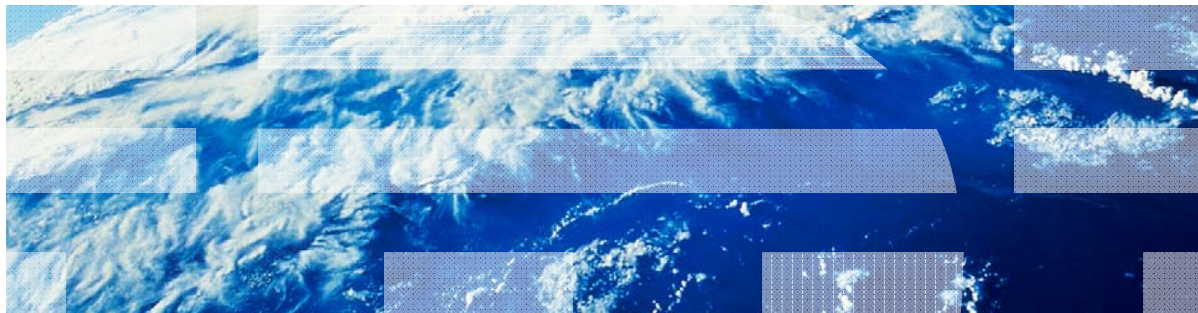


IBM Worklight V6.0.0 Getting Started

Previewing your application on BlackBerry 10



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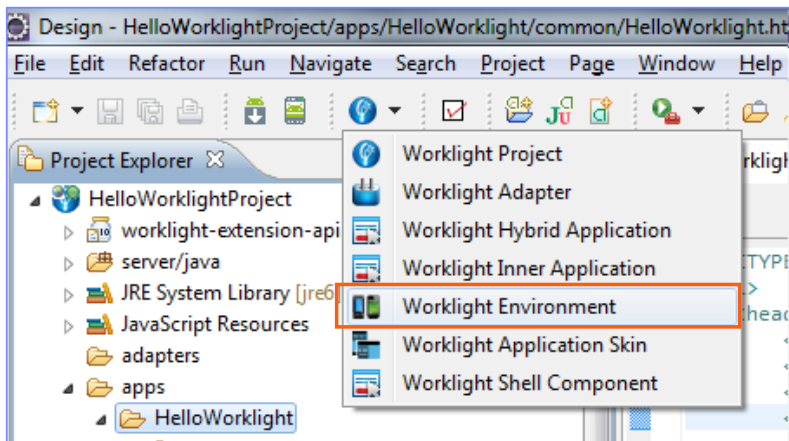
- See <http://www.ibm.com/ibm/us/en/>

Agenda

- Adding a BlackBerry 10 environment
- 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

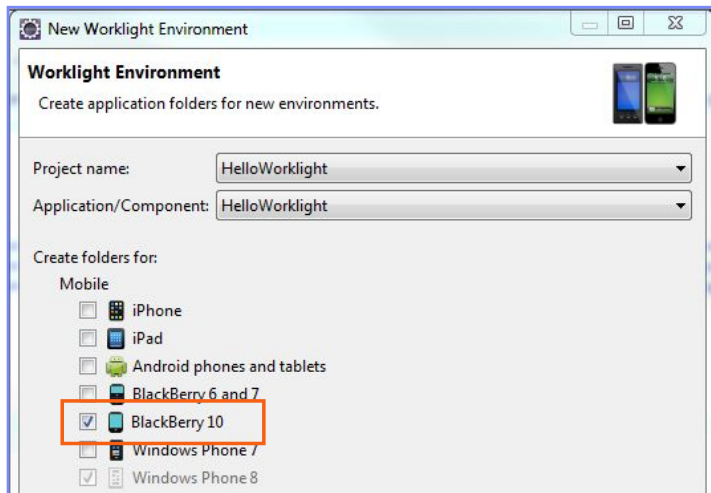
Adding a new environment

- 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.



