Mobile Porting Services

Rapidsoft Systems has extensive domain knowledge when it comes to wireless and mobile application solutions. We like to build smart phone applications for cellular operators and handset manufacturers, game developers, as well as ring tone developers. We develop solutions using J2ME, Brew, iPhone, Palm Pre, Windows Mobile, Flashlite and Symbian platforms, that allow rapid deployment and sophisticated user functionality. We are one of the few mobile software development companies that can work across all major mobile platforms available today.

We have very strong mobile development team and we work across all platforms and phones.

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.

Rapidsoft Systems Mobile Porting Services

If you are like one of many mobile application producers, you face a major dilemma as to which platforms to support. The decision is not easy and it may have to be driven by business and commercial factors. But those are commercial decisions, and have nothing to do with technology difficulties in porting applications across mobile platforms. In this paper, we talk about some of the reasons why people will like to port applications from PC to mobile platform, and from one mobile platform to another. We also provide some ground rules that can help developers write software that is easy to port across platforms and hence will cut down the development cost.
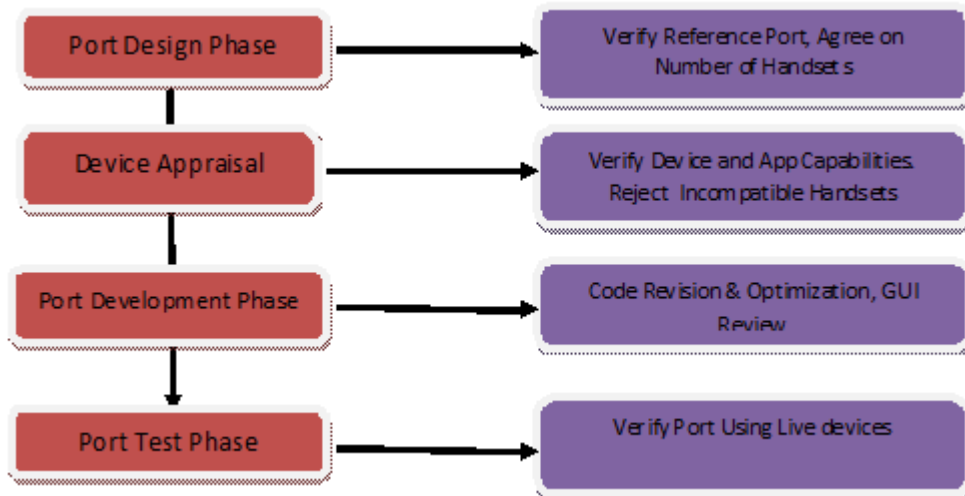

Rapidsoft Systems' Mobile Device Porting In Progress

As we mentioned earlier, BREW and J2ME are very different programming environment. The same is true for iPhone and Windows Mobile. They all provide vary different programming functionality. For example, J2ME has many programming APIs which have no direct or corresponding functionality in BREW or on iPhone. For example, there is an API called Sound, Player and Volume Control in J2ME; whereas there are no libraries available for the same in C/C++. So what can a developer do in such situations.

Porting Project Management and Applications Verifications

Porting include verifying application on the "live" handsets with each carrier one by one, noting behavior of the application and then making device specific changes to the software as needed. If your application is simple – we can port application on about 10-20 handsets per day (depending upon the device availability and it assumes that the reference build works) with a relatively small team. We use handsets from DeviceAnywhere for porting our mobile applications. A typical Mobile application porting can take about a few days per handset depending upon complexity of handsets and applications (e.g., mobile games porting takes lot of time).

Rapidsoft Systems Mobile Porting Process

Mobile Operator Supported by Rapidsoft

Rapidsoft Systems has been either a development partner or has been working for applications for major US cellular carriers for the last several years. We understand their content policies, their application deployment policies and security restrictions. If you are new to mobile applications areas - Rapidsoft team can provide you complete guidelines on development and deployment of your applications. Some of the network operators we work are shown below.


Mobile Operators Supported by Rapidsoft Systems

Minimizing Port Development Costs

With so much of complexity -how can we, at Rapidsoft Systems, then write software that minimizes porting cost for multi-platform development? At Rapidsoft Systems, by doing multiple projects on various platform we have developed this expertise over the years. This is learning by fire and experimentation since there is no guide exist that tells you how to go about such a task.

