

We Stop Piracy of Mobile Applications!

The challenge:

Mobile applications have become a leading software segment with revenues expected to top \$11 billion by 2014 from US downloads only (Yankee Group).

According to Gartner, worldwide downloads of mobile application from online stores are expected to surpass \$21 billion by 2013, and app. store revenues from purchases and advertising are projected to top \$29 billion by that time.

The growth of the mobile applications market, however, is hampered by software piracy. According to MobileSoftwareWorld.com, in 2010 smart phone software developers lost around 70% in potential revenues. This means that almost three out of four mobile applications are downloaded without payment.

Mobile piracy poses a real problem for mobile software developers. Moreover, it also puts a ceiling on the functionality (and therefore price) of mobile applications.

The Android opportunity:

The Android environment, which is the fastest growing mobile segment, suffers most from piracy. The main reasons are: the open-source platform, which makes it harder to protect software, the ability of users to install applications without having to crack the phone (as they need to do with the Apple (iPhone)), and lack of scrutiny, like the one provided by Apple's "closed garden" approach.



Why Rascal?

The first solution that stops piracy of mobile applications.

Rascal develops an anti-piracy software solution called Smart-Phone guard (SPguard), geared specifically for the mobile environment. SPguard works by preventing full functionality of unauthorized copies of the protected software and is suitable for mobile software, including applications for smart phones like iPhone and Android, tablets, navigation tools and other mobile computers.

The core technology:

- SPguard scans a compiled code of an application, then selects small parts of the application code and removes them. This operation is done on the program binary code, not the source code.
- The removed parts are encrypted and ported to a secured and tamper-resistant environment. This secured environment can be either on the mobile device itself or on a secure remote server, hence, the removed parts cannot be reverse engineered or replicated.
- During runtime the application calls the protected code parts (as it would call a subroutine). If the application is authenticated as a legal copy, the removed code is executed in the secured environment when called. At no point is the removed code downloaded back to the client:

The ability of SPguard to automatically target and remove essential, small yet complex parts of the application code, is the core of the Rascal solution, and is based on novel patent pending algorithms. The bottom line is that SPguard ensures that only authorized users can utilize their legitimate application.

The main advantages of SPguard solution:

- **Enhanced security:** SPguard protection is tamper-resistant, cannot be reverse engineered and cannot be cracked (intractable).
- **Performance:** SPguard protection does not hamper application performance.
- **Non disruptive:** SPguard does not interfere with programming work since the protection process is done post development, on the application code and not on the source code.
- **Quick time to market:** SPguard process is automatic, easy to deploy thus enabling quick and easy protection of software.

About Rascal and the management team:

Rascal was established by a group of IT security entrepreneurs led by Dr. Shlomit Pinter, a prominent innovator in the field of compiler technology and security protocols. Dr. Pinter holds a Ph.D. in Computer Science from Boston University, served as a faculty member at the Technion, a research specialist at MIT and research staff member at IBM research Lab in Haifa. Dr. Pinter also worked as a consultant to the Mathematics Research Center at AT&T Bell Labs.

The Company CEO is Mr. Noam Pa'il, a 20 year veteran of the international IT industry. Mr. Pa'il held senior business positions at various IT companies: Sales Director at ARX, VP Biz-Dev & Sales at V-Secure, CEO of Cobrador IT Security, VP Biz-Dev & Marketing at Targetize Mobile software and Sales Director at Magic Software Enterprise. Mr. Pa'il holds a B.Sc. in Industrial Engineering & Management from FDU USA.

Rascal currently operates within the Granot Ventures Incubator. The company is at the post POC stage, and is now reviewing Beta trials as well as joint ventures with strategic application software providers for the Smart-Phone.



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