



BlackBerry® Code Signing
Step by Step Guide



Code Signing Keys

Research In Motion (RIM) must track the use of some sensitive BlackBerry® application programming interfaces (APIs) for security and export control reasons. To load your application on a BlackBerry smartphone or the BlackBerry® PlayBook™ tablet, your application must be signed using a **signature key** (also referred to as **code signing keys**) that is provided by RIM. Code signing registration is solely for purposes of monitoring usage of these particular APIs in third-party application development, and does not in any way indicate RIM's approval or endorsement of your application or your use of the APIs.

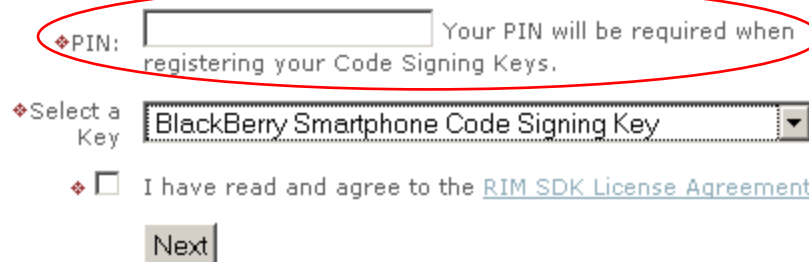
Step 1 - Register for code signing keys

To register for access to the BlackBerry runtime, application and cryptography APIs, complete the code signing keys order form at <https://www.blackberry.com/SignedKeys/>. There are separate code signing keys for BlackBerry Tablets and Blackberry smartphones. Please be sure to select the keys for BlackBerry smartphones. There is no fee for the code signing keys; however, a credit card is still required for authentication.

While you are filling out the form make sure that you write down the **PIN** that you have chosen; you will need it later to import keys into Eclipse.

Registration PIN

Your PIN can be any 6-10 digit, lowercase, alphanumeric code. Your PIN protects against usage of your Code Signing Keys by unauthorized parties, so keep it safe. RIM reserves the right to request that you choose another PIN if deemed unsuitable.



◆ PIN: Your PIN will be required when registering your Code Signing Keys.

◆ Select a Key:

◆ I have read and agree to the [RIM SDK License Agreement](#)

Figure 2 - Write the PIN down for later use in Eclipse



In the **Select a Key** drop down menu select **BlackBerry Smartphone Code Signing Key**. Do not select **BlackBerry Tablet OS and Smartphone Signing Keys** because the process for BlackBerry Tablet OS keys is slightly different and choosing it in this form will cause an error.

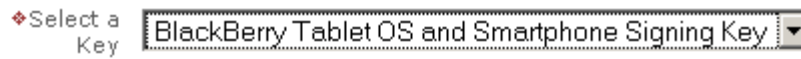


Figure 3 - Do not select this option

Once you have registered, you will be sent a set of keys and installation instructions via email that will allow you to sign your applications using the BlackBerry® Signing Authority Tool. Typically, keys are sent via email within one business day of submitting the form, but occasionally the process can take longer. If you haven't received your keys within two business days of submitting the registration form, contact BlackBerry support at devsupport@rim.com.

Step 2 - Import code signing keys in Eclipse® IDE

Once you receive your code signing keys via email, follow these instructions to import them into Eclipse:

1. Save all 3 .csi files in the same folder (each one will be sent in a separate email).
2. Start Eclipse.
3. Click on the **Window** menu, then **Preferences**, expand **BlackBerry Java Plug-in** then select **Install New Keys...**

