How To Deploy BlackBerry Java Application Over The Air

BlackBerry Java OTA (over-the-air) files consist of one .JAD file and one or more .COD files.

When you build the desktop version of BlackBerry application using JDE, the JAD file will be created, which will have the following lines (suppose the JAD and COD file are: MyApp.jad and MyApp.cod):

Content of MyApp.jad:

```
...
RIM-COD-URL: MyApp.cod
RIM-COD-Size: 213916
...
```

However, if the COD file is too large, the above JAD and COD may not be able to download over the air. According to RIM, one way to know whether the COD file is too large is:

Try to open/extract the COD file with Winzip (or another unzipping tool) by right-clicking on the file, select Open, then select the zip utility to open the file with. If you see that the COD file contains multiple COD files within it (referred to as "sibling CODs"), then it is too large for download. If it can not be unzipped, then the COD file is small enough for OTA download.

There are two options to work around the above issue:

Option #1:

- UnZip the COD file with Winzip (or another unzipping tool). Suppose MyApp.cod is extrated to MyApp.cod, MyApp-1.cod, and MyApp-2.cod
- Rename those COD files to MyAppOTA.cod, MyAppOTA-1.cod, MyAppOTA-2.cod. The reason is that you don't want the OTA version to overwrite the desktop version (MyApp.cod).
- Modify the MyApp.jad file by replacing the following lines:

  ```
  RIM-COD-URL: MyApp.cod
  RIM-COD-Size: 213916
  ```

  with:

  ```
  RIM-COD-URL-1: MyAppOTA.cod
  RIM-COD-Size-1: 96680
  RIM-COD-URL-2: MyAppOTA-1.cod
  RIM-COD-Size-2: 59780
  RIM-COD-URL-3: MyAppOTA-2.cod
  RIM-COD-Size-3: 56380
  ```

  Note: RIM-COD-Size-<n> is the file size of each individual COD file
- Upload the OTA version (MyApp.jad, MyAppOTA.cod, MyAppOTA-1.cod, MyAppOTA-2.cod) to Handango server

Option #2: (From BlackBerry web site)

To work around this, you can build your application so that it consists of several smaller COD files. Place some of your object code or resources into a Library project. When built, this will produce multiple COD files that must be smaller than the 64k limit detailed above.

The steps required to build a Library project are detailed below:

- Create a second Project (and a third project if two is not enough) in the JDE and give it a new package name
- Right click on the Project, go to properties, and select "Library" for the application type
- Move some of your classes from the main application into this library project, to reduce the size of your main application
- The library project essentially becomes part of the runtime classes on the handheld. So in the main application, import this package and you can now use the classes
- Compile both applications. You will now see two distinct COD files (one for your application, and one for the library).
- Change your JAD file to allow the user to download the two COD files. Something like this:

```
RIM-COD-URL-1: myLibrary.cod
RIM-COD-Size-1: 25000
RIM-COD-URL-2: myApp.cod
RIM-COD-Size-2: 55000
```

Note: Always place the libraries at the top of the JAD list so they get downloaded first.