RSA® ADAPTIVE AUTHENTICATION FOR ECOMMERCE
RISK-BASED 3-D SECURE FOR CREDIT CARD ISSUERS

3-D Secure is an anti-fraud protocol adopted by Mastercard, American Express, Visa, and JCB International that offers another layer of protection to online payments. In the 3-D Secure protocol, each time a registered cardholder uses an enrolled credit card at a participating merchant, that cardholder is authenticated before the transaction can proceed. Authentication in a traditional 3-D Secure environment is based on a password that cardholders create when they enroll their credit cards, and every transaction is challenged.

The 100% challenge rate in traditional 3-D Secure negatively impacts issuers, merchants, and cardholders alike. Any activity that interrupts the purchase flow increases the likelihood of shopping cart abandonment, which reduces revenue for both issuers and merchants. The negative experience created when cardholders forget their passwords also increases the likelihood of abandonment, and reduces use of that particular card, further impacting issuer revenue.

Risk-based 3-D Secure offers high fraud detection rates through strong authentication while eliminating the poor cardholder experience that negatively impacts issuer revenues. With risk-based 3-D Secure, credit card issuers can reduce fraud while protecting revenues.

HIGH FRAUD DETECTION, LOW INTERVENTION
Adaptive Authentication for eCommerce is RSA’s 3-D Secure Access Control Server for credit card issuers and processors. The RSA Risk Engine is at the core of the solution, enabling Adaptive Authentication for eCommerce to silently authenticate cardholders and challenge only high-risk customers (global average of ~5% of all transactions). The risk engine’s high level of accuracy drives a very high fraud detection rate while maintaining a very low false positive rate.

The graph above shows RSA Adaptive Authentication for eCommerce’s average fraud detection rate of 96% and low genuine-to-fraud ratios (i.e., number of genuine transactions challenged for each confirmed fraudulent transaction). RSA Adaptive Authentication for eCommerce can significantly reduce fraud losses while challenging very few legitimate customers. Not only does this improve cardholder experience and protect issuer revenue, it drives down operations costs associated with reviewing transactions and handling inquiries from genuine customers.

TRANSPARENT AUTHENTICATION FOR A FRICTIONLESS CARDHOLDER EXPERIENCE
Utilizing the 3-D Secure protocol and infrastructure, RSA Adaptive Authentication for eCommerce enables merchants and issuers to provide a consistent, secure online shopping experience for cardholders while mitigating the risk of chargeback losses.
RSA Adaptive Authentication for eCommerce allows issuing banks to provide Verified by Visa® (VbV), Mastercard SecureCode® and Identity Check®, and American Express SafeKey® support without negatively impacting their cardholders’ shopping experience. Using the RSA Risk Engine, Adaptive Authentication for eCommerce transparently evaluates each transaction in real-time and determines the probability that the transaction is fraudulent. Only cardholders engaging in transactions determined to be high-risk will be challenged to authenticate, leaving approximately 95% of transactions from participating merchants unimpeded by the 3-D Secure verification process. In addition, because of the transparent layer of authentication, cardholders are no longer required to go through a VbV, SecureCode, Identity Check, or SafeKey enrollment process (the issuer enrolls entire card BIN ranges beforehand) or remember a password (a range of step-up authentication methods including one-time password and biometrics are available). This leaves genuine cardholders to transact online uninterrupted.

**The way we measure the success is that we’re able to process many more sales, we have our fraud losses under control, and our customers are happy with the solution.**

Vice President and Manager Fraud Risk Control Large Bank

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**THE ANALYTICS APPLICATION**

RSA Adaptive Authentication for eCommerce’s Analytics Application provides card issuers with full visibility into their 3-D Secure transaction data. The Analytics Application puts daily and monthly monitoring metrics, fraud detection rates, and rule performance data at the issuer’s fingertips, so that they can align the solutions with their risk tolerance and business priorities.

The dashboard is populated with reports that

- Visualize and highlight trends and outliers
- Allow viewing of data at various levels of granularity
- Offer a flexible and dynamic interface for on-the-fly changes

Issuers can also export information from the dashboard into a range of formats that can be consumed by external applications.

The Analytics Application provides issuers with more insight into their threat landscape, so they can make more informed decisions around policy management rules, risk score thresholds, and other configurable variables.
3-D SECURE 2.0 – THE NEXT GENERATION

The 3-D Secure protocol is evolving. EMVCo, the standards body tasked with developing the new protocol, released the next generation of 3-D Secure (EMV 3-D Secure, 3-D Secure 2.0, or simply “3DS 2.0”) in October of 2016. The 3DS 2.0 protocol seeks to promote a frictionless shopping experience for cardholders by leveraging risk-based authentication technologies – an approach RSA pioneered in 2008. As an EMVCo Technical Associate, RSA provided input to 3DS 2.0 which was reflected in the specifications.

RSA looks forward to enabling new functionality within our platform, and will continue to work directly with our customers and EMVCo on initiatives that provide card issuers with transparent, password-free authentication.

ABOUT RSA

RSA® Business-Driven Security™ solutions provide organizations with a unified approach to managing digital risk that hinges on integrated visibility, automated insights and coordinated actions. With solutions for rapid detection and response, user access control, consumer fraud protection and integrated risk management, RSA customers can thrive and continuously adapt to transformational change. For more information, visit rsa.com.