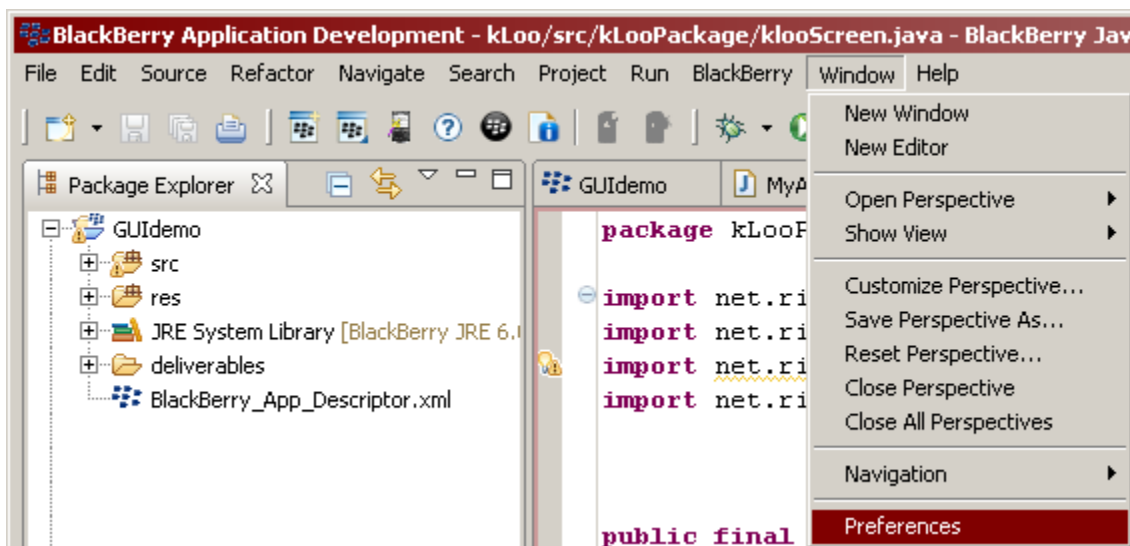


Figure 4 - Eclipse Preferences

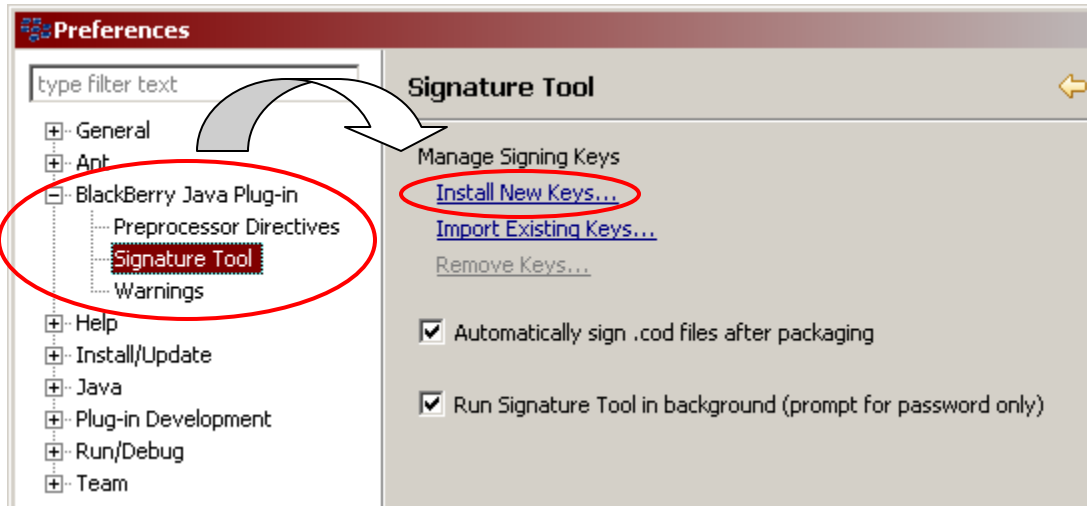


Figure 5 - Expand BlackBerry Java Plug-in on the left, select Signature Tool and click on Install New Keys

