SAFE—Shape AI 
Fraud Engine

Shape’s converged solution for application security and fraud mitigation via a real-time, closed-loop engine that delivers the outcome of fraud mitigation.
Reducing online fraud against web and mobile applications is difficult. Despite having numerous fraud tools, most enterprises still lose millions to fraud annually. Worse, fear of fraud also causes enterprises to impose friction on legitimate users. Shape AI Fraud Engine (SAFE) gives fraud teams a new and powerful solution to detect and eliminate online fraud.

Less is More: Less Fraud, Less Friction, Less Effort

SAFE delivers three outcomes which augment existing fraud tools:

- SAFE delivers the outcome of “less fraud” (often 2x less) than other systems.
- SAFE delivers less friction for legitimate users by eliminating excess MFA challenges.
- SAFE requires less effort from fraud teams to operate.

Less fraud, faster. SAFE is a closed-loop engine that blocks fraud in real time. SAFE detects and stops account takeover, malicious account creation, exploitation of stolen accounts, and other fraudulent activities. In production Fortune 500 environments, SAFE identifies 2x to 5x more fraud per month than current solutions, while maintaining false positives at pre-existing baseline levels.

Less friction for legitimate users. SAFE imposes less friction on legitimate users by reducing multi-factor authentication (MFA) challenges for legitimate users. Most large B2C enterprises issue thousands of MFA challenges to visitors who might be fraudsters because legacy fraud tools fail to properly segment good users from bad. The evidence of this is that typical organizations observe that roughly 90% of users successfully complete the MFA challenge. This means that enterprises are imposing significant friction on legitimate users every day. SAFE measures and reduces this number, aiming to deliver no more than 10% successful completion of MFAs; in other words, 90% of the MFAs recommended by SAFE go to likely fraudsters who fail to complete the challenge (thus minimizing friction for legitimate users).

Less effort for fraud teams, quantitatively. Most fraud tools deliver raw ingredients like device properties and risk scores, and expect enterprises to use these ingredients to write and maintain complex rules. SAFE actively blocks fraud in real time without the need to write rules. SAFE also measures and reduces the number of transactions flagged for review, aiming to drive this number down by 50% vs prior baselines.
Figure 1: Shape AI Fraud Engine delivers fraud prevention outcomes-as-a-service. SAFE delivers a closed-loop, real-time solution for reducing fraud and improving user experience.

**How SAFE Detects Online Fraud**

Powered by Shape’s AI engine and data-driven insights generated by evaluating over a billion transactions a day, SAFE provides a real-time engine that identifies fraudster activity at all points of the kill chain, such as login, account create, account grooming, and other activities that precede the final step of fraud.

**Understanding intent.** SAFE evaluates each online transaction across a set of telemetry, environmental and behavioral data, starting from the first time a visitor arrives at any SAFE-protected web or mobile application, through account creation or login, and continuing through all aspects of the user’s journey. SAFE can even connect context across different browsers and devices used by the same user. Shape also leverages observations across its entire network to accurately determine user intent.

**Closed-loop AI.** SAFE feeds transaction data and enterprise fraud files into an AI engine. The result is a single, high-fidelity, real-time outcome. SAFE delivers fraud reductions immediately, and continues to drive fraud down more and more in each successive month as the engine consumes more data. This results in more blocked fraud, reductions in the number of transactions that need any investigation, and less friction for legitimate users.
Fraud Prevention Outcomes-as-a-service

SAFE delivers a closed-loop system that delivers fraud prevention outcomes-as-a-service and relieves much of the investigation and management burden from overly stretched fraud teams. Shape maintains and tunes the solution, delivering real-time decisions to applications and an ever-decreasing number of incidents for investigation to fraud teams.

Figure 2: SAFE leverages a unique set of data from each application session, including behavioral signals, to accurately determine in real time if user intent is malicious or not.

Protect Your Online Business Today

Shape has developed the world’s first converged, AI-powered platform that maximizes revenue-improving topline revenue and reducing bottomline losses by delivering application security, anti-fraud and user experience outcomes for web and mobile applications. Learn how Shape can deliver these outcomes for your business today.

To learn more, contact your Shape Security or F5 representative, or visit shapesecurity.com or f5.com.