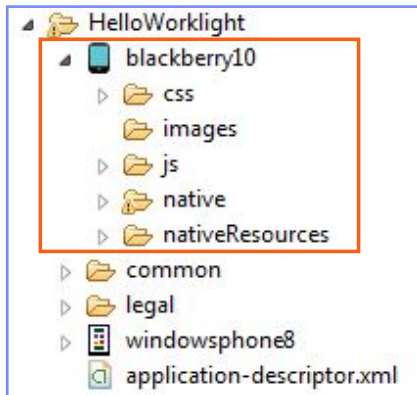
Adding a new environment

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



Adding a new environment

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

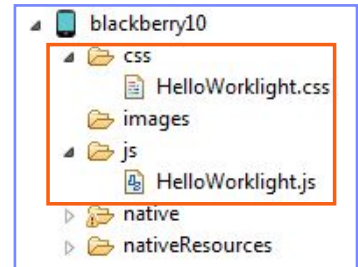


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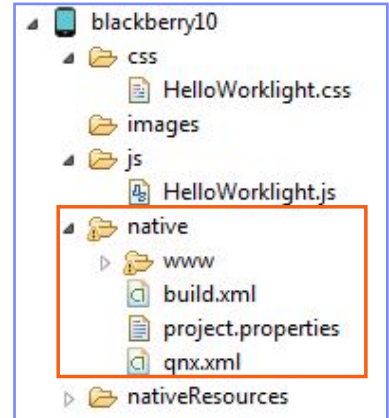
Review of the BlackBerry 10 environment folder structure

- 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, if required, override JavaScript from the **common** folder.



Review of the BlackBerry 10 environment folder structure

- The **native** folder contains automatically generated BlackBerry app code that is ready to be packaged.
 - 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.

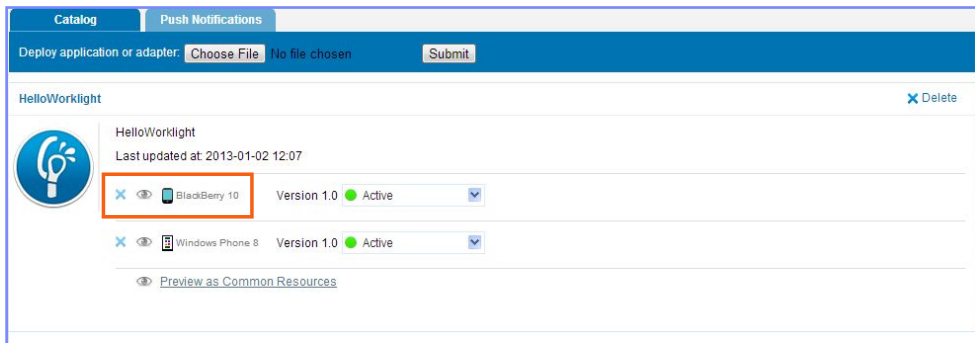


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Previewing in Ripple

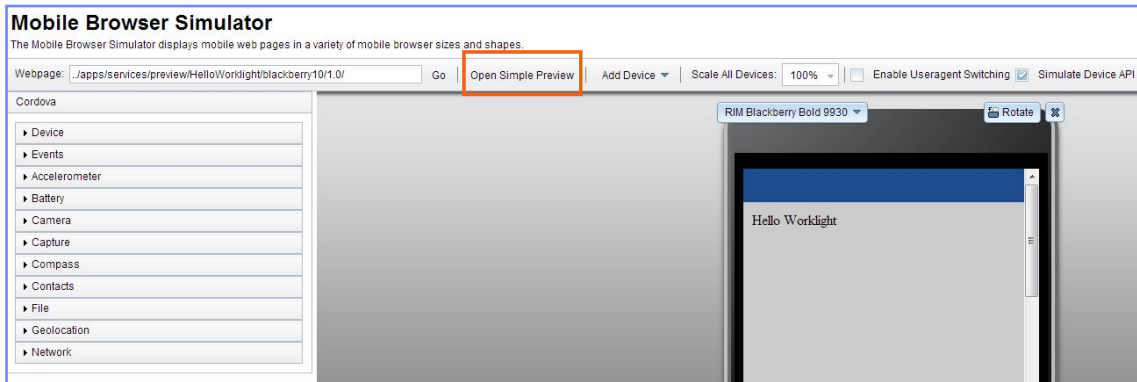
- The Ripple extension is available only for the Google Chrome browser. You can download it from the Chrome Web Store.
- Right-click your app and select **Run As > Build all and deploy** to build it.
- Open Worklight Console and choose **preview as BlackBerry 10**.