4. Select first of the 3 .csi files saved in step 1 and click **Open**.

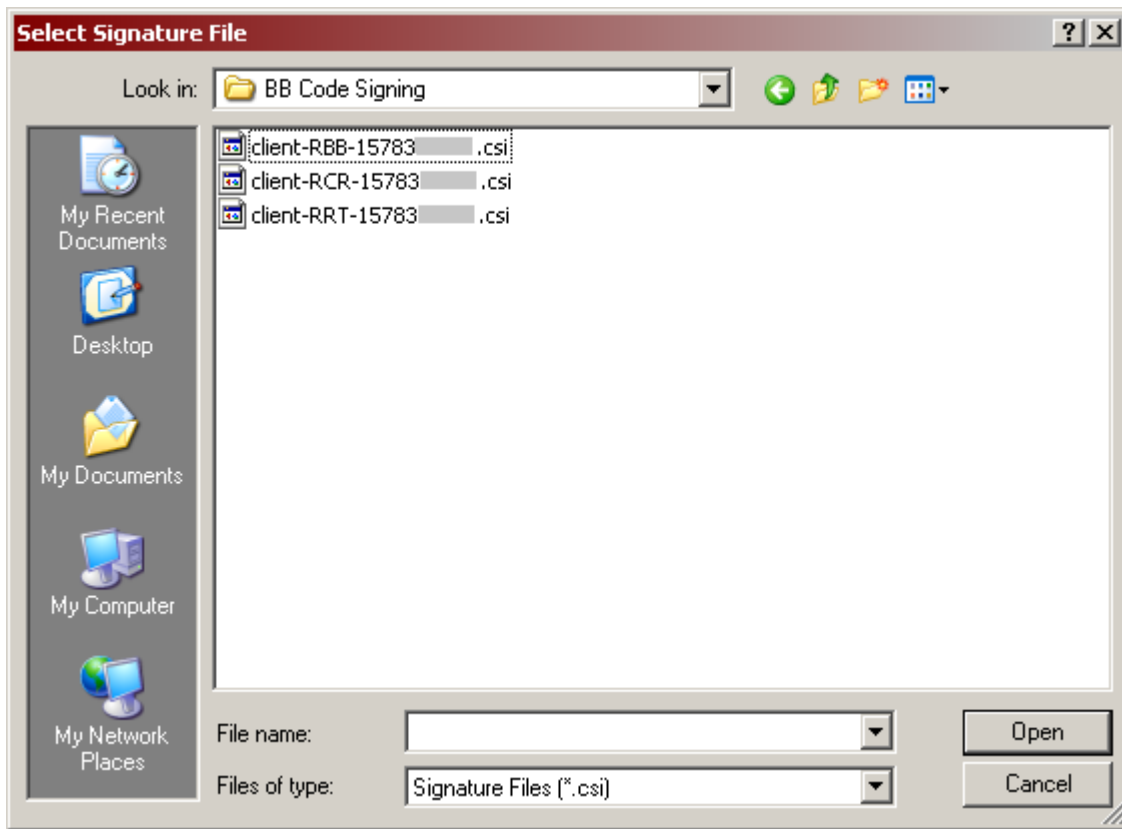


Figure 6 - Select first of the 3 .csi files and click Open



5. Click **Yes** to create a new key pair file.

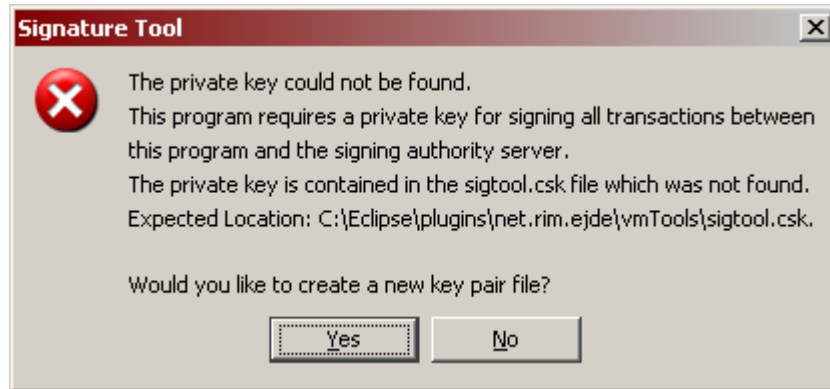


Figure 7 - Click **Yes** to create a new key pair file

6. Create a password for your private key of at least 8 characters, and confirm your password.

This is your private key password, which protects your private key. Please remember this password as you will be prompted for it each time signing is attempted or a signature key is installed.

