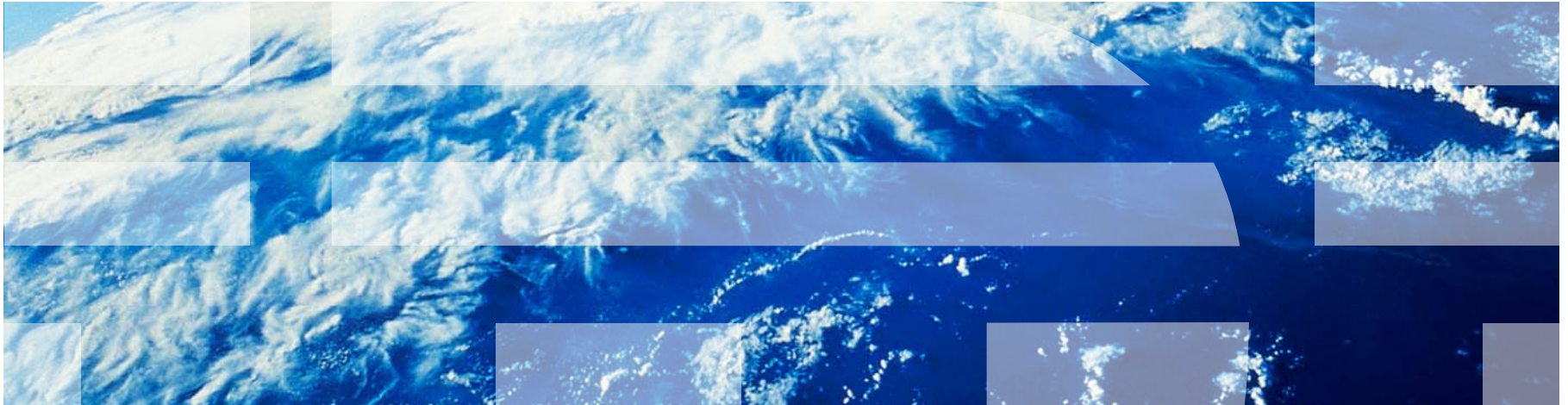


IBM Worklight V6.1.0 Getting Started

Previewing your application on BlackBerry 10



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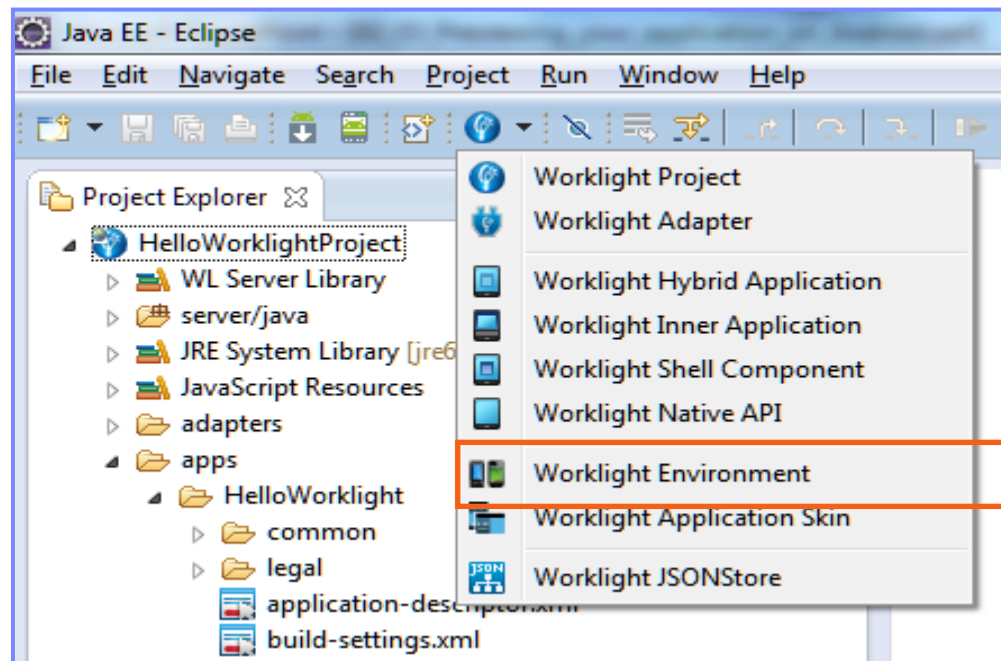
- See <http://www.ibm.com/ibm/us/en/>

Agenda

- Adding a BlackBerry 10 environment
- Review of the BlackBerry 10 environment folder structure
- Previewing your application with the Mobile Browser Simulator
- Previewing your application on the BlackBerry Ripple Emulator
- Packaging your application
- Running your application and running it on BlackBerry Simulator / handsets

