

# CA Risk Analytics Network



## At a Glance

CA Risk Analytics Network is the only real-time behavioral analytics network that instantly blocks card-not-present (CNP) fraud for its members, while providing a frictionless experience for genuine cardholders. Issuers currently using CA Risk Analytics can opt in to the network to gain a 25 percent savings in fraud losses or 35 percent reduction in false positives compared to single issuer data.\* Our patented neural network model uses advanced analytics and machine learning to adapt to fraud patterns in real time by leveraging transaction intelligence and data across the global network. When fraud is detected on a card or device, the risk score is updated in real time to reflect the risk for all network members.

### Key Benefits/Results

- **Reduce fraud losses** by an average of 25 percent, improving overall transaction revenue.\*
- **Reduce false positives** by an average of 35 percent, improving overall customer experience.\*
- **Limit the window of uncertainty** to an average 5 milliseconds, virtually eliminating the vulnerability between transactions.

### Key Features

- **Advanced neural network consortium model.** Use transaction intelligence and data across a consortium of card issuers to fight fraud collaboratively.
- **Multidimensional view of transaction behavior.** Analyze and compare connections among card and device activities as they are happening across banks and geographies.
- **Instant model score update.** Behavioral profiles are updated in real time for the model to learn from and adapt to fraud patterns instantly.
- **Support for 3-D Secure 2.0.** Leverage new transaction data from advancements in the market, like app-based purchases on mobile and other consumer devices, and traditional, browser-based e-commerce channels.

## Business Challenges

Issuers continue to find themselves victims of ongoing attacks perpetrated by fraudsters looking to rapidly exploit CNP transactions. The challenges facing issuers include reducing time to detection and improving the fraud detection rate to reduce fraud losses, while at the same time keeping the online shopping experience frictionless.

Typically, fraudsters will automate their attacks to get the most value from their stolen cards before the cards are identified and blocked by the bank. They often orchestrate fraudulent transactions using these stolen cards from multiple issuers; however, the transactions are typically carried out from the same device. In a study conducted by the CA Technologies data science team, data showed that only 13 percent of transactions associated with a single device are from more than one card, while 47 percent of all **fraudulent** transactions are associated with a single device that used more than one card.\*

Without access to a real-time consortium model, issuers miss out on all fraudulent transactions coming through from cards from multiple issuers, via the same device. With CA Risk Analytics Network, issuers close this gap—by more accurately detecting fraud, faster, with fewer instances of false positives—leveraging shared transaction data, which keeps the raw, transactional information confidential and the online shopping experience frictionless.

## Solution Overview

CA Risk Analytics Network enhances the fraud-fighting capabilities of our existing CA Payment Security Suite. It is a SaaS, data-driven offering that acts on fraudulent transactions in true real time by leveraging transactional intelligence and data from a consortium of participating network members. The data shared among the network community helps prevent both known and suspected fraud, faster, which also enhances the customer experience. This helps boost top-line revenue, while improved fraud detection reduces potential losses for better bottom-line results.

Issuers that opt in to the network will realize these benefits immediately, and easily. There are no major changes or complex configurations required to reap the benefits of the solution. The real-time network model is activated behind the scenes and scoring rules are updated via CA Risk Analytics, if required. CA Risk Analytics Network is monitored by the CA data science team during the first two weeks of live operation to ensure a seamless implementation and zero impact to cardholders.

## Critical Differentiators

### **The only real-time behavioral analytics fraud prevention network.**

CA Risk Analytics Network uses a patented, advanced neural network model and machine learning to learn from and adapt to fraud patterns in real time. By analyzing and comparing multiple dimensions of large-scale data—both recent and historical, across banks and geographies—the network helps issuers detect anomalous behaviors for the cardholder, the device or both.

**Real-time learning and instant risk score update.** Behavioral profiles, for both card and devices, are updated in real time for the network model to learn from and adapt to fraud patterns in real time. It then gathers and uses the behavioral information to accurately and quickly determine which transactions are risky and which aren't. In other words, the model learns to distinguish normal patterns from fraudulent patterns by combining all the real-time information available into an optimized view of fraud and non-fraud in the high-dimensional space of the transaction and the histories of the given card and device. All the while, the model uses that data in a secure area where the raw information is never shared or visible across clients.

**Experience.** CA Risk Analytics Network taps into the largest network of global cardholders and financial transaction data. Plus, CA has the most experienced data science team with over decades of expertise in financial fraud/risk network intrusion, marketing analytics, modeling techniques, big data and more. The team prides itself on devoting time to continuous research, ensuring the best approaches support our customers' goals.

## Related Products/Solutions

**CA Payment Security Suite.** Real-time intelligent risk assessment for 3-D Secure transactions using an advanced neural network fraud model and flexible field-programmable rules to help minimize the risk and monetary loss from online payment fraud.

For more information, please visit [ca.com/risk-analytics-network](https://ca.com/risk-analytics-network)

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\* Data based on applying the new CA Risk Analytics Network fraud model to historical customer data over a 90-day period.