



Mobile Application Development



Blackberry Mobile Software Development

Rapidsoft Systems believes that high performing technical players are always surging ahead of the competition by doing one thing right – using information technology to build competitive advantage and market share. We use top rung technology and systems integration to provide technology R&D, IT diagnostics, systems integration, technical architectures, business intelligence and infrastructure consulting among others.

We work with more than 2500+ handsets and work with all major US, Canadian, European and Asian carriers. Among the applications that we have developed/ported are some very popular games, mapping applications, city guides, puzzle games, and corporate mobile applications. All these applications are widely distributed by Major US carriers (ATT, T-Mobile, Verizon, Sprint, US Cellular, Alltel etc.). We also work with major European carriers such as Vodafone, Orange, T-Mobile etc. We have over 20 years of experience in mobile technologies in designing mobile applications, mobile phones programming - some of us at Rapidsoft Systems even designed cellular phones, pagers, GSM/ CDMA base stations and cellular switching equipments themselves for companies like Motorola, Nokia and Panasonic.

Blackberry Applications Development by Rapidsoft Systems

Rapidsoft Systems is an approved software developer for RIMs very popular Blackberry phones. We have developed numerous applications for Blackberry Curve (8900), Blackberry Pearl (8800), Blackberry Bold 9000 and new Touchscreen based Blackberry Storm - 9530. As an approved vendor, we have credentials to sign your applications for installations and testing.

Developed by Research In Motion (RIM), the BlackBerry is a handheld wireless device whose major selling feature to date has been instant, secure, mobile access to email. New BlackBerry devices have cutting edge mobile features and support many new business and personal applications making them very popular with the business professional. While some BlackBerry devices are based on C++, many new ones support the Java 2 Platform, Micro Edition (J2ME), primarily because Java technology makes developing applications so much easier. Its platform-independence eliminates many porting woes and its automatic garbage collection lets developers concentrate on application logic rather than memory management. At Rapidsoft, we have been working with J2ME based applications with Blackberries in various application domains.

RIM's support for J2ME includes development of its own Java virtual machine (JVM)¹, which supports the Connected Limited Device Configuration (CLDC) and the Mobile Information Device Profile (MIDP). BlackBerry devices also come with additional BlackBerry-specific APIs, however, that enable developers to create applications that have the BlackBerry-native look and feel, and are more sophisticated than standard MIDlets developed using MIDP.

I. Examples of Some Blackberry Applications

Rapidsoft specializes in developing applications and games for all blackberry platforms. The images below show some sample blackberry games and applications. Rapidsoft can do similar games design and implementation for you.



1. Blackberry App 1



2. Blackberry App 2



3. Blackberry App 3

BlackBerry Extensions to J2ME

In addition to full support of standard CLDC and MIDP APIs, RIM provides BlackBerry-specific extensions that enable you to develop applications with the look and feel of native applications. The BlackBerry APIs provide tighter integration for BlackBerry devices, and access to BlackBerry features for user interface, networking, and other capabilities.

Generally, you can use CLDC, MIDP, and BlackBerry APIs together in the same application – with the notable exception of user-interface APIs. A single application should not use both the `javax.microedition.lcdui` and `net.rim.device.api.ui` packages. RIM's UI APIs provide greater functionality and more control over the layout of your screens and fields, but at a cost: Resulting MIDlets will be non-standard, so porting to other platforms will require more effort.

Your choices come down to these: You can develop your application as a standard MIDlet that will run on any MIDP-enabled device, or as a RIMlet, a CLDC-based application that uses BlackBerry-specific APIs and therefore will run only on BlackBerry devices but will give BlackBerry-native look and feel. For persistence, you can use BlackBerry's APIs or the MIDP RMS APIs; if you're already familiar with RMS, use it. For networking, use the Generic Connection Framework.



1. Development in Action



2. BB Mobile Development at Rapidsoft Systems

BlackBerry® Java™ Development Environment (BlackBerry® JDE) to bring your applications to a new level of function and design. Create your own custom applications and integrate them seamlessly with BlackBerry® smart phones. The following are just some of the advanced features of developing with the BlackBerry JDE.

BlackBerry Application Integration

Some of the most widely used JavaME applications were created by RIM—use these to your advantage by integrating your applications with the BlackBerry Browser, messaging, calendar, BlackBerry® Maps, camera, and search applications.

Always-On Background Threads

Unlike other mobile development frameworks, the BlackBerry application framework allows your applications to remain running in the background (in “sleep” mode). Use the BlackBerry server-side push technology with true mobile OS multi-tasking to create dynamic applications such as Instant Messaging (IM) clients and more. For more information:

Bluetooth Peripherals

The introduction of Bluetooth® functionality with BlackBerry smart phones in BlackBerry® Device Software v4.3 ushered in a new wave of possibilities for BlackBerry. Design applications that extend to various types of Bluetooth hardware including headsets, printers, writing devices, and GPS transmitters. Since both the Java environment and Bluetooth protocols follow industry standards, integrating these devices with a BlackBerry smart phone is far easier than you imagine!

Location-Based Services

Without a doubt, location-based services is one of the hottest topics in mobile development, and BlackBerry smart phones are at the front of the pack. Support for JSR 172 provides the GPS functionality (available on some BlackBerry smart phones) to incorporate location-based services into your applications.

Rich Multimedia

Take advantage of the rich multimedia capabilities of BlackBerry smart phones using JSR-135 (MMAPI) or the BlackBerry smart phone’s media player. Functionality includes audio playback and recording along with video playback and streaming.

Cryptography & Security API's

Security is a fundamental part the BlackBerry® solution. BlackBerry smart phones are equipped with industry-leading cryptography APIs, including a full-blown PKI and state-of-the-art elliptic curve support. You can add these capabilities in your own applications.

Long Term Support of Rapidsoft Developed Mobile Applications

Rapidsoft team will be available to provide long term technical support to customer on their Server or web applications. The similar support is available to all customers for their new mobile applications. We can test and certify the phones and will support any issues over the phone from the expert team in India. A support mechanism will be developed with your team.

Here will be key goals:

- **Evaluate all new phones as they are announced**
- **Add them to supported pages if deemed necessary**
- **Deal with customer issues for any particular phone**
- **Verify port or functionality as needed**
- **Add newer functionality to the phone application**

Rapidsoft Support For Dealing With US Carrier Certifications, Distribution and Application Deployments

US cellular environment is very different from Europe and Asia. Unlike Asia and Europe, US phones are locked phones and any application distributed must meet carrier guidelines, content policies and securities environments. With our experience of working with major carriers, we can hold your hand through complex maze of network operator policies of each US cellular operator. Our 20+ years of experience in cellular industry differentiates us with the crowd of novice developers and companies.

Rapidsoft can guide you with distributing your applications through various networks. Because of our relationships, we can deal with content guidelines, and security requirements of each carrier, and will guide you to acquire necessary credentials as applicable from various vendors such as Verisign, Thwate etc. as needed depending upon the phone and carrier requirements. Rapidsoft uses its own signed certificates on our phones for testing.

CDMA applications, if applicable, require True Brew Testing (TBT) certification before they can be offered for distribution and installations. Rapidsoft can guide you through complex process of Qualcomm mandated process of TBT certifications through testing laboratories.

Why Rapidsoft Systems:

With over 350+ software projects executed, you can simply count on our expertise, experience in giving you the right solution at absolutely lowest possible cost. If you would like more information, or want us to submit an estimate or a "no-obligation" quote for your project, contact us for more information.

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