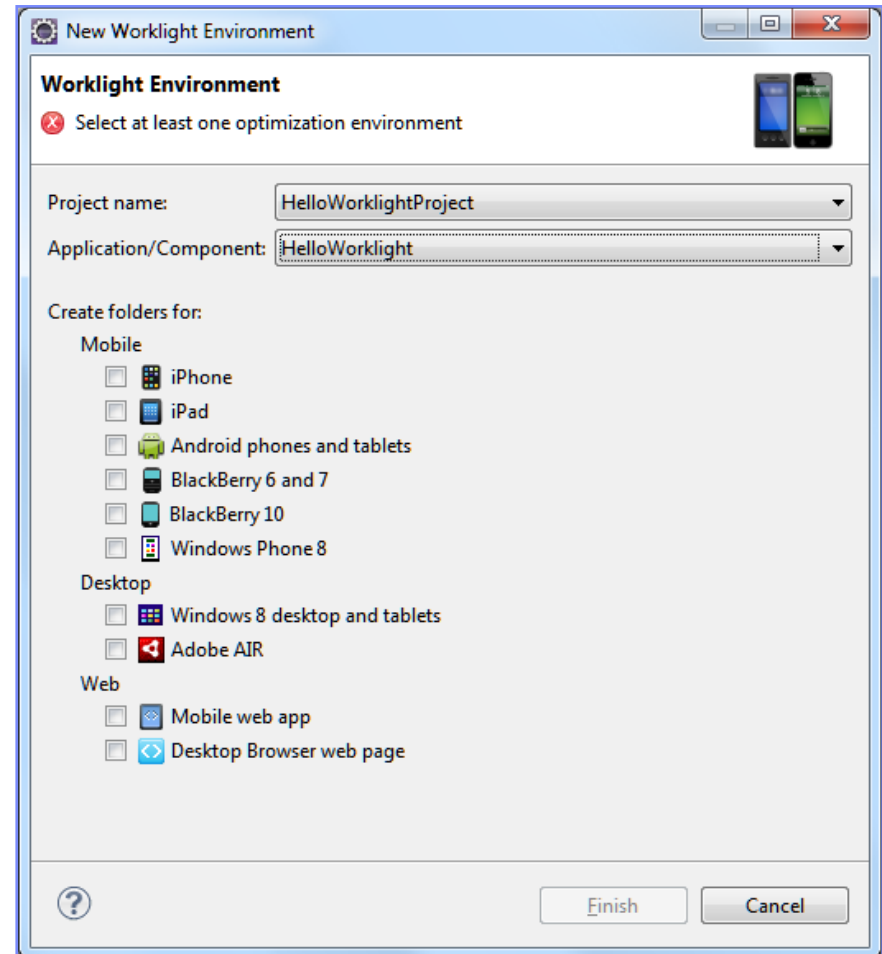
Adding a new environment

- Before creating a BlackBerry 10 application, you must define a **WEBWORKS_HOME** environment variable. The value of this variable must be the path to your WebWorks SDK.
- Click the IBM Worklight® icon, and select **Worklight Environment** to add an environment to your application.



Adding a new environment

- Select the **BlackBerry 10** check box, and then click **Finish**.
- A **blackberry10** folder is automatically added.

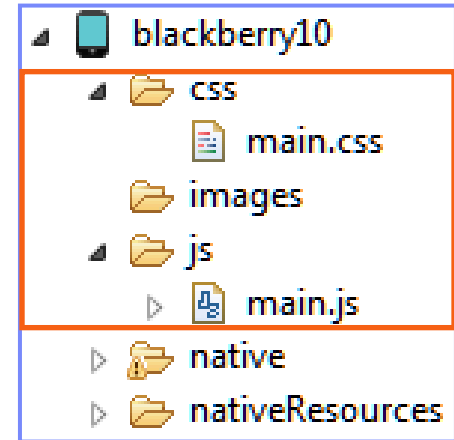


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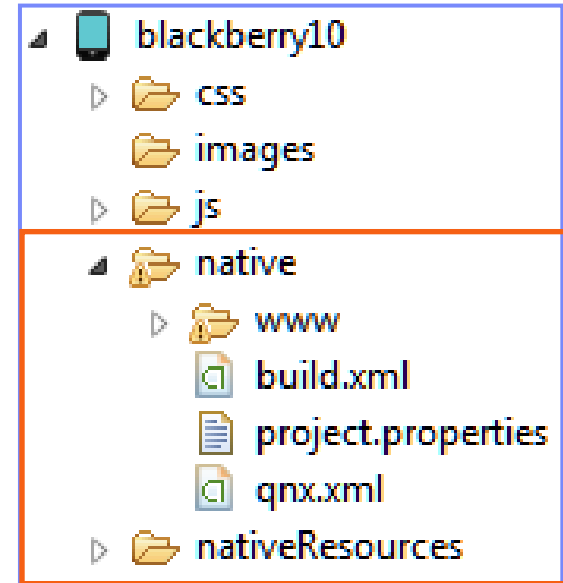
Review of the BlackBerry 10 environment folder structure

- The BlackBerry 10 environment includes the following folders:
 - **css** – The properties that are specified here override the CSS files from the **common** folder.
 - **images** – BlackBerry-specific images can be added here. If an image with the same file name exists in the **common** folder, it is overwritten in the BlackBerry application.
 - **js** – Contains JavaScript™ that can extend and, if required, override JavaScript from the **common** folder.



