

RSA[®] Adaptive Authentication

Protecting mobile transactions

The mobile landscape

Even though accessing products and services remotely is not a new concept, advances in technology continue to create new opportunities – and new channels – for consumers to communicate, transact and work. Today, the mobile channel is a prime example. Particularly suited for an on-the-move society that demands convenience, mobile devices – including laptops, mobile phones, smart phones, tablets and PDAs – free consumers from the confines of traditional storefronts and geography by providing anywhere-anytime access on a 24x7 basis.

Organizations are responding by moving products and services to this channel, delivering specialized small-screen adaptations for web browsing, and developing apps that supply mobile functionality and brand-based services. In the first half on 2014, 27% of all banking transactions originated from a mobile device – which was a 50% growth from the same time frame a year prior¹.

Despite the convenience offered to end users, the mobile channel continues to be vulnerable to a myriad of threats similar to those witnessed in the online channel such as phishing and malware. Cybercriminals are paying attention to the transaction growth in the mobile channel and are creating opportunity for themselves. In fact, 32% of all fraudulent transactions in the first half of 2014 originated from the mobile channel². It is vital, therefore, for organizations to instill trust and confidence in the mobile channel by applying the same level of protection their customers have come to expect when conducting transactions in the online channel.

RSA Adaptive Authentication for mobile

RSA Adaptive Authentication is a comprehensive, risk-based authentication and fraud-detection platform that provides cost-effective protection for an entire user base. The Mobile Protection module is an extension of RSA Adaptive Authentication technology, allowing new or existing customers to easily extend strong risk-based authentication to secure transactions in the mobile channel. RSA Adaptive

Advanced threats are starting to target mobile users making it vital for organizations to build protection in to the mobile channel from the start.

Authentication protects multiple types of mobile channels including mobile browsers, WAP browsers and the more sophisticated, mobile-specific functionality of mobile applications.

The RSA Risk Engine is at the heart of the RSA Adaptive Authentication Mobile Protection module. The Risk Engine examines a variety of indicators, behind-the-scenes, to determine a user's level of risk. Once the transaction details are analyzed, the Risk Engine generates a score between 0 and 1000, which represents the level of confidence associated with the legitimacy of the user and the transaction. Some of the indicators the Risk Engine considers include:

- **Mobile device identification.** This includes characteristics of the mobile device such as the device model, language, screen size, system version and many more. This allows the risk engine to build a profile of the device and flag abnormal devices for that user.
- **Location awareness.** Location gathered through Wi-Fi, cell-tower triangulation and GPS and used to identify high risk, abnormal locations or illogical ground speeds.
- **Behavioral profile.** This includes an analysis of the transaction being conducted including the amount and payee and whether or not it is typical behavior for the user.

The Risk Engine also runs a match against the RSA® eFraudNetwork™ database – a store of fraud patterns shared by RSA's network of customers, partners and third-party contributors worldwide. The eFraudNetwork service provides direct feeds to the Risk Engine so that when a transaction or activity is attempted from a device or to a fraudulent account that appears in the eFraudNetwork data repository, it will be flagged as high-risk and prompt additional authentication. In addition, Jailbroken/Routed and Emulated devices are identified to provide context to better decide if a transaction is fraudulent or genuine.

RSA Adaptive Authentication also considers organizational policies in determining the level of risk associated with the user or transaction. Organizations can also use the RSA Policy Manager to set custom risk policies which translate into decisions and actions through the use of a comprehensive rules framework that can be configured in real-time. The Policy Manager allows organizations to develop a true cross-channel strategy by applying risk policies and acceptable risk levels across the multiple channels where user access is enabled. For example, an organization might set a lower risk threshold for the online channel when considering it is common for users to access their account from multiple computers yet set a higher risk threshold for mobile devices as users are most likely to access an account from the same mobile device all the time.

In most situations, users are authenticated invisibly, eliminating the impact on user experience. Only high-risk and unusual scenarios that fall outside a user's normal pattern of behavior will be challenged. In these cases and depending on the organization's policy, users can be challenged with a variety of step-up authentication methods such as classic challenge questions or a one-time-password. In addition, the RSA Multi-Credential Framework allows

Current trends in mobile transactions and banking

In the first half of 2014:

- 27% of all transactions originated from a mobile device*
- 32% of all fraudulent transaction originated from a mobile device*

*

In 2013, there were 145K +new mobile malware strains vs. 40K in 2012; 98% of malware targeting Android OS**

*RSA AFCC

**Kaspersky Labs

organizations to customize their Adaptive Authentication deployment with additional authentication methods to meet the needs and risk level of all users via RSA Professional Services, “in-house” or through third parties.

Adaptive Authentication offers integration through a web services call and a Software Development Kit (SDK) that allows developers to embed the data collection directly into their mobile applications. Supported platforms include Apple iOS, Android OS, Windows and Blackberry OS. Developers of mobile applications for business, banking, e-commerce and data access can now help increase security and confidence by integrating strong risk-based authentication in their mobile offerings.

Extend your existing investment to mobile

RSA Adaptive Authentication is used today by over 8,000 organizations across multiple industries to protect more than 450 million user identities and 50 billion transactions worldwide. In addition to proven results, RSA Adaptive Authentication is flexible and can be deployed in two ways – as an on-premise installation that uses existing IT infrastructure or as a software-as-a-service model.

As more organizations move products and services to the mobile channel, protecting against fraud and advanced threats will be important to build customer trust. The RSA Adaptive Authentication Mobile Protection module gives organizations the ability to authenticate end-users in different ways, depending on their activity type, transactional details and mobile device being used. RSA Adaptive Authentication also enables organizations to set unique risk policies for other channels as well – such as the Web channel – and realize the unique benefits of a true multi-channel fraud protection strategy.

About RSA

RSA offers business-driven security solutions that provide organizations with a unified approach to managing digital risk that hinges on integrated visibility, automated insights and coordinated actions. RSA solutions are designed to effectively detect and respond to advanced attacks; manage user access control; and reduce business risk, fraud and cybercrime. RSA protects millions of users around the world and helps more than 90 percent of the Fortune 500 companies thrive and continuously adapt to transformational change.

For more information, go to rsa.com.

The Adaptive Authentication Mobile Protection module allows existing customers to easily extend the same protection they offer their online users to their mobile users.