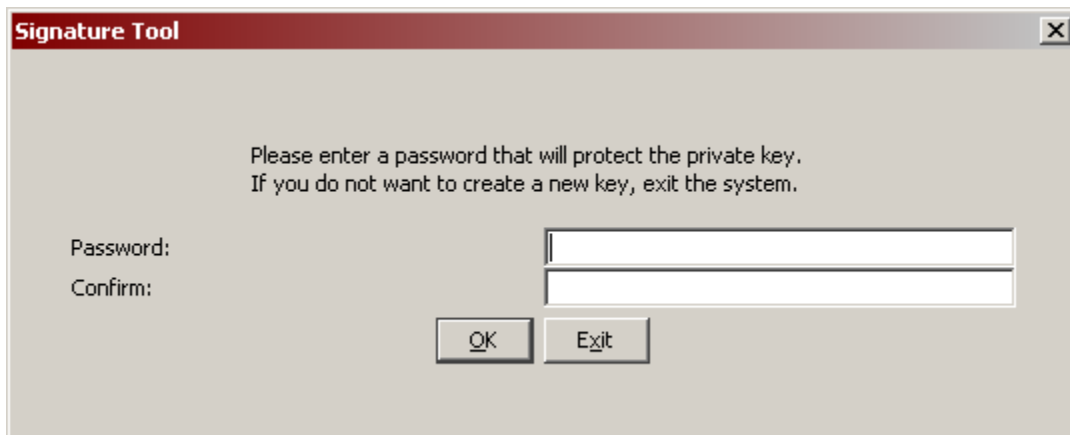


Figure 8 - Create a password



7. Move your mouse to generate data for a new private key.

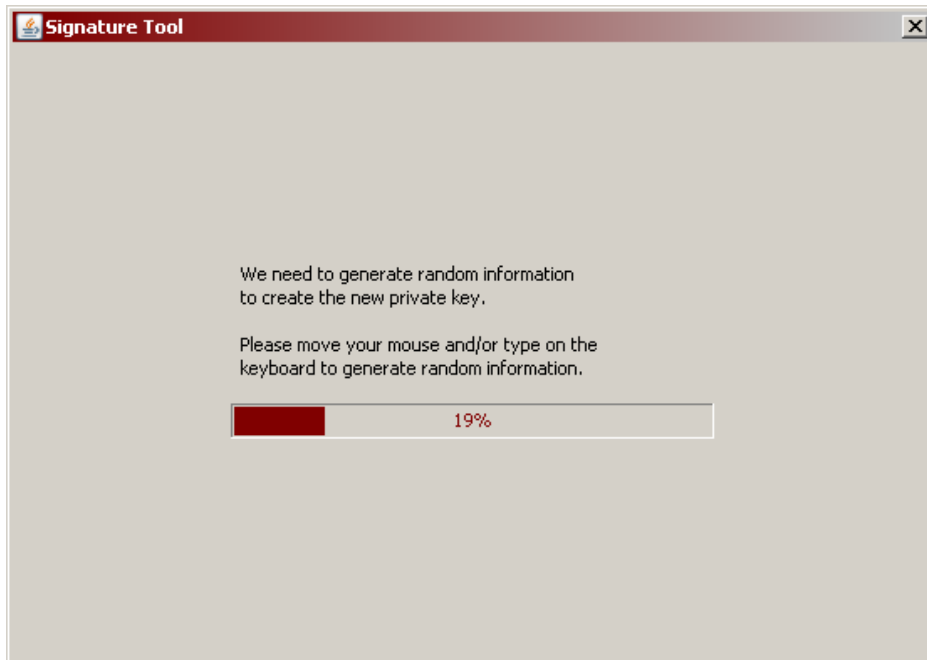


Figure 9 - Move your mouse to generate data for a new private key

8. In the "Registration PIN" field, enter the PIN number that you supplied on the signature key order form.



Figure 10 - PIN number that you supplied on the signature key order form



When you click **Register**, you will see the following window:

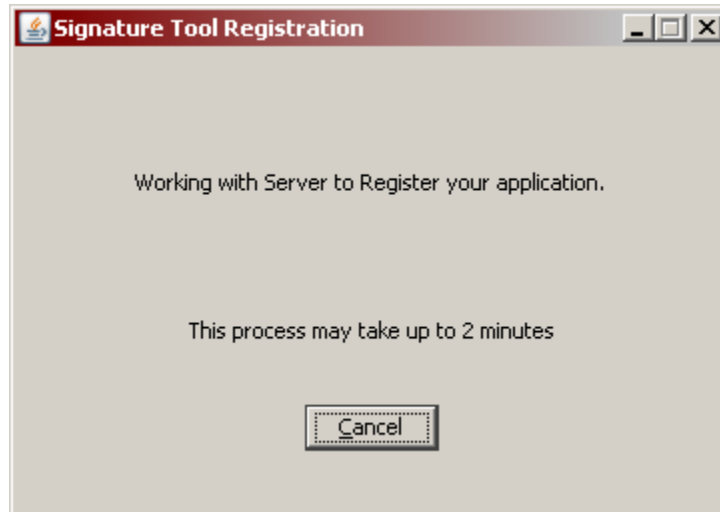


Figure 11 - Signature Tool is registering your keys with server

When the Signature Tool finishes the registration with the server, you will be notified by following message:

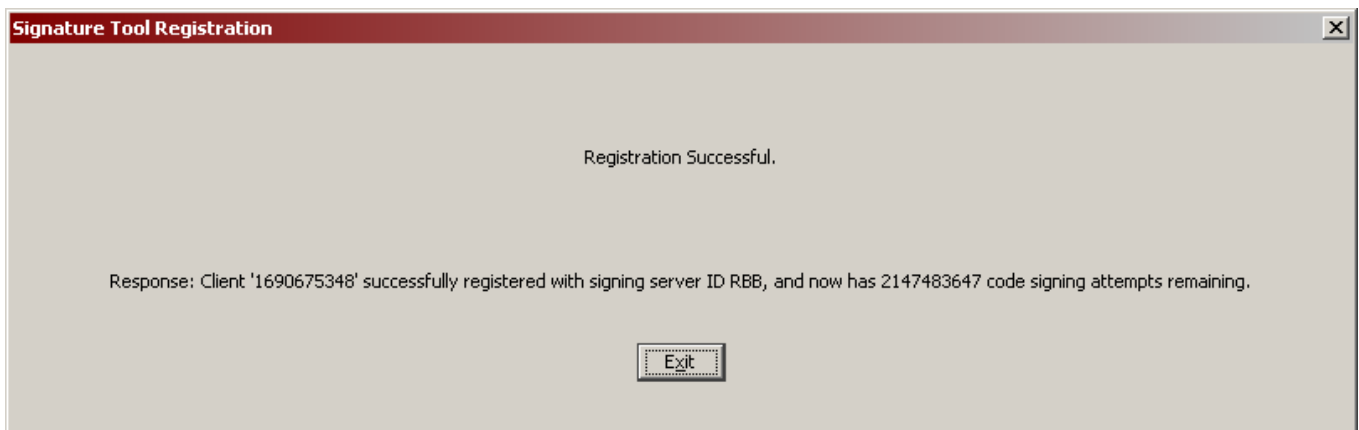


Figure 12 - Signature Tool registration successful

9. Click **Exit**. Your first key has been imported, that leaves you with two more.



10. Click again on **Install New Keys** and navigate to the next .csi file in the folder where you have downloaded them.

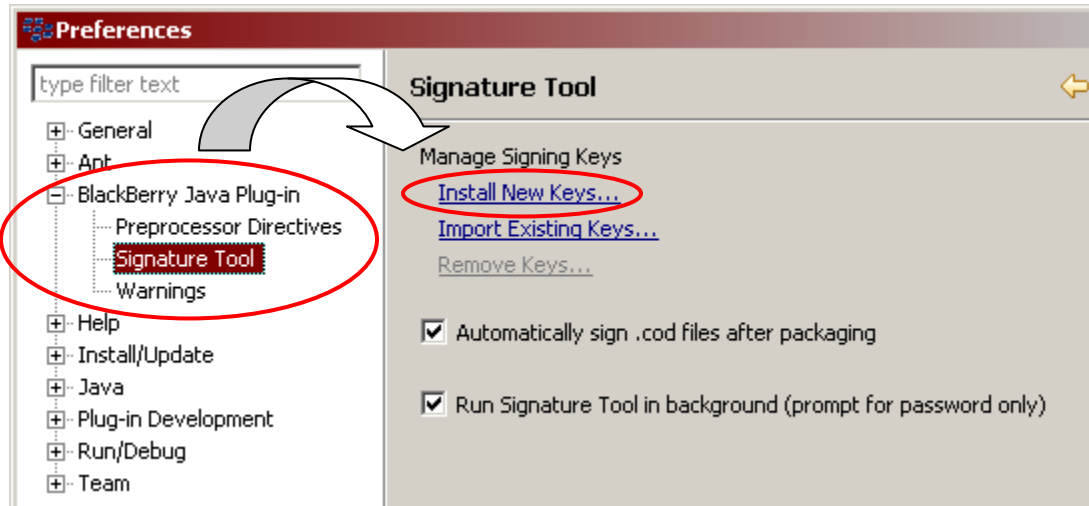


Figure 13 - Click on **Install New Keys** to repeat the import process for remaining two keys

11. Enter the PIN number that you supplied on the signature key order form and in the "Private Key password" field, type the password created in step 6.