Review of the BlackBerry 10 environment folder structure - continued

- The **native** folder contains automatically generated BlackBerry app code that is ready to be packaged.
 - The CSS, HTML, and js files in the **native/www** folder are regenerated every time that the application is built, so any changes made to these files are lost.
- The **nativeResources** folder contains resources that are used by the native code.



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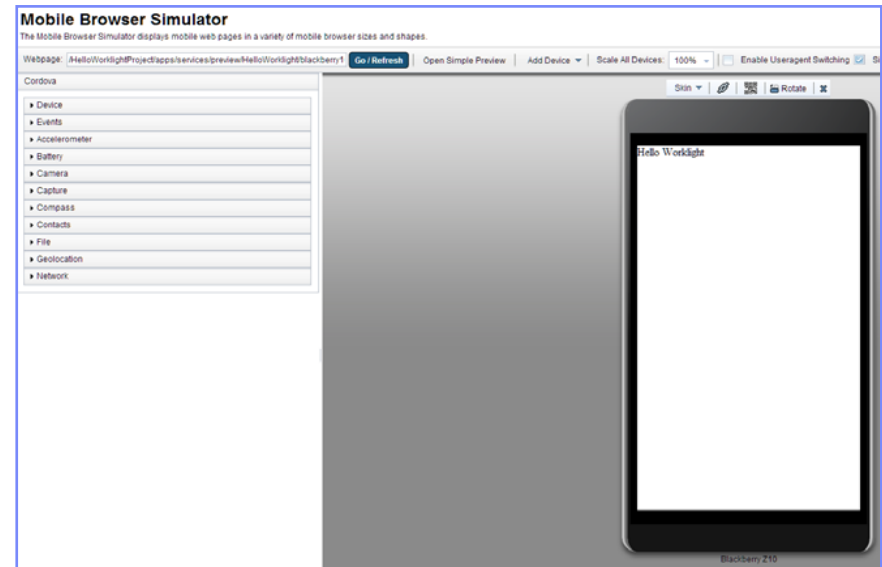
Previewing your application with the Mobile Browser Simulator

- Once your application is built and deployed in Worklight Studio, you can preview it in the Mobile Browser Simulator.
- Right-click the project and then **Open Worklight Console**, or browse to the Worklight Console, and then click the preview icon beside the environment name.



Previewing your application with the Mobile Browser Simulator - continued

- The Mobile Browser Simulator (MBS) can be used to emulate Cordova, or to preview your application with different device skins.
 - *Limitation:*
 - With the Mobile Browser Simulator, to preview an application that contains security tests that rely on the device (such as auto-provisioning or authenticity), you must temporarily change the security test settings so that they do not use the device identification.



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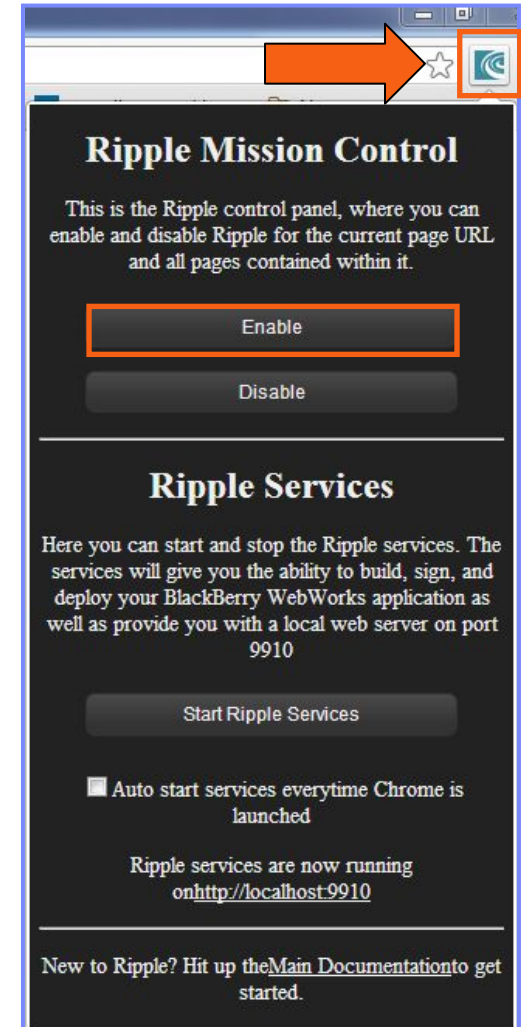
Previewing your application on the BlackBerry Ripple Emulator

- Click **Open Simple Preview**.
- Make sure to enable the Ripple plug-in in Chrome.