Rapidsoft Systems has developed a standard process for mobile software porting. This is shown below in the diagram.

Rapidsoft Systems Mobile Porting Process
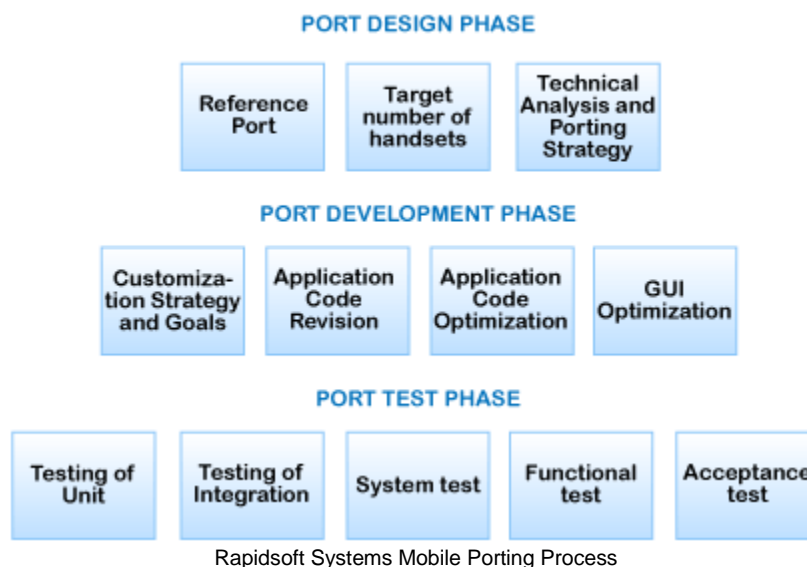
Mobile Application Porting Categories

There are 3 types of Ports (that we need to consider):

A) Standard platform to Mobile

Here the task is to port a PC game and make it available to mobile phones. Of course, there are many mobile platforms; we can choose PC to J2ME Phones porting. This is essentially a re-write of applications in most cases. This can be an expensive exercise depending upon the level of complexity of the game or mobile application.

B) Mobile Standard to Mobile Standard (Mobile Platform Change)

Here the task is to port games written for one mobile platform to another mobile platform. For example games written for J2ME platform to be ported to Brew handsets. Again, because of incompatibilities between the system, one has to write the application from scratch. This can be an expensive exercise depending upon the level of complexity of the game or mobile application.

C) Mobile Phone to Different Mobile Phone (Simple Application Porting)

This case involves porting mobile games or application between different phones. For instance, porting a J2ME game over a range of 100 J2ME handsets falls in this case.

Rapidsoft Systems' Porting Process Successes

For many mobile applications, it is necessary to verify them on a variety of real live handsets due to many subtle differences in the handsets technologies and various features.

For example, a reference J2ME implementation should normally work on all J2ME phones. However, due to differences how each vendor has fiddled or implemented JSRs, JVMs and individual device differences, it is possible that application may not work on every phone from a given manufacturer. In this case, you have choice to ignore the phone and list it as incompatible, or the software needs to be tested on this particular phone using a real network as a special case.

Rapidsoft has ported several major applications such as games, infotainment applications, medical applications, media applications both for intra-device porting as well as for inter-device porting. We have ported applications between iPhone, Blackberry, J2ME and Symbian devices. Besides we do support full Brew Applications development functionality - thus ensuring whatever the device we likely support it.

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.

Rapidsoft Systems, Inc,

(http://www.rapidsoftsystems.com)

Offices and Project Centers:

New York (USA), San Jose (USA), Singapore, New Delhi (India), Noida (India), Gurgaon, (India), Chennai (India), Mumbai (India)

For General Enquiries: info@rapidsoftsystems.com

Phones: 1-609-439-4775 (Sales Direct), 1-609-439-9060 (US East Coast, NJ Office)
1-408-829-6284 (Sales Direct), 1-408-890-2509 (US West Coast, San Jose Office)

USA Office Central PBX: 1-609-356-5121 (Multiple Lines -Support Sales, Service and Admin)
Fax: 1-831-855-9743