem between the administration server and the runtime. See the logs for details.

Runtime Name	State	Synchronization	Analytics
mfp	Active	Synchronized	Active

### Actions dropdown

The dropdown provides quick access to various console actions.

MobileFirst Operations Console

Analytics Console

Hello, admin

Dashboard

Dashboard

Applications (0)

New

Adapters (0)

New

Runtime Settings

Error Log

Devices

Download Center

Home > Dashboard

Dashboard

Welcome!

You do not have any apps registered or adapters deployed. To get started, click these buttons to register an application, access the command-line interface, or download code samples. To learn more, visit the [Developer Center](#).

Register an App

Get CLI

Monitoring

Administration DB

Active

Live Update

Active

Push Service

Active

Runtime Status

Monitor the runtimes on this server. Synchronization errors might indicate a problem between the administration server and the runtime. See the logs for details.

Runtime Name	State	Synchronization	Analytics
mfp	Active	Synchronized	Active

Actions

Applications

Register Application

Import Application

Adapters

Deploy Adapter

Import Adapter

General

Download Samples

Download Developer CLI

## Runtime settings

Edit runtime properties, global security variables, server keystore and confidential clients.

MobileFirst Operations Console

Analytics Console

Hello, admin

Dashboard

Dashboard

Applications (0)

New

Adapters (0)

New

Runtime Settings

Error Log

Devices

Download Center

Home > mfp > Runtime Settings

Runtime Settings

Runtime Properties

Keystore

Confidential Clients

Runtime Properties

Edit

Adapters

GZIP compression threshold for adapter responses \*

20480

Compression threshold, in bytes, from which the server tries to compress the MobileFirst adapter response if the client accepts gzip.

Analytics

Additional packages

A comma-separated list of packages that the logger uses to generate the output sent to the MobileFirst Analytics server.

Data collection enabled

true

Enables or disables collecting data about applications, adapters, devices, and logs to be sent to the analytics service.

## Error log

The Error log shows a list of the failed management operations that were initiated from the MobileFirst Operations Console, or from the command line, on the current runtime environment. Use the log to see the effect of the failure on the servers.

For more information, see the topic about error log of operations on runtime environments in the user documentation.

MobileFirst Operations Console

Analytics Console

Hello, admin

Dashboard

mfp runtime

Applications (0)

No application is registered.

Adapters (0)

No adapter is deployed.

Runtime Settings

Error Log

Devices

Download Center

Home > mfp > Error Log

Actions

Error Log

Date	Type	Name	Details	Value						
May 23, 2016, 11:29 AM	Upload Adapter	sqlAdapter		sqlAdapter.adapter						
<div>Error Details</div> <table> <thead> <tr> <th>Node</th> <th>Type</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>mfp//9.148.225.168</td> <td>FAILURE</td> <td>FWLST0905E: Adapter deployment failed. SQL driver com.mysql.jdbc.Driver was not found in the adapter resources. FWLSE4042I: Security check 'PinCodeAttempts' configuration for param 'inactivityTimeoutSec': 'Missing configuration property, using default value 0'.</td> </tr> </tbody> </table>					Node	Type	Description	mfp//9.148.225.168	FAILURE	FWLST0905E: Adapter deployment failed. SQL driver com.mysql.jdbc.Driver was not found in the adapter resources. FWLSE4042I: Security check 'PinCodeAttempts' configuration for param 'inactivityTimeoutSec': 'Missing configuration property, using default value 0'.
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May 23, 2016, 11:25 AM	Upload Adapter	sqlAdapter		sqlAdapter.adapter						
May 15, 2016, 10:12 PM	Multiple Artifacts Upload									
May 15, 2016, 4:34 PM	Multiple Artifacts Upload									
May 15, 2016, 1:01 PM	Multiple Artifacts Upload									
May 10, 2016, 6:39 PM	Delete Adapter	UserLogin								

## Devices

Administrators can search for devices that access the MobileFirst Server and can manage access rights. Devices can be searched for using either user ID or using a friendly name. The user ID is the identifier that was used to log-in.

A friendly name is a name that is associated with the device to distinguish it from other devices that share the user ID.

For more information, see the topic about device access management in the user documentation.

MobileFirst Operations Console

Analytics Console

Hello, admin

Dashboard

mfp runtime

Applications (0)

No application is registered.

Adapters (0)

No adapter is deployed.

Runtime Settings

Error Log

Devices

Download Center

Home > mfp > Devices

Actions

Devices

No devices are registered in this runtime.

Install your application on a device. After the application connects to MobileFirst Server, this page displays details about the device, such as status, OS, model, and ID. You can also control device access to applications.

## Applications

### Registering applications

Provide basic application values and download Starter Code.

