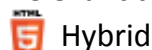


Setting up the BlackBerry 10 development environment

Relevant to:



Overview

Prerequisite: If you intend to use IBM MobileFirst Platform Studio or the command-line interface (CLI) to develop your application, first read the [Setting up the MobileFirst development environment](#) tutorial.

Before you start to develop, deploy, and test your BlackBerry applications, set up the BlackBerry development environment. This initial setup includes installing the BlackBerry SDK and BlackBerry Simulator.

BlackBerry WebWorks SDK requires a 32-bit Java™ Development Kit (JDK), version 1.6 or later to be installed on the development host.

To create a BlackBerry 10 application, first define the WEBWORKS_HOME environment variable. The value of this variable must be the path to your WebWorks SDK.

BlackBerry 10 development tools

BlackBerry SDK

The BlackBerry SDK is used to package applications.

To download and install this SDK, visit <http://developer.blackberry.com/html5/downloads/>.

The screenshot shows the 'Get started with the SDK' page. It features a diagram with a download icon and a double-click icon, with text instructions: 'Download the installer.' and 'Double-click the installer file and follow the instructions.' Below this is a link: 'For more instructions about the BlackBerry 10 WebWorks SDK, go here >'. On the right, there's a section titled 'BlackBerry 10 WebWorks SDK' with a yellow box containing 'BlackBerry 10 WebWorks SDK 2.1' and '2.1.0.13 for Mac OS X (43.9 MB)'. Below this are links for 'Release Notes', 'Requirements', 'Checksum (MD5)', 'Windows', and 'Linux'. A note at the bottom states: 'Note: A known issue with Java for Mac OS X may cause issues when installing. For more information and a solution, see here (10.6 only) or here (10.7, 10.8+).'.


BlackBerry Simulator

Use the BlackBerry Simulator to preview and debug your application in a simulated device environment.

Download the simulator that is relevant to your development environment.

For a list of simulators, visit <http://us.blackberry.com/sites/developers/resources/simulators.html>.

And a simulator to test the result



You need VMWare Fusion to run the Simulator. [You can get it here](#) »

Download the installer and run it.

Open a Finder window and go to the folder where you installed the simulator and double-click the **BlackBerry10Simulator-BB10_n_nn** file to start the simulator.

[See more instructions for the BlackBerry 10 Simulator here](#) »

BlackBerry 10 Simulator

BlackBerry 10.3.0 Simulator
10.3.0.698 for Mac OS X (982 MB)

[Release notes](#) | [Requirements](#) | [Checksum \(MD5\)](#) | [Windows](#) | [Linux](#)

[Need a different version of the simulator?](#)

WebWorks development

For more information about the BlackBerry WebWorks development process, see the [Getting Started section of the BlackBerry documentation](#).

Important note: With BlackBerry 6 and 7, the performance of hybrid mobile applications might not be on par with the latest BlackBerry 10 OS, because of older embedded browser technologies and hardware. You might want to use prototypes to validate that applications meet performance targets on BlackBerry 6 and 7. When advanced performance is needed, native development is preferred.

Creating a new BlackBerry 10 project

When you create a new BlackBerry 10 project, the project structure is different depending on whether you use WebWorks SDK 1.x or WebWorks SDK 2.x. Make sure that your `WEBWORKS_HOME` environment variable is set to the WebWorks SDK that you use.

Migrating a BlackBerry10 Webworks 1.x project to Webworks 2.x

To make a BlackBerry 10 WebWorks 1.x project work with WebWorks SDK 2.x, follow these instructions:

1. Set the `WEBWORKS_HOME` environment variable to the WebWorks SDK 2.x folder.
2. Create a new MobileFirst project and MobileFirst application. Add the BlackBerry10 environment to it. This creates a BlackBerry10 native folder with a WebWorks SDK 2.x project structure.
3. Replace the `{new project}/{new app}/blackberry10/native/www` folder with the `{old app}/blackberry10/native/www` folder of the old project (which has a BlackBerry10 native folder with a WebWorks SDK 1.0 project structure).
4. Replace the `{new project}/{new app}/blackberry10/css`, `{new app}/blackberry10/images`, `{new app}/blackberry10/js`, and

{new_app}/common folders with the corresponding folders from the old project.

5. Modify the {new_project}/{new_app}/blackberry10/native/www/webresources/default/index.html file as follows:
 1. Remove the <script></script> tag pair which encloses the webworks.js file name.
 2. Change src="worklight/cordova.js" to src="../../cordova.js".
This will point to {new_project}/{new_app}/blackberry10/native/platforms/blackberry10/www/cordova.js.
6. Remove the unnecessary files and folders from {new_project}/{new_app}/blackberry10:
 - Delete chrome, ext-qnx and config.xml from the native/www folder.
 - Delete Plugins, cordova.js, cordova_plugin.js from the native/www/webresources/default/worklight/ folder.
7. Reapply the custom changes that you have made to the config.xml file.