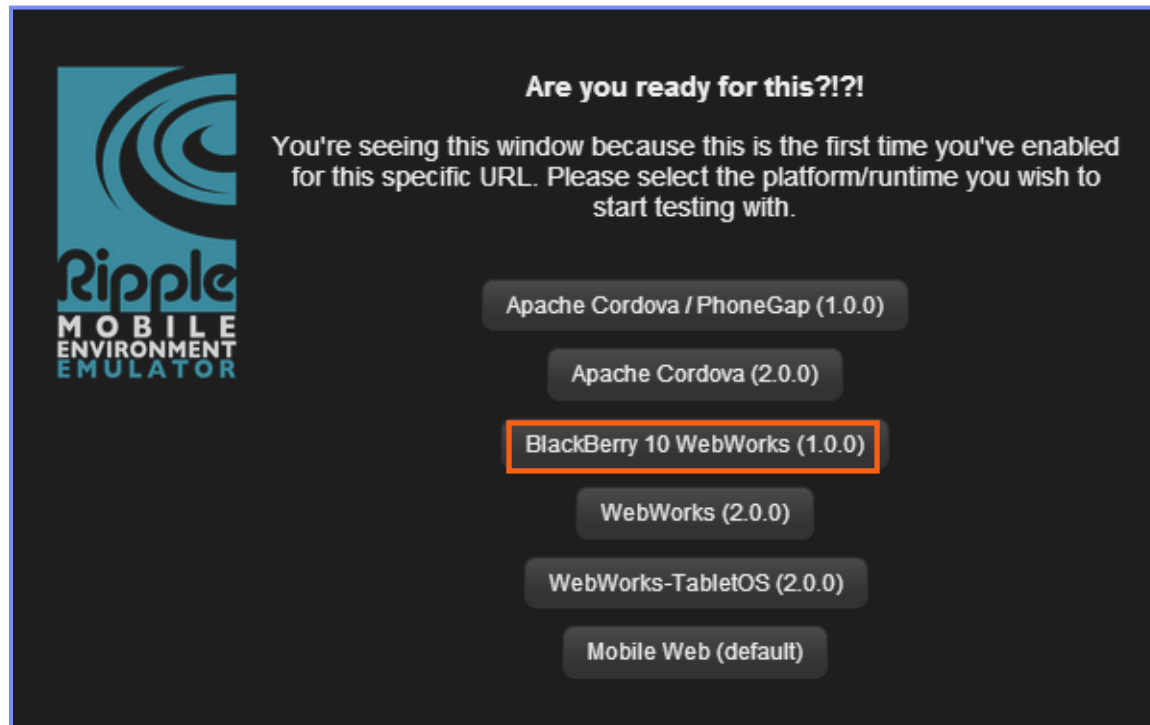
Previewing your application on the BlackBerry Ripple Emulator - continued

- Click the ripple icon on the right top bar of your browser, and click **Enable** to view the selected application in Ripple.



Previewing your application on the BlackBerry Ripple Emulator - continued

- If you get the screen below, choose **BlackBerry 10 WebWorks (1.0.0)** to proceed with previewing the application.

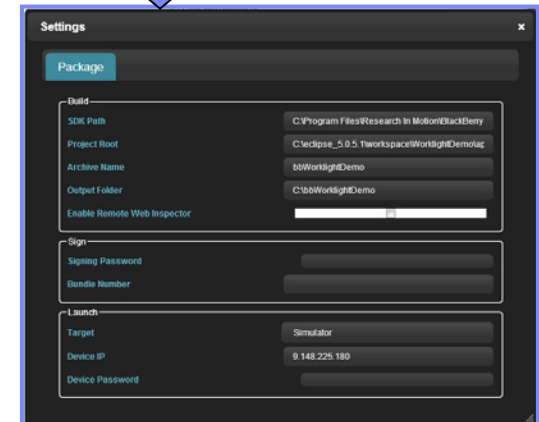
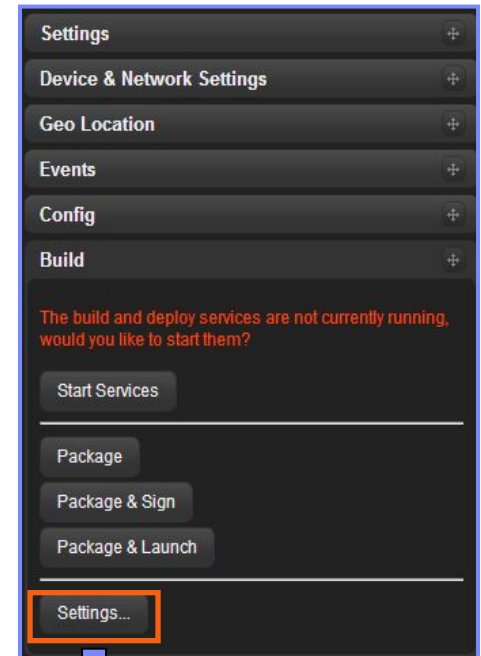