## Managing applications

Manage and configure registered applications by use of [Direct Update \(../../application-development/direct-update/\)](#), [Remote Disable](#), [Application Authenticity \(../../authentication-and-security/application-authenticity/\)](#), and setting security parameters ([../../authentication-and-security/](#)).

## Authentication and Security

Configure application security parameters, such as the default token expiration value, map scope elements to security checks, define mandatory application scopes and configure security check options.

Learn more ([../../authentication-and-security/](#)) about the MobileFirst security framework.

The screenshot shows the MobileFirst Operations Console interface. The left sidebar contains a navigation menu with options like Dashboard, mfp runtime, Applications (1), MyApplication, Versions (1), iOS (latest), App Settings, Push, Adapters (0), Runtime Settings, Error Log, and Devices. The main content area is titled 'MyApplication' and shows the 'Security' tab. It includes sections for 'Security Configurations', 'Token Configuration', 'Maximum Token-Expiration Period (seconds)', and 'Scope-Elements Mapping'. The 'Maximum Token-Expiration Period' is set to 3600 seconds. The 'Scope-Elements Mapping' section indicates that no mappings currently exist for this application.

## Application Settings

Configure the display name of the application in the console as well as the application type and licensing.

The screenshot shows the MobileFirst Operations Console interface for the 'RememberMeSwift' application. The left sidebar is the same as the previous screenshot. The main content area is titled 'RememberMeSwift Settings' and shows the 'General' tab. It includes sections for 'Display name', 'License', 'Application Type', and 'Token License Type'. The 'Display name' is set to 'RememberMeSwift'. The 'Application Type' is set to 'B2C - Applications that help businesses keep touch with their customers and serve them in a better way'. The 'Token License Type' is set to 'Application'.

## Notifications

Set-up push notifications (../../notifications/) and related parameters, such as certificates and GCM details, define tags, as well as send notifications to devices.

**MobileFirst Operations Console**

Home > mfp > com.sample.myapplication > Push

**Push**

Send Notifications   Tags   **Push Settings**

**Push Notification Settings**

Configure your push notifications here. For detailed instructions, see the [tutorial about push notifications](#).

**Apple Push Notifications Certificate**

Learn more about how to generate and use Apple Push Notification Service (APNS) certificates in [Apple Push Notifications certificates guide](#).

**Choose use \***

☒ Production   ☐ Sandbox

**Select PKCS 12 (p12) File \***

**Browse**

**Password \***

**Save**

**GCM Push Credentials**

Learn more about how to set up Google Cloud Messaging (GCM) in [Google Cloud Messaging documentation](#).

## Adapters

### Creating adapters

Register a MobileFirst adapter (../../adapters/) and download Starter Code, as well as update an adapter on-the-fly by updating its properties without needing to re-build and re-deploy the adapter artifact.

**MobileFirst Operations Console**

Home > mfp > Create Adapter

**Create Adapter**

Adapters are used to securely connect back-end systems to client applications and cloud services. Adapters are built as Maven projects and can be written in JavaScript or Java.

**Follow these steps to create an adapter.** [Hide guide](#)

1 Set up your development environment.

You can develop adapters in any environment that supports Maven. To build, deploy, and update adapters, you can use Maven or IBM MobileFirst Platform Foundation Command Line Interface, also called the mfpdev CLI.

**Installing the mfpdev CLI**

Make sure to download and install Node.js, version 4.3. Install the mfpdev CLI by using the npm utility of Node.js. The CLI is automatically downloaded by the npm utility.

```
npm install -g mfpdev-cli
```

**Installing Maven**

To download and install Maven, follow the instructions on the [Apache Maven website](#).

2 Create

3 Develop

4 Build

### Adapter properties

After an adapter is deployed, it can be configured in the console.

The screenshot shows the MobileFirst Operations Console interface. The left sidebar contains a navigation menu with options: Dashboard, mfp runtime, Applications (0), Adapters (1), Runtime Settings, Error Log, and Devices. The main content area is titled 'javaAdapter' and shows a list of resources. The 'Resources' tab is selected, displaying a table of API endpoints.

URL	Methods	Security
/resource	GET	DEFAULT_SCOPE
/resource/greet	GET	DEFAULT_SCOPE
/resource/prop	GET	DEFAULT_SCOPE
/resource/protected	GET	myCustomScope
/resource/unprotected	GET	None
/resource/{path}	POST	DEFAULT_SCOPE

## Client logs

Administrators can use log profiles to adjust client logger configurations, such as log level and log package filters, for any combination of operating system, operating system version, application, application version, and device model.

When an administrator creates a configuration profile, the log configuration is concatenated with responses API calls such as `WLResourceRequest`, and is applied automatically.

