

# Workstation Installation Guide

## Overview

Follow this installation guide in order to setup your workstation for development using MobileFirst Foundation.

## DevKit Installer

The MobileFirst Foundation Development Kit Installer ([file:///home/travis/build/MFPSamples/DevCenter/\\_site/tutorials/en/foundation/8.0/setting-up-your-development-environment/mobilefirst-development-environment](file:///home/travis/build/MFPSamples/DevCenter/_site/tutorials/en/foundation/8.0/setting-up-your-development-environment/mobilefirst-development-environment)) will install a ready-to-use MobileFirst Server, database and runtime on your developer machine.

### Prerequisite:

The installer requires Java installed.

1. Install Oracle's JRE (<http://www.oracle.com/technetwork/java/javase/downloads/jre8-downloads-2133155.html>).
2. Add a `JAVA_HOME` variable, pointing to the JRE

*Mac and Linux:* Edit your `~/.bash_profile`:

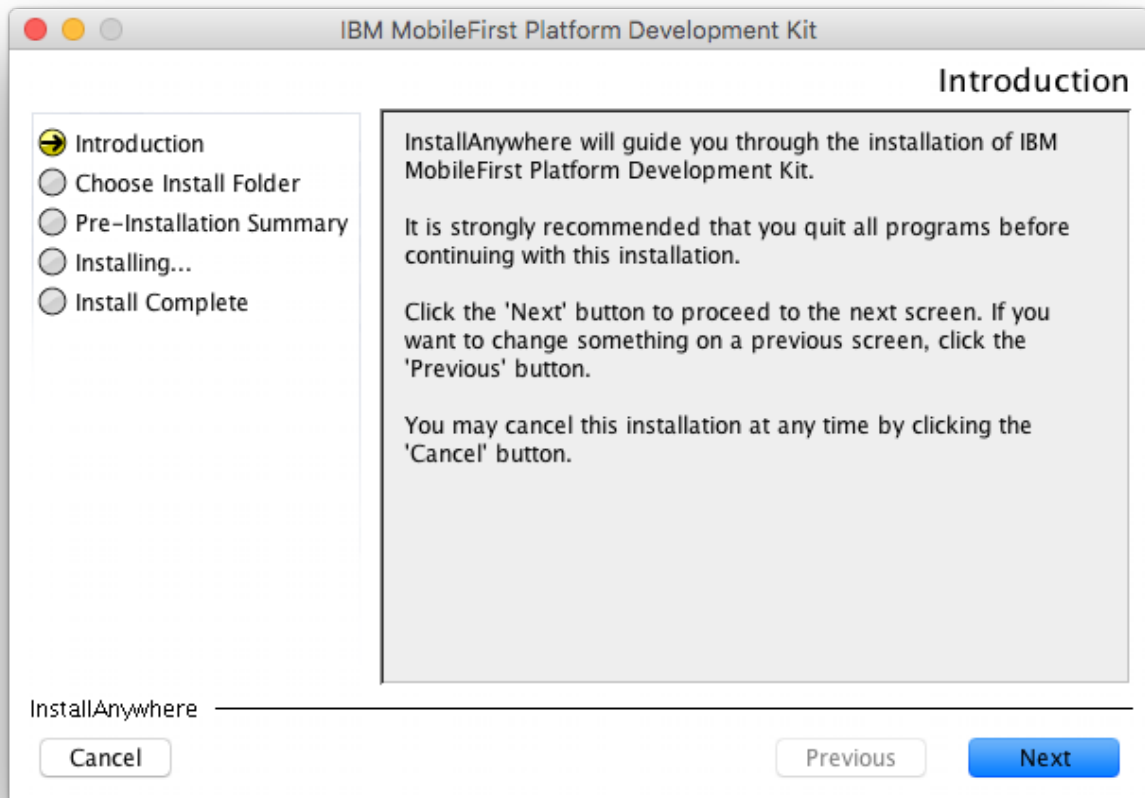
```
#### ORACLE JAVA
export JAVA_HOME="/Library/Java/JavaVirtualMachines/jdk1.8.0_73.jdk/Contents/Home"
```

*Windows:*

Follow this guide ([https://confluence.atlassian.com/doc/setting-the-java\\_home-variable-in-windows-8895.html](https://confluence.atlassian.com/doc/setting-the-java_home-variable-in-windows-8895.html)).