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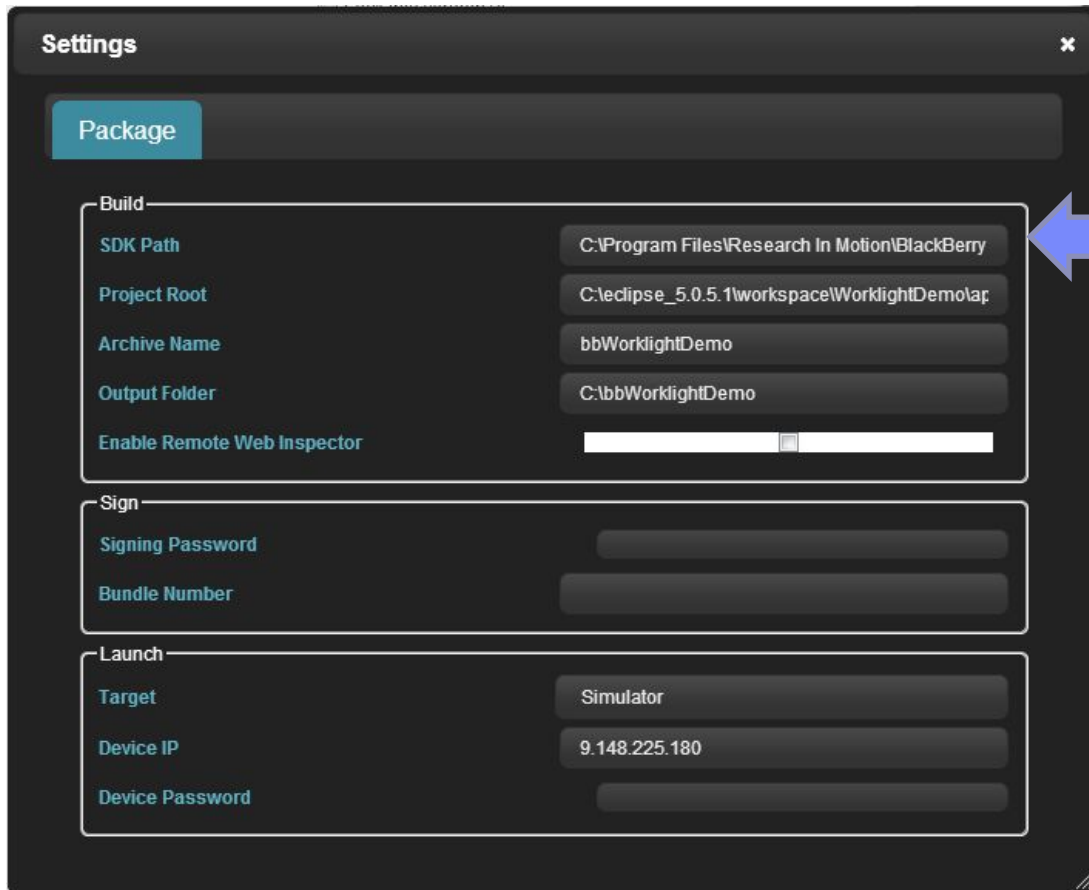
Packaging your application

- You must have BlackBerry WebWorks SDK installed to package an application for a simulator or mobile device.
- In BlackBerry Ripple, at the bottom of the right menu, select **Settings**.



Packaging your application – continued

- Complete the following fields:



The screenshot shows the 'Settings' dialog box with the 'Package' tab selected. The 'Build' section contains the following fields:

Field	Value
SDK Path	C:\Program Files\Research In Motion\BlackBerry
Project Root	C:\eclipse_5.0.5.1\workspace\WorklightDemo\ap
Archive Name	bbWorklightDemo
Output Folder	C:\bbWorklightDemo
Enable Remote Web Inspector	<input type="checkbox"/>

The 'Sign' section contains the following fields:

Field	Value
Signing Password	[Redacted]
Bundle Number	[Redacted]

