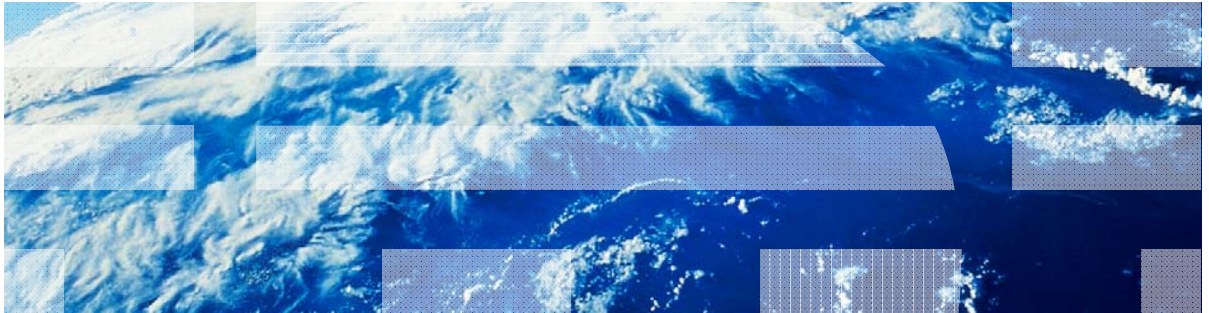


IBM Worklight V5.0.6 Getting Started

Previewing your application on BlackBerry 10



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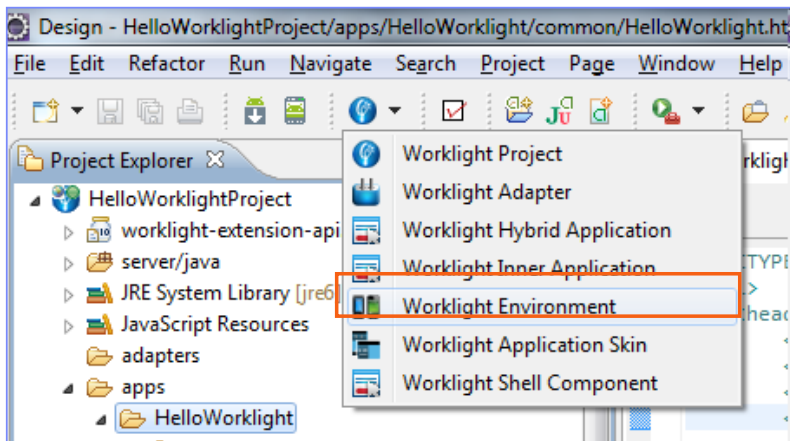
- See <http://www.ibm.com/ibm/us/en/>

Agenda

- Adding a BlackBerry 10 environment
- Brief review of the BlackBerry 10 environment folder structure
- Running your application on the BlackBerry Ripple Emulator
- Packaging your application
- Packaging your application and running it on BlackBerry Simulator / handsets

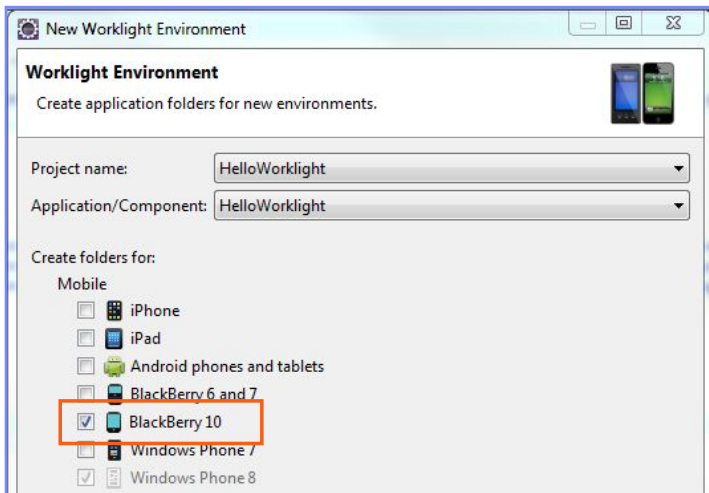
Adding a New Environment

- Prior to creating a BlackBerry 10 application you need to 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.



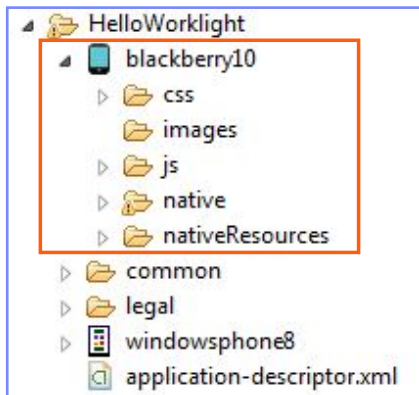
Adding a New Environment

- Select the **BlackBerry 10** check box, and then click **Finish**.