## Installation

Get the DevKit Installer from the Downloads page ([file:///home/travis/build/MFPSamples/DevCenter/\\_site/downloads/](file:///home/travis/build/MFPSamples/DevCenter/_site/downloads/)), and follow the on-screen instructions.



## Starting and stopping the server

Open a command-line window and navigate to the extracted folder location.

*Mac and Linux:*

- To start the server: `./run.sh -bg`
- To stop the server: `./stop.sh`

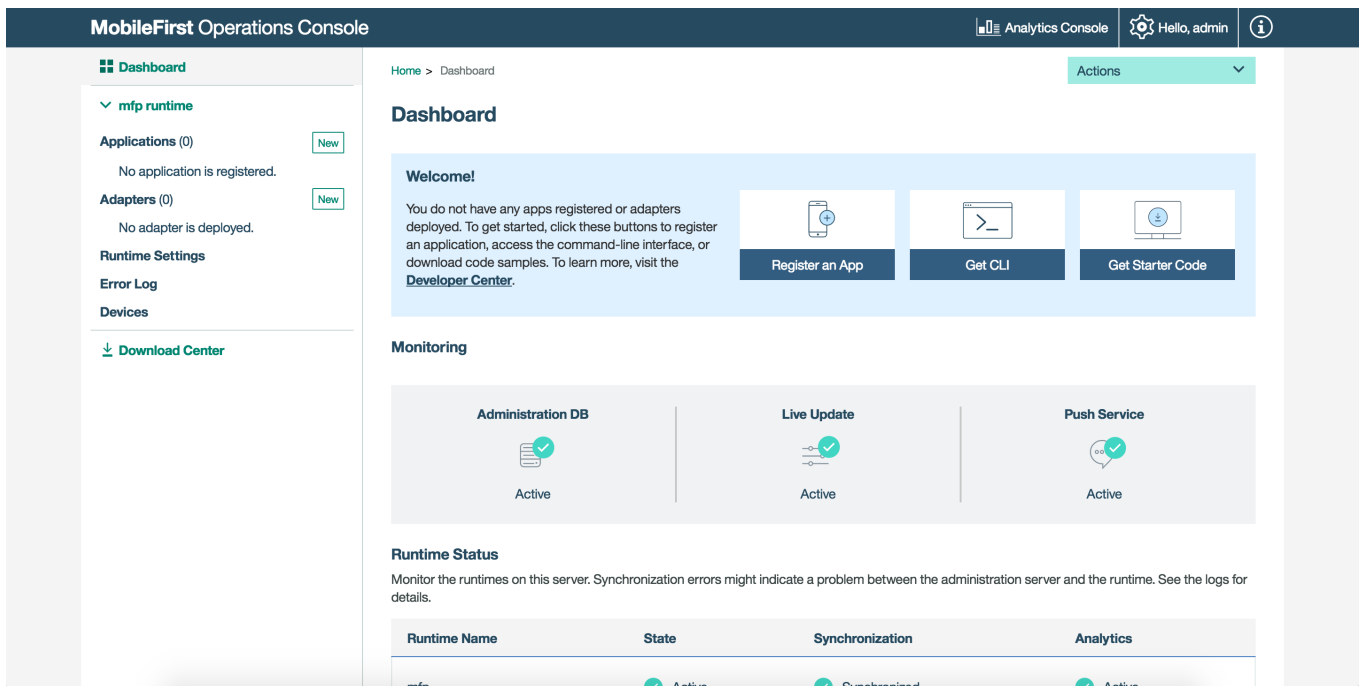
*Windows:*

- To start the server: `./run.cmd -bg`
- To stop the server: `./stop.cmd`

## Accessing the MobileFirst Operations Console

You can access the MobileFirst Operations Console (file:///home/travis/build/MFPSamples/DevCenter/\_site/tutorials/en/foundation/8.0/setting-up-your-development-environment/console/) in the following ways:

- From command-line, execute: `mfpdev server console`
- From a browser, visit: `http://localhost:9080/mfpconsole` (`http://localhost:9080/mfpconsole`)



## MobileFirst CLI

The MobileFirst CLI

(file:///home/travis/build/MFPSamples/DevCenter/\_site/tutorials/en/foundation/8.0/using-the-mfp-sdk/using-mobilefirst-cli-to-manage-mobilefirst-artifacts) is a command-line interface enabling you to register applications in the MobileFirst Server, pull/push application from/to the MobileFirst Server, create Java and JavaScript adapters, manage multiple local and remote servers, update live applications using Direct Update and so on.

### Prerequisite:

1. NodeJS is a requirement before you can install the MobileFirst CLI.

Download and install NodeJS v4.4.3 LTS (<https://nodejs.org/en/>).

To Verify the installation, open a command-line window and execute: `node -v`.

1. Some CLI commands, such as creating, building and deploying adapters require Maven. See the next section for installation instructions.

## Installation

Open Terminal and execute: `npm install -g mfpdev-cli`.

*Mac and Linux:* Note that you may need to run the command using `sudo`.

Read more about fixing NPM permissions (<https://docs.npmjs.com/getting-started/fixing-npm-permissions>).

To Verify the installation, open a command-line window and execute: `mfpdev -v` or `mfpdev help`.

A terminal window titled 'Desktop' showing the command 'mfpdev help' and its output. The output includes the title 'IBM MobileFirst Platform Foundation Command Line Interface (CLI)', a 'SYNTAX' section showing 'mfpdev <command> [options]', and a 'DESCRIPTION' section explaining the CLI's purpose and usage modes (interactive and direct).

```
[idanadar@mbp-idan:~/Desktop$ mfpdev help]
IBM MobileFirst Platform Foundation Command Line Interface (CLI)

SYNTAX
  mfpdev <command> [options]

DESCRIPTION
  The IBM MobileFirst Platform Foundation Command Line Interface (CLI) is a
  command-line for developing MobileFirst applications. The command-line can
  be used by itself, or in conjunction with the IBM MobileFirst Platform
  Foundation Operations Console. Some functions are available from the
  command-line only and not the console.

  You can run mfpdev commands in two modes: interactive mode and direct mode.
  In interactive mode, you enter the command without options, and you are
  prompted for responses. In direct mode, you enter the full command,
  including options, and prompts are not provided. When applicable, the
  prompts are context-sensitive to the target platform of the app, as
  determined by the directory from which you run the command. Use the up and
  down arrow keys on your keyboard to move through the selections, and press
  the Enter key when the selection you want is highlighted and preceded by
  a > character.

  For more information and a step-by-step example of using the CLI, see the
  IBM Knowledge Center for your version of IBM MobileFirst Platform
```

## MobileFirst Adapters and Security Checks

### MobileFirst Adapters

(file:///home/travis/build/MFPSamples/DevCenter/\_site/tutorials/en/foundation/8.0/adapters) and Security Checks (file:///home/travis/build/MFPSamples/DevCenter/\_site/tutorials/en/foundation/8.0/authentication-and-security) are your door-way to introduce authentication and other security layers to your application.

### Prerequisite:

Apache Maven is a required to set-up before you can create adapters and security checks.

1. Download the Apache Maven .zip (<https://maven.apache.org/download.cgi>)
2. Add a `MVN_PATH` variable, pointing to the Maven folder

*Mac and Linux:* Edit your `~/.bash_profile`:

```
#### Apache Maven
export MVN_PATH="/usr/local/bin"
```

*Windows:*

Follow this guide (<http://crunchify.com/how-to-setupinstall-maven-classpath-variable-on-windows-7/>). Verify the installation by executing: `mvn -v`.

## Usage

With Apache Maven installed, you can now create adapters either via Maven command-line commands, or by using the MobileFirst CLI.

For more information, review the Adapters tutorials

(file:///home/travis/build/MFPSamples/DevCenter/\_site/tutorials/en/foundation/8.0/adapters).