For more information, see the topic about client-side log capture configuration in the user documentation.

The screenshot shows the MobileFirst Operations Console interface for 'MyApplication'. The left sidebar contains a navigation menu with options: Dashboard, mfp runtime, Applications (1), MyApplication, Versions (1), App Settings, Push, Adapters (0), Runtime Settings, Error Log, and Devices. The main content area is titled 'MyApplication' and shows the 'Log Filters' tab selected. The page indicates that no log filters are currently registered for this application.

## License tracking

Accessible from the top Settings buttons.

License terms vary depending on which edition (Enterprise or Consumer) of MobileFirst Foundation is being used. License tracking is enabled by default and tracks metrics relevant to the licensing policy, such as active client devices and installed applications. This information helps determine whether the current usage of MobileFirst Foundation is within the license entitlement levels and can prevent potential license violations.

By tracking the usage of client devices and determining whether the devices are active, administrators can decommission devices that should no longer be accessing the service. This situation might arise if an employee has left the company, for example.



For more information, see the topic about license tracking in the user documentation.

The screenshot shows the 'License Tracking' page in the MobileFirst Operations Console. The left sidebar contains navigation links: Dashboard, mfp runtime (with sub-links for Applications (1), Adapters (0), Runtime Settings, Error Log, and Devices), and Download Center. The main content area is titled 'License Tracking' and includes a breadcrumb 'Home > License Tracking'. Below the title is a section for 'mfp Runtime License Tracking' with an information icon and a message: 'The report has not been run yet. It will be automatically run in the next 24 hours.' There are three tables: 'Application License Tracking' (1 row: Number of Applications: 0), 'Addressable Device License Tracking' (3 rows: Number of Addressable Devices, Target Category Undefined: 0; Number of Addressable Devices, Target Category B2C: 0; Number of Addressable Devices, Target Category B2E: 0), and 'Client Device License Tracking' (2 rows: Number of Server Installations in Cluster: Check the administrative console of your application server.; Number of \*Active Client Devices: 0).

MobileFirst Operations Console

Analytics Console | Hello, admin | i

Dashboard

mfp runtime

Applications (1) New

> MyApplication

Adapters (0) New

No adapter is deployed.

Runtime Settings

Error Log

Devices

Download Center

Home > License Tracking

Actions

### License Tracking

mfp

#### mfp Runtime License Tracking

i The report has not been run yet. It will be automatically run in the next 24 hours.

##### Application License Tracking

Number of Applications	0
------------------------	---

##### Addressable Device License Tracking

Number of Addressable Devices, Target Category Undefined	0
Number of Addressable Devices, Target Category B2C	0
Number of Addressable Devices, Target Category B2E	0

##### Client Device License Tracking

Number of Server Installations in Cluster	Check the administrative console of your application server.
Number of *Active Client Devices	0

## Downloads

For situations where Internet connectivity is not available, you can download a snapshot of the various development artifacts of MobileFirst Foundation from the Download Center in the MobileFirst Console.

The screenshot shows the 'Download Center' page in the MobileFirst Operations Console. The left sidebar is identical to the previous screenshot. The main content area is titled 'Download Center' with a breadcrumb 'Home > Download Center'. Below the title are tabs for 'Tools', 'SDKs', and 'Samples'. The 'Tools' tab is active, showing 'MobileFirst CLI' with a description: 'Use the MobileFirst Platform Command Line Interface (CLI) to manage and develop applications.' and a link 'Learn more about MobileFirst CLI on npmjs.com'. There are three sections: 'Prerequisite' (npm commands require Node.js to be installed), 'Install latest version' (npm install -g mfpdev-cli), and 'Install local version' (npm install -g <path-to-mfpdev-cli.tgz>). A 'Download' button with a download icon is present. Below this is the 'Adapter Archetypes' section with the text 'Use Maven artifacts to create and develop adapters.'

MobileFirst Operations Console

Analytics Console | Hello, admin | i

Dashboard

mfp runtime

Applications (0) New

No application is registered.

Adapters (0) New

No adapter is deployed.

Runtime Settings

Error Log

Devices

Download Center

Home > Download Center

Actions

### Download Center

Tools SDKs Samples

#### MobileFirst CLI

Use the MobileFirst Platform Command Line Interface (CLI) to manage and develop applications.

[Learn more about MobileFirst CLI on npmjs.com](#)

☒ **Prerequisite** npm commands require [Node.js to be installed](#)

☐ **Install latest version** npm install -g mfpdev-cli

☐ **Install local version** npm install -g <path-to-mfpdev-cli.tgz>

Download

#### Adapter Archetypes

Use Maven artifacts to create and develop adapters.

*Last modified on*