Adding a New Environment

- A **blackberry10** folder is automatically added.

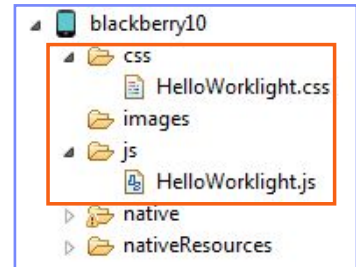


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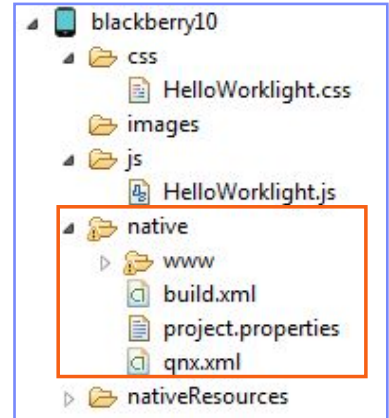
Review of the BlackBerry 10 Environment Folder Structure

- 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** – JavaScript that can extend, and override if required, JavaScript from the **common** folder.



Review of the BlackBerry 10 Environment Folder Structure

- The **native** folder contains automatically generated, ready to be packaged, BlackBerry app code
 - The CSS, HTML, and js files in the **native** 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.

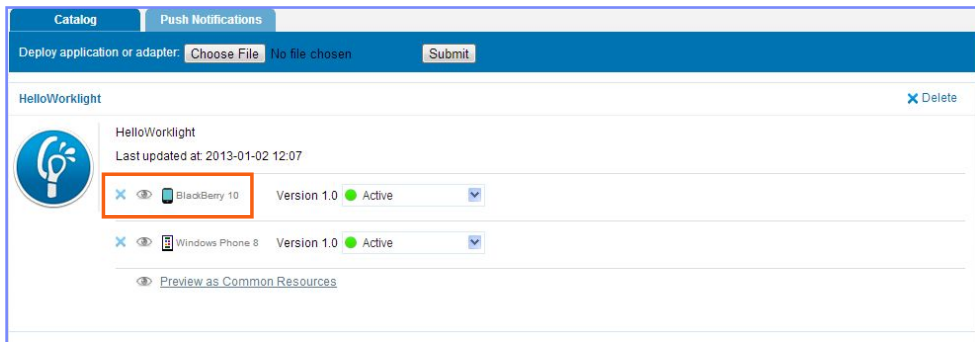


Agenda

- Adding a BlackBerry environment
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Previewing in Ripple

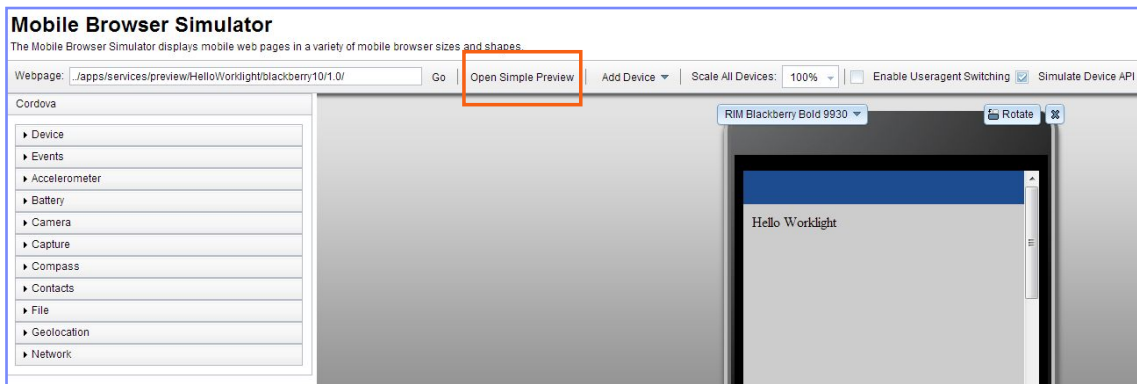
- Ripple is available only on Google Chrome.
- Right-click your app and select **Run As > Build all and deploy** to build it.
- Open Worklight Console and choose **preview as BlackBerry 10**.



- A preview page automatically opens.

Previewing in Ripple

- Click **Open Simple Preview** at the top.



Previewing in Ripple

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



Ripple Mission Control

This is the Ripple control panel, where you can enable and disable Ripple for the current page URL and all pages contained within it.