- A preview page opens.

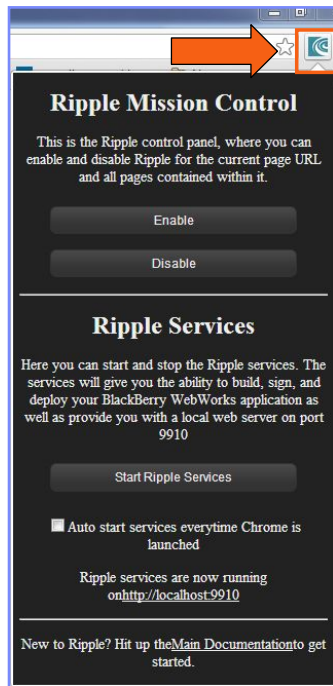
Previewing in Ripple

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



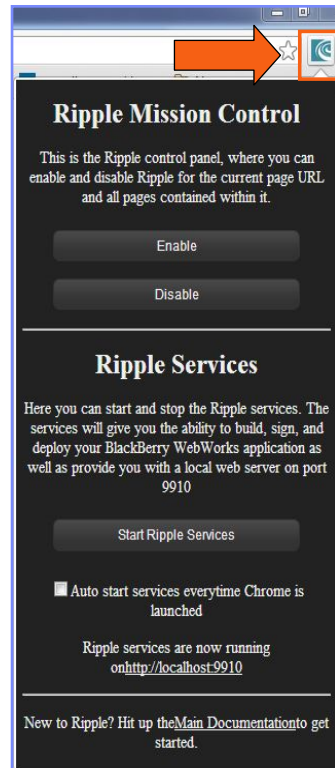
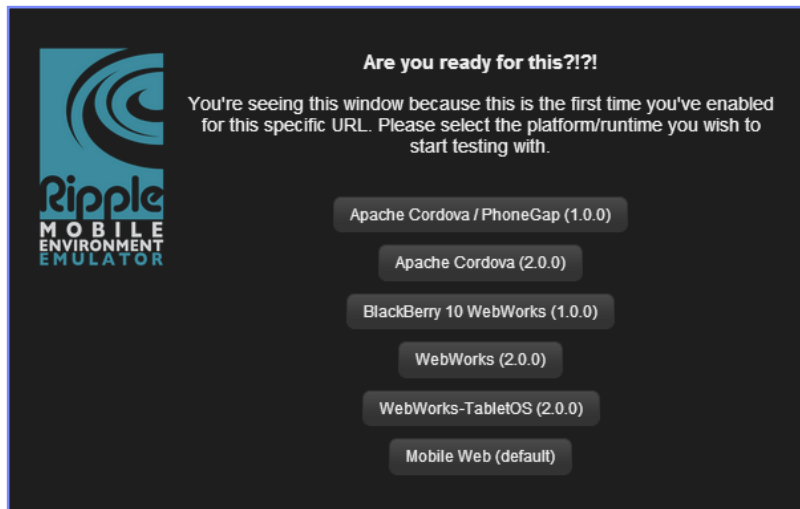
Previewing in Ripple

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



Previewing in Ripple

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

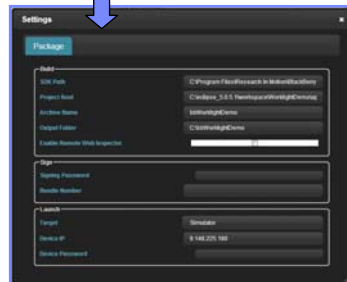
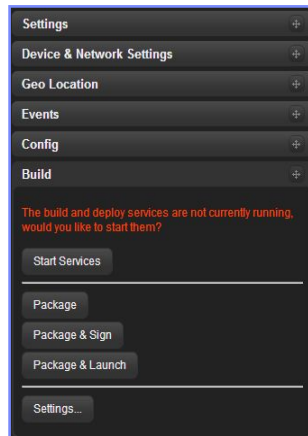