Figure 14 - Enter the PIN number from the signature key order form and password from step 6



12. Click **Register**. You should see the following message:

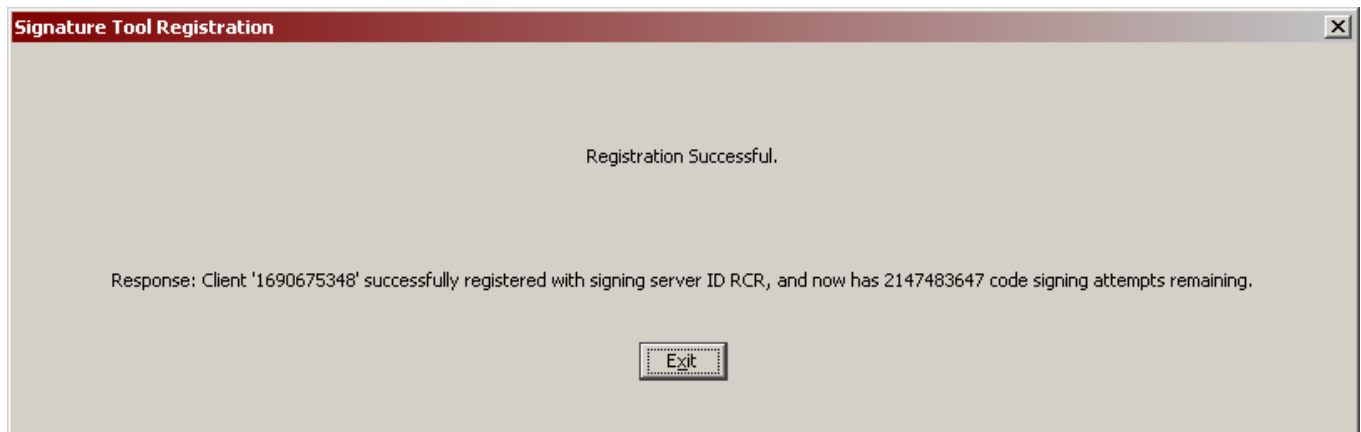


Figure 15 - Signature Tool registration successful

13. Click **Exit**.

14. Repeat steps 10 to 13 for the last .csi file.

Additional information

Note: All 3 keys (RBB, RCR, RRT) received need to be installed on the same PC. The same password must be specified for all keys on the same PC. You should receive each key (.csi file) in a separate email message.

When registering with the signing authority, ensure that you have correctly entered your registration PIN number. **If you enter the incorrect PIN 5 times, your keys will be deactivated.**

Installing keys on multiple computers or reinstalling keys

You can only install a set of code signing keys once. Once you have installed and registered one set of .csi files on a computer, you cannot register the same keys on another computer. If you want to perform code signing on multiple computers, you must register for multiple sets of code signing keys.



If you need to reinstall your .csi files, please request a new set of BlackBerry Smartphone Code Signing keys using the web form found here: <http://www.blackberry.com/go/codesigning>

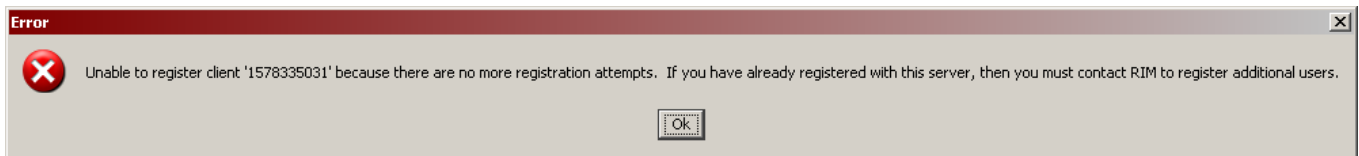


Figure 16 - Error caused by attempting to reinstall the same .csi files that have been previously removed

Prior to installing new signature keys first delete all present CSI files as well as the sigtool.* (sigtool.DB, sigtool.CSK, sigtool.SET...) files in the sub-directories of the development environment to which you are installing.

For further information on BlackBerry Controlled APIs and applications signing, please refer to the **BlackBerry Signature Tool Developer Guide**, found at the following link:

http://docs.blackberry.com/en/developers/deliverables/1078/BB_JDE_SignatureTool_Dev_Guide.pdf

Troubleshooting

If you are having difficulty installing or registering your signature keys please check the **Signature Tool and Code Signing** section of the Developer Knowledge Base found here:

http://supportforums.blackberry.com/t5/Testing-and-Deployment/tkb-p/Testing_and_Deployment_of_Applications%40tkb

The **BlackBerry Development Support Forums** can also be a great resource when developing with the BlackBerry platform. Check them out here:

<http://supportforums.blackberry.com/rim/?category.id=BlackBerryDevelopment>

If you continue to experience issues please contact devsupport@rim.com.