Enable

Disable

Ripple Services

Here you can start and stop the Ripple services. The services will give you the ability to build, sign, and deploy your BlackBerry WebWorks application as well as provide you with a local web server on port 9910

Start Ripple Services

Auto start services everytime Chrome is launched

Ripple services are now running on <http://localhost:9910>

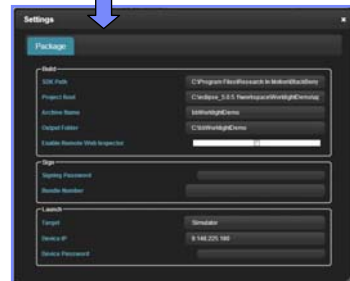
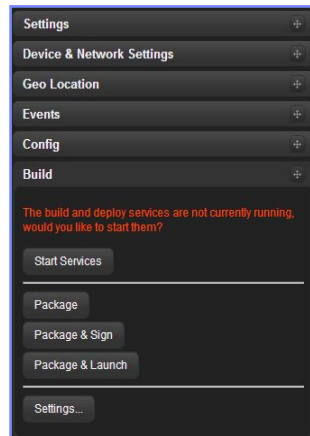
New to Ripple? Hit up the [Main Documentation](#) to get started.

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- **Packaging your application**
- Run application on a BlackBerry Simulator / handsets

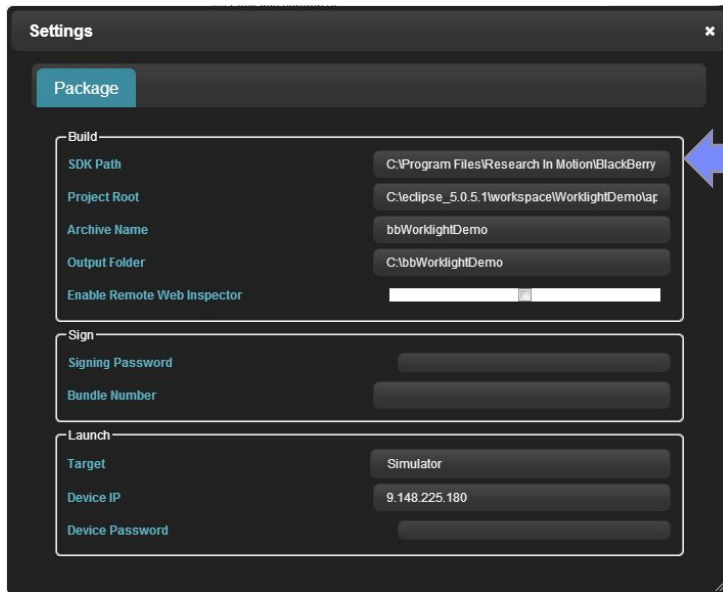
Packaging Your Application

- As described in “Setting up your BlackBerry 10 development environment” tutorial, 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**.
 - A window opens.



Packaging Your Application

- Complete the following values:



Settings

Package

Build

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

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

Archive Name: bbWorklightDemo

Output Folder: C:\bbWorklightDemo

Enable Remote Web Inspector:

Sign

Signing Password:

Bundle Number:

Launch

Target: Simulator

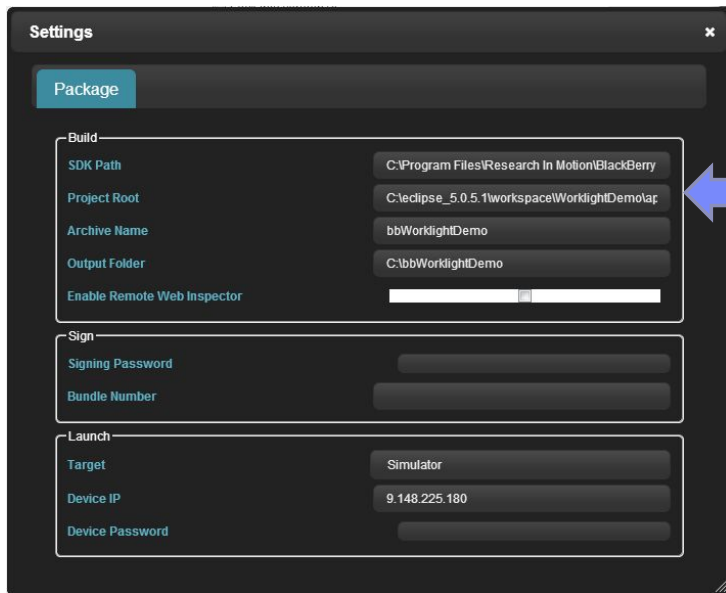
Device IP: 9.148.225.180

Device Password:

Path where
BlackBerry
WebWorks SDK is
installed

Packaging Your Application

- Complete the following values:



Settings [X]

Package

Build

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

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

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:

The root folder of your project

Packaging Your Application

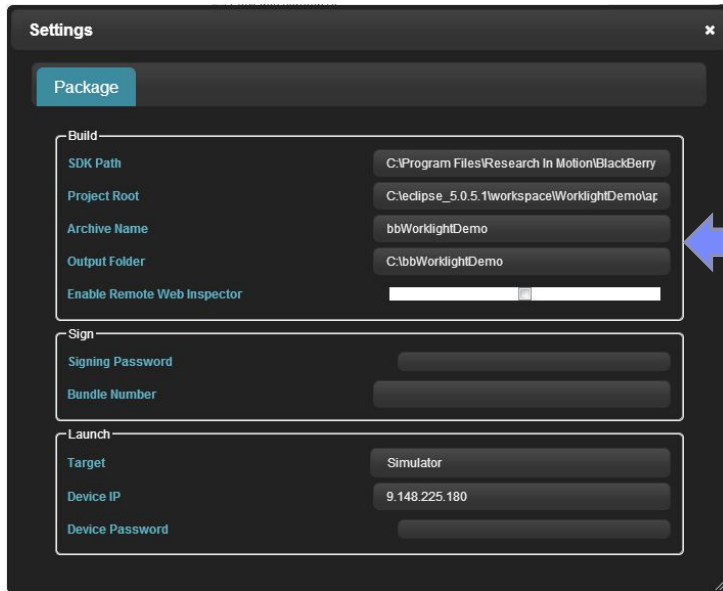
- Complete the following values:

The screenshot shows the 'Properties for www' dialog box in Eclipse. The 'Location' field is highlighted with an orange box, containing the path: `C:\WorklightStarter_5.0.5.1\WorklightStarter\apps\worklightStarter\blackberry10\native\www`. The 'Type' field is set to 'Folder'. The 'Text file encoding' is set to 'Inherited from container (UTF-8)'. A blue callout box on the right contains the following text:

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

Packaging Your Application

- Complete the following values:



Settings

Package

Build

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

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

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

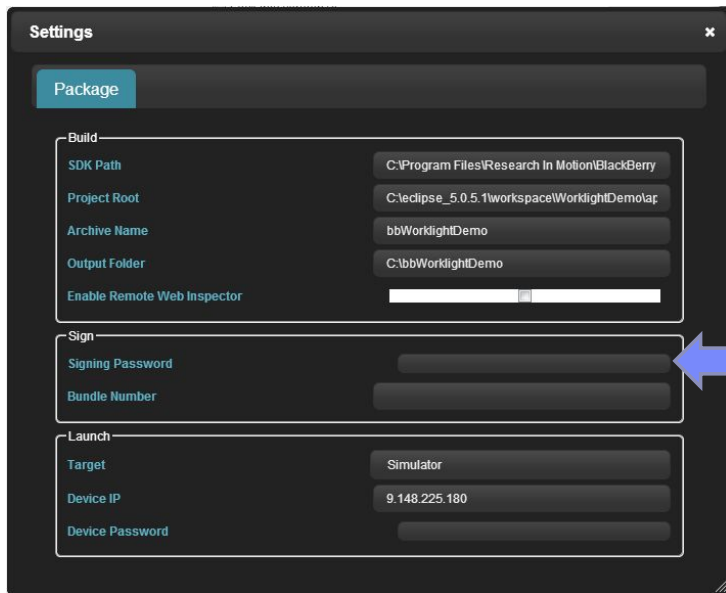
Device Password:

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

Specify a folder outside your project.

Packaging Your Application

- Complete the following values:



The screenshot shows a 'Settings' dialog box with a 'Package' tab selected. The 'Build' section contains fields for SDK Path, Project Root, Archive Name, and Output Folder, along with a checkbox for 'Enable Remote Web Inspector'. The 'Sign' section contains fields for 'Signing Password' and 'Bundle Number'. The 'Launch' section contains fields for 'Target', 'Device IP', and 'Device Password'. A blue arrow points from the 'Signing Password' field to a callout box on the right.

Section	Field	Value
Build	SDK Path	C:\Program Files\Research In Motion\BlackBerry
	Project Root	C:\eclipse_5.0.5.1\workspace\WorklightDemo\app
	Archive Name	bbWorklightDemo
	Output Folder	C:\bbWorklightDemo
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

- Complete the following values:

Settings [x]

Package

Build

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

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

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

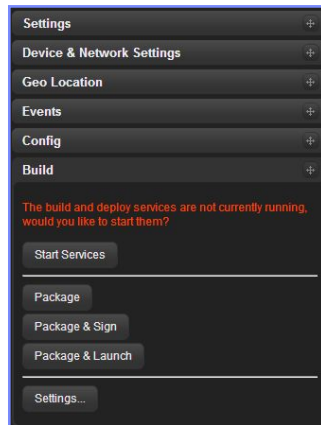
Device Password:

Select your target:
device or simulator.

Then, enter the
device IP and
password.

Packaging Your Application

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

- Then, 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 Using 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 visit:
<https://www.blackberry.com/SignedKeys/codesigning.html>

Run application Using Cordova Ant tool

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

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