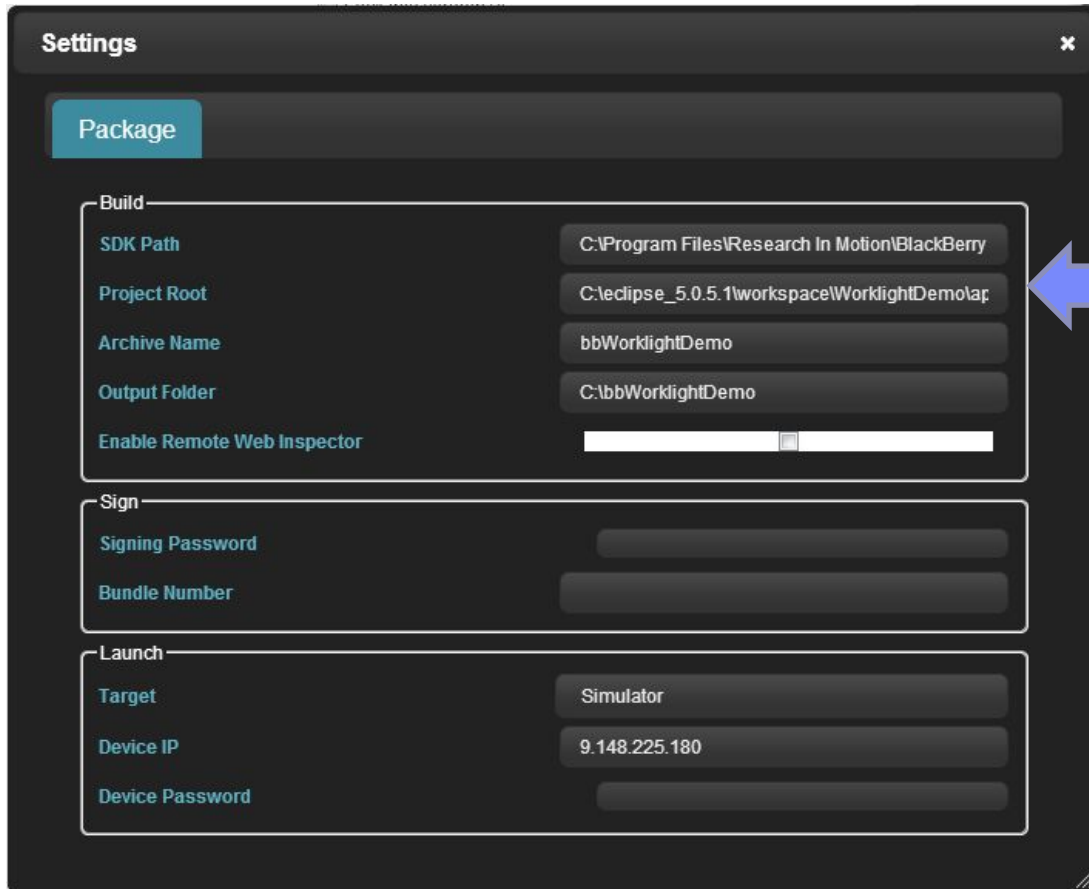
The 'Launch' section contains the following fields:

Field	Value
Target	Simulator
Device IP	9.148.225.180
Device Password	[Redacted]

Path where
BlackBerry
WebWorks SDK is
installed

Packaging your application – continued

- Complete the following fields:



The screenshot shows the 'Settings' dialog box with the 'Package' tab selected. The 'Build' section contains the following fields:

Field	Value
SDK Path	C:\Program Files\Research In Motion\BlackBerry
Project Root	C:\eclipse_5.0.5.1\workspace\WorklightDemo\ap
Archive Name	bbWorklightDemo
Output Folder	C:\bbWorklightDemo
Enable Remote Web Inspector	<input type="checkbox"/>

The 'Sign' section contains the following fields:

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Signing Password	[Redacted]
Bundle Number	[Redacted]

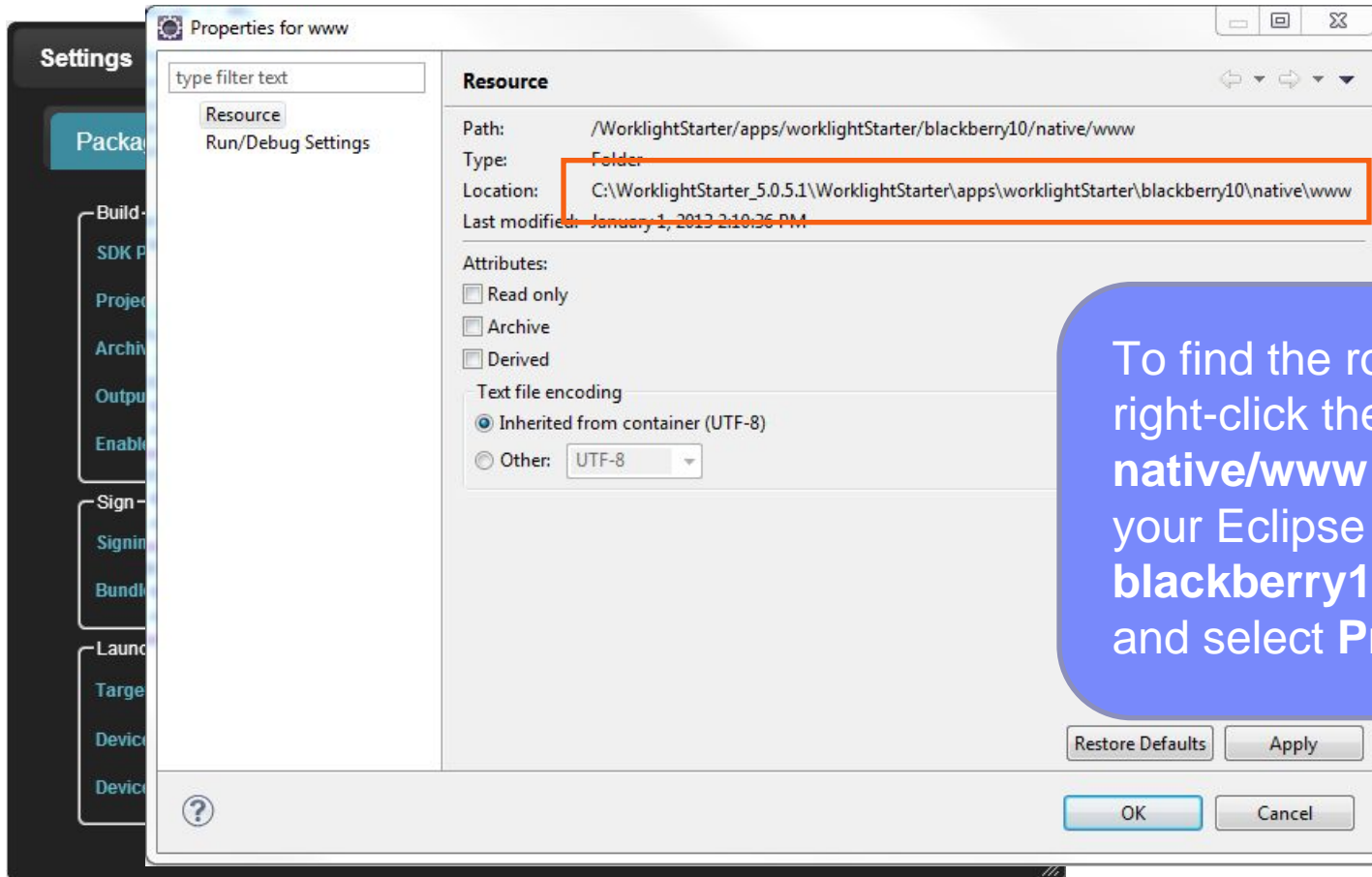
The 'Launch' section contains the following fields:

Field	Value
Target	Simulator
Device IP	9.148.225.180
Device Password	[Redacted]

The root folder of your project

Packaging your application – continued

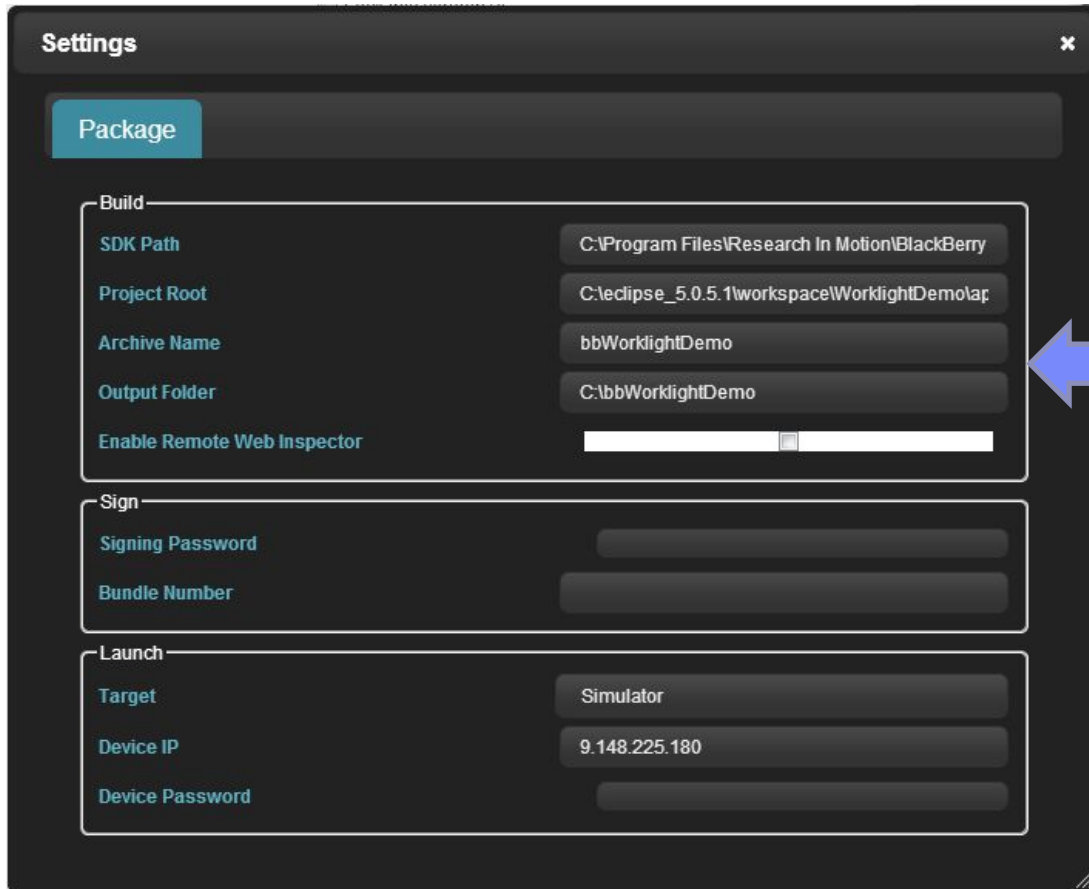
- Complete the following fields:



To find the root folder, right-click the **native/www** folder in your Eclipse **blackberry10** folder, and select **Properties**.