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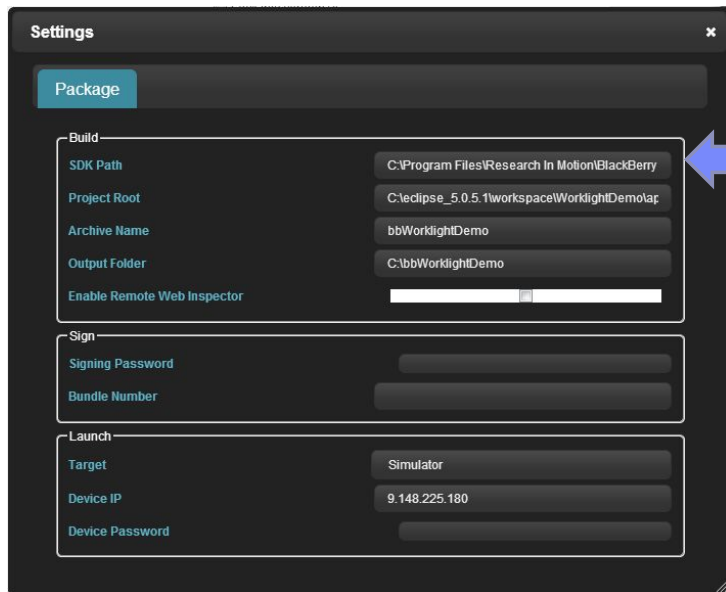
Packaging your application

- 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**.
 - A window opens.



Packaging your application

- Complete the following fields:



The screenshot shows a 'Settings' dialog box with a '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\app
Archive Name	bbWorklightDemo
Output Folder	C:\bbWorklightDemo
Enable Remote Web Inspector	<input type="checkbox"/>

The 'Sign' section contains:

Field	Value
Signing Password	
Bundle Number	

The 'Launch' section contains:

Field	Value
Target	Simulator
Device IP	9.148.225.180
Device Password	

Path where
BlackBerry
WebWorks SDK is
installed

Packaging your application

- Complete the following fields:

The screenshot shows a 'Settings' dialog box with a '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:

Field	Value
Signing Password	
Bundle Number	

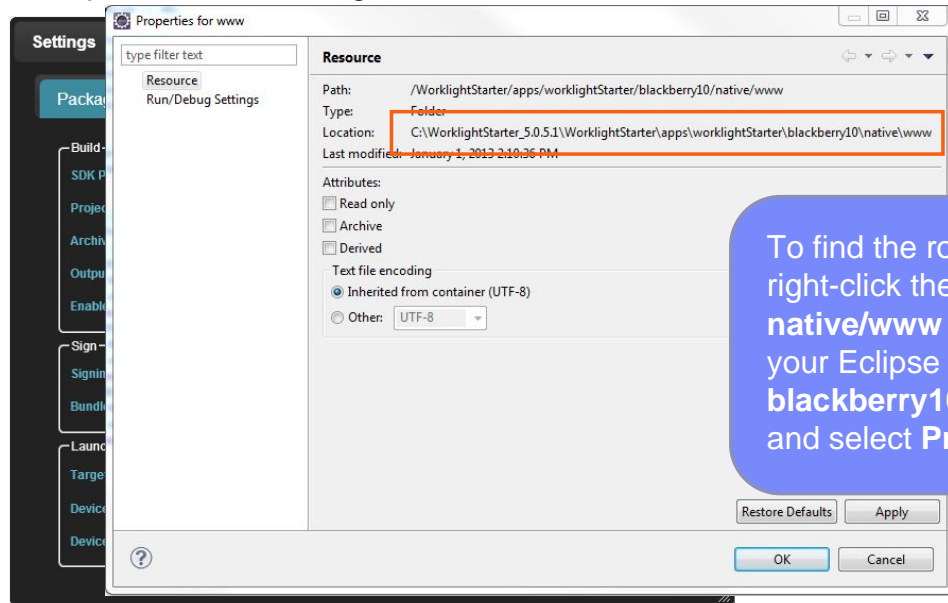
The 'Launch' section contains:

