# Entrust<sup>®</sup> Securing Digital Identities & Information

# Entrust IdentityGuard Mobile Software Development Kit

Mobile devices are now the centerpiece to consumer lifestyles. From email communication, social networking, banking, commerce, shopping and personal entertainment, mobile devices have enabled a radical shift in the manner in which organizations can now service their customers.

Financial institutions are certainly no exception to this transformation. In fact, regulatory compliance, industry mandates and brand integrity typically place financial institutions in one of the most difficult positions. These organizations strive to provide mobile services while ensuring customer identities and data are protected.

But the growth in mobile devices and the drive to move more services to the mobile channel has also increased incidences of fraud targeting these devices. Whether simple rogue text messages, fictitious billing scams, or more malicious attacks using malware installed on the device, the number of attacks are increasing at an alarming rate.

#### **Building Confidence**

For many, the lack of security on these devices is a major inhibitor to their adoption of mobile banking. As banks look to address these issues and capitalize on the opportunities of the mobile environment, they are also challenged by the need to bolster customer confidence in online banking.

Organizations seek methods to properly enhance the security of transactions on these devices in a manner that is simple, quick and un-obtrusive for the user. Yet the proliferation of mobile devices offers financial institutions an opportunity to leverage the device itself to strengthen both online and mobile security, while addressing customer demand for extended mobile banking services.

## Simple & Strong Mobile Authentication

With Entrust's easy-to-use software toolkit, it's simple to leverage the Entrust IdentityGuard versatile authentication platform into mobile banking applications — bringing advanced identity-based security to mobile and online channels.

The Entrust Software Development Kit (SDK) enables banks to seamlessly embed strong authentication into an application's mobile session without requiring the user to input a one-time passcode (OTP). This provides a simple and secure approach to protect a user when their password has been compromised.

#### **Product Benefits**

 Provides financial institutions with a simple approach to deploying two-factor authentication to the mobile session without impacting the user experience

SECURI

- Leverages the mobile device to provide strong two-factor authentication and stops advanced malware attacks, such as man-in-the-browser
- Enhances the security of transactions on mobile devices in a manner that is simple, quick and un-obtrusive for the user
- Provides a single mobile application to meet mobile and online security needs
- Support for leading mobile platforms including Apple iOS, RIM BlackBerry, Google Android and Microsoft Windows Mobile (6.0-6.5)
- Customizable to include organizationspecific branding for increased user acceptance

It also enables financial institutions to incorporate additional security features into mobile banking applications to enhance security for the online channel, including soft tokens and outof-band transaction verification capabilities.

Integrating strong authentication and transaction verification into a mobile application is one of the most effective forms of out-of-band transaction verification approaches. While outof-band transaction verification using SMS or voice dial-out transaction provides some protection against fraud attacks, these approaches rely on baseline telecommunication technology that has already been compromised.

Entrust employs a highly secure, encrypted protocol between the server and the mobile device, to provide the most secure protection against malicious online threats.

#### Lead the Market, Enhance the Brand

A branded mobile application provides a simple, easy-to-use experience for customers. And embedding OTP technology in a mobile device is more cost-effective than purchasing, issuing and deploying hardware tokens because it leverages devices that are already widely deployed — increasing user acceptance.

This transparent approach increases end-user value and helps build a consistent brand between the mobile application and the bank's online presence. The net result is a mobile application platform that gives financial institutions an edge over competitors with progressive, cross-channel security features that are simple to use and effective against today's most advanced online fraud threats.

#### **Designed for Developers**

For software developers creating mobile applications, security is often a secondary concern. But because of its straightforward APIs, the Entrust IdentityGuard Mobile SDK allows developers to easily design and implement uniquely branded mobile applications without sacrificing usability or transparency for end-user adoption.

The SDK provides a number of capabilities that are invoked through a simple native platform API. With support for Apple, Google Android, RIM BlackBerry and Java platforms, the toolkit delivers a common API framework that allows developers to leverage integration efforts across multiple development environments.



Figure 1: Entrust IdentityGuard Mobile SDK architecture overview



#### Entrust IdentityGuard Mobile — Advantages

**Secure.** Proven mobile authentication that helps defeat advanced malware, including man-in-the-browser attacks. Key to interoperability, it leverages time-based, OATHcompliant OTP authentication and out-of-band transaction verification on leading mobile devices.

**Easy to Use.** The most convenient, easy-to-use strong mobile authentication method available today, Entrust IdentityGuard Mobile enables out-of-band transaction verification, OATH-compliant signatures and even a method to immediately report suspicions account behavior.

The end-user isn't forced to enter any data within the smartphone application, only a straightforward Web confirmation code to complete the transaction online.

**Portable.** Enables use of leading smartphones to boost authentication strength by not requiring the user to carry an extra hardware device or have access to a specific computer.

**Cost-Effective.** Unlike physical options, Entrust IdentityGuard Mobile leverages the user's existing phone; there's no extra physical hardware to buy and deploy. In addition, Entrust IdentityGuard Mobile delivers transaction notifications directly to the phone without the use of SMS.

**Flexible.** Supports the use of both simple time-based OTP as well as out-of-band transaction signatures. Also supports multiple identities within the same application, enabling organizations to fully leverage the deployed application (e.g., a banking ID as well as a corporate remote access ID).

**Broad Platform Support.** Supports the leading mobile smartphone platforms on the market today, including Apple iOS, RIM BlackBerry, Google Android, and Microsoft Windows Mobile (6.0-6.5).

**Standards-Compliant.** Uses the OATH standard for time-based, one-time passcode and transaction signature generation.

**Customizable.** Includes the ability to add organizationspecific branding to each identity, improving usability and reinforcing brand image.







### Entrust & You

More than ever, Entrust understands your organization's security pain points. Whether it's the protection of information, securing online customers, regulatory compliance or large-scale government projects, Entrust provides identity-based security solutions that are not only proven in real-world environments, but cost-effective in today's uncertain economic climate.

The smart choice for properly securing digital identities and information, Entrust solutions represent the right balance between affordability, expertise and service. For more information on Entrust IdentityGuard Mobile and the platform's SDK, contact the Entrust representative in your area at **888-690-2424** or visit **entrust.com/mobile**.

#### **Company Facts**

Website: www.entrust.com Employees: 359 Customers: 5,000 Offices: 10 globally

#### Headquarters

Three Lincoln Centre 5430 LBJ Freeway, Suite 1250 Dallas, TX 75240 USA

#### Sales

North America: 1-888-690-2424 EMEA: +44 (0) 118 953 3000 Email: entrust@entrust.com

#### **About Entrust**

A trusted provider of identity-based security solutions, Entrust secures governments, enterprises and financial institutions in more than 5,000 organizations spanning 85 countries. Entrust's award-winning software authentication platforms manage today's most secure identity credentials, addressing customer pain points for cloud and mobile security, physical and logical access, citizen eID initiatives, certificate management and SSL. For more information about Entrust products and services, call **888-690-2424**, email **entrust@entrust.com** or visit **www.entrust.com**.

Entrust<sup>®</sup> Securing Digital Identities & Information

Entrust is a registered trademark of Entrust, Inc. in the United States and certain other countries. In Canada, Entrust is a registered trademark of Entrust Limited. All other Entrust product names and service names are trademarks or registered trademarks of Entrust, Inc. or Entrust Limited in certain countries. All other company names, product names and logos are trademarks or registered trademarks or trademarks of their respective owners. © 2012 Entrust. All rights reserved.