Setting up the MobileFirst development environment

Overview

This tutorial covers the basics of the IBM MobileFirst Platfrom Foundation development environment and tools.

- The MobileFirst developer tools are supported on the following operating systems: Windows, Apple OS X and Linux.
- The MobileFirst Operations Console is supported in modern browsers such as: Internet Explorer 10+, latest Chrome, Safari and Firefox.

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MobileFirst Development Server

The IBM MobileFirst Development Server is a web application archive (.war) that is deployed on an IBM WebSphere Liberty profile Application Server.
From the MobileFirst Server's Operations Console a developer can:

- Register and deploy applications and adapters
- Optionally download native/Cordova application templates
- Configure application aspects:
    - Authentication and security
    - Authenticity
    - Push Notifications
    - Direct Update
- Generate DevOps scripts for continuous integration workflows and faster development cycles
- and more

The MobileFirst Development Server is installed as a stand-alone server and provides the following scripts in its **scripts** folder:

`.sh` scripts are for Linux and Mac.
`.cmd` scripts are for Windows.

- `console.[sh|cmd]` : Open the local MobileFirst Console
- `run.[sh|cmd]` : Run the local MobileFirst Server with trailing Liberty Server messages
- `start.[sh|cmd]` : Run the local MobileFirst Server in background mode
- `stop.[sh|cmd]` : Stop the currenet local MobileFirst Server instance

To learn more about the MobileFirst Operations Console, see the tutorial: Using the MobilFirst Platform Operations Console (../../quick-start/console/).
To download and install the MobileFirst Development Server, visit the downloads (/downloads/) page.

Adding the MobileFirst Server to Eclipse

The MobileFirst Server can be integrated into the Eclipse IDE, allowing to quick starting and stopping of the development server.

1. From the **Servers** view in Eclipse, select **New → Server**.
2. Select **IBM → WebSphere Application Server Liberty**, provide a server **name** and **hostname** and click **Next**.
3. Provide the path to the server's root directory, and select a JRE version to use.
4. Click **Next** followed by clicking **Finish**.

By default the server starts in debug mode using the port 10777.

MobileFirst Command-line Interface

The IBM MobileFirst command-line interface (CLI) tool enables developers to:

- Manage MobileFirst Servers
- Register and configure applications
- Create, build, deploy and test adapters

To download and install the MobileFirst Developer CLI, visit the downloads (/downloads/) page.

> Learn more about the various CLI commands in the Using CLI to manage MobileFirst artifacts (../../using-the-mfpf-sdk/using-cli-to-manage-mobilefirst-artifacts/) tutorial.

Applications and adapters development

You can use your preferred code editor or alternative IDEs, such as Atom.io, Visual Studio Code, Eclipse, IntelliJ and others, to implement applications and adapters.

For adapters develvment, refer to the Adapters (../../adapters/) category as well as to the Developing Adapters in IDEs (../../adapters/developing-adapters) and testing and debugging adapters (../../adapters/testing-and-debugging-adapters) tutorials.

> **Note:** API auto-completion is available only in Typescript-supporting IDEs.