Field	Value
Target	Simulator
Device IP	9.148.225.180
Device Password	

The root folder of your project

Packaging your application

- Complete the following fields:



Packaging your application

- Complete the following fields:

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

Field	Value
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Project Root	C:\eclipse_5.0.5.1\workspace\WorklightDemo\app
Archive Name	bbWorklightDemo
Output Folder	C:\bbWorklightDemo
Enable Remote Web Inspector	<input type="checkbox"/>

The 'Sign' section contains:

Field	Value
Signing Password	
Bundle Number	

The 'Launch' section contains:

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

- Complete the following fields:

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

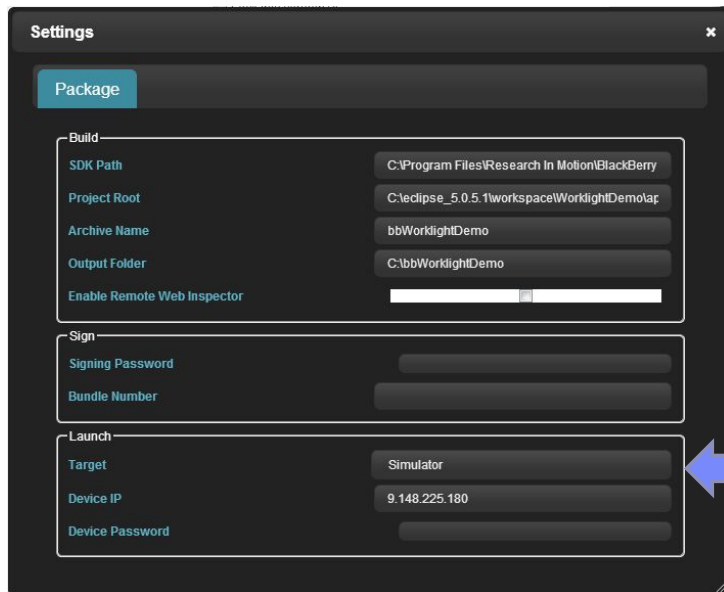
Section	Field	Value
Build	SDK Path	C:\Program Files\Research In Motion\BlackBerry
	Project Root	C:\eclipse_5.0.5.1\workspace\WorklightDemo\app
	Archive Name	bbWorklightDemo
	Output Folder	C:\bbWorklightDemo
	Enable Remote Web Inspector	<input type="checkbox"/>
Sign	Signing Password	
	Bundle Number	
Launch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

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 fields:



The screenshot shows a 'Settings' dialog box with a 'Package' tab selected. It contains three sections: 'Build', 'Sign', and 'Launch'. The 'Build' section has fields for SDK Path, Project Root, Archive Name, Output Folder, and a checkbox for 'Enable Remote Web Inspector'. The 'Sign' section has fields for 'Signing Password' and 'Bundle Number'. The 'Launch' section has fields for 'Target' (set to 'Simulator'), 'Device IP' (set to '9.148.225.180'), and 'Device Password'. A blue arrow points from the 'Device IP' field to a text 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
	Enable Remote Web Inspector	<input type="checkbox"/>
Sign	Signing Password	
	Bundle Number	
Launch	Target	Simulator
	Device IP	9.148.225.180
	Device Password	

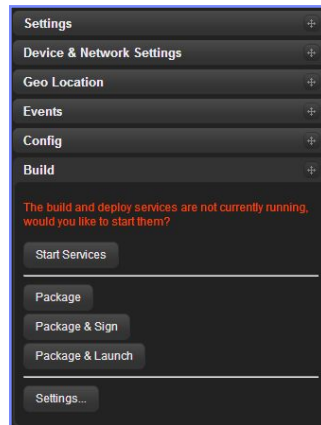
Select your target:
device or simulator.

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

- 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.

- 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

- 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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