Packaging your application – continued

- Complete the following fields:



The screenshot shows the 'Settings' dialog box with the 'Package' tab selected. The 'Build' section contains the following fields:

Field	Value
SDK Path	C:\Program Files\Research In Motion\BlackBerry
Project Root	C:\eclipse_5.0.5.1\workspace\WorklightDemo\ap
Archive Name	bbWorklightDemo
Output Folder	C:\bbWorklightDemo
Enable Remote Web Inspector	<input type="checkbox"/>

The 'Sign' section contains the following fields:

Field	Value
Signing Password	
Bundle Number	

The 'Launch' section contains the following fields:

Field	Value
Target	Simulator
Device IP	9.148.225.180
Device Password	

The name for your archive, and the folder where to output the application

Specify a folder outside your project.

Packaging your application – continued

- Complete the following fields:

The screenshot shows a 'Settings' dialog box with a 'Package' tab selected. It is divided into three sections: 'Build', 'Sign', and 'Launch'. The 'Build' section includes fields for SDK Path, Project Root, Archive Name, Output Folder, and an 'Enable Remote Web Inspector' checkbox. The 'Sign' section includes fields for Signing Password and Bundle Number. The 'Launch' section includes fields for Target, Device IP, and Device Password.

Section	Field	Value
Build	SDK Path	C:\Program Files\Research In Motion\BlackBerry
	Project Root	C:\eclipse_5.0.5.1\workspace\WorklightDemo\ap
	Archive Name	bbWorklightDemo
	Output Folder	C:\bbWorklightDemo
	Enable Remote Web Inspector	<input type="checkbox"/>
Sign	Signing Password	[Redacted]
	Bundle Number	[Redacted]
Launch	Target	Simulator
	Device IP	9.148.225.180
	Device Password	[Redacted]

Sign your app with a BlackBerry 10 developer certificate to run it on a BlackBerry 10 handset. Specify your certificate password here.

Signing is NOT required to run the application in the BlackBerry 10 Simulator.

Packaging your application – continued

- Complete the following fields:

Settings [x]

Package

Build

SDK Path: C:\Program Files\Research In Motion\BlackBerry

Project Root: C:\eclipse_5.0.5.1\workspace\WorklightDemo\ap

Archive Name: bbWorklightDemo

Output Folder: C:\bbWorklightDemo

Enable Remote Web Inspector:

Sign

Signing Password:

Bundle Number:

Launch

Target: Simulator

Device IP: 9.148.225.180

Device Password:

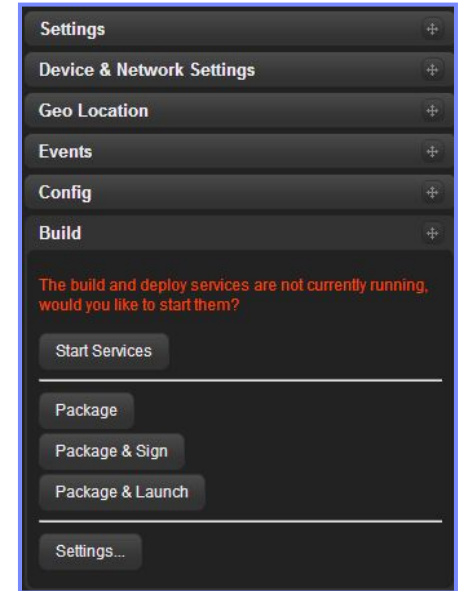
Select your target:
device or simulator.

Then, enter the
device IP and
password.

The Device IP
address can be found
by using either the
BlackBerry Desktop
Manager, or in the
device settings.

Packaging your application – continued

- Before you package the application, click **Start Services**.
- Package your application.
- At the end of the packaging process, you receive indication about the process success or failure.
- For more information about application packaging, see the BlackBerry Developer website.



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Run application on a BlackBerry Simulator / handsets

- To load and run your packaged application on a simulator or device, open a command prompt and navigate to the dependencies\tools\bin folder under your BlackBerry 10 SDK folder.

- Use the following command to load and run your application:

```
blackberry-deploy -installApp -password
<simulator password> -device <simulator
IP address> -package <BAR file path>
```

- Use the following command to remove your application:

```
blackberry-deploy -uninstallApp -device
<IP_address> -package <bar file name> -
password <device password>
```



Run application with Cordova Ant tool

- Worklight BlackBerry 10 application supports Cordova Ant tool to package and run your application.
- After you build your Worklight application, open the `project.properties` file under the `\native` directory and edit it as follows:
 - To run on a device:
 - `qnx.device.ip = <Device IP>`
 - `qnx.device.password = <Device password>`
 - `qnx.device.pin = <Device PIN number>`
 - `qnx.sigtool.password = <BlackBerry 10 Code Signing Password>`
 - To run on a simulator:
 - `qnx.sim.ip = <simulator IP>`
 - `qnx.sim.password = <simulator password>`
- To get a BlackBerry 10 Code Signing keys, see <https://www.blackberry.com/SignedKeys/codesigning.html>

Run application with Cordova Ant tool - continued

- To run an application on a device or a simulator, use the following Cordova ant scripts:
 - ant qnx debug-device
 - ant qnx load-device
 - ant qnx debug-simulator
 - ant qnx load-simulator

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