

# Achieve Compliance Without Friction

## 3-D Secure 2 & Behavioral Biometrics



### WHY BEHAVIOSEC?

- Meet PSD2 & SCA regulations
- Achieve seamless transactions across worldwide merchants
- Add frictionless SCA to your 3DS2 for frictionless payments
- Detect Card-Not-Present fraud
- Stop bots and malware

**Behavioral biometrics** collect and analyze the unique attributes of live human-digital interaction to verify a digital identity is who it claims to be.



Don't let compliance become a mandate for slow and complicated transactions. Meet 3DS2 and SCA requirements with superior customer experience and insights from BehavioSec®.

### 3-D SECURE 2 & SCA – COMPLIANCE VERSUS CONVENIENCE

With over 73% growth in global adoption from 2020<sup>1</sup>, 3-D Secure is rapidly becoming the new standard for secure payments, and is an authentication protocol created to improve security and reduce fraud in online payments. 3DS2 is an enhanced version of 3DS intended to remove user experience friction from the payment process by offering improved authentication and checkout interactions. The 3DS2 protocol can also be used to meet Strong Customer Authentication (SCA) for regions that require it.

To support 3DS2, merchants must provide additional transactional data so that a card issuer's Access Control Server (ACS) can determine transaction legitimacy. If the data provided matches the stored information, the transaction proceeds without requiring more user input. For 3DS2 to comply with SCA, the authentication process must contain two of the three acceptable elements.

Unfortunately, by adding more authentication elements, SCA is also known to detrimentally and measurably impact the consumer experience and business bottom lines. According to a Baymard study<sup>2</sup>, cumbersome account creation and complex checkout processes are two of the top three reasons shoppers abandon online carts.

Luckily, due to technology advancements like behavioral biometrics, compliance doesn't have to be a mandate for poor user experience.

### FRICTIONLESS 3DS2 & SCA WITH BEHAVIORAL BIOMETRICS

In full accordance with (EU) Directive 2015/2366 Article 97, BehavioSec helps you comply with 3DS2 and PSD2's SCA elements without harming the customer shopping transaction experience.

**BehavioSec** is the industry pioneer and technology leader in behavioral biometrics for continuous authentication. Industry recognized and working with Global 2000 companies worldwide, our proven solution integrates with your platforms, applications, and services to continuously track and profile how your users type, swipe, and engage.

Using our behavioral biometrics platform as a frictionless multifactor inherence element, – something you are – you can now meet 3DS2 and SCA with a more frictionless experience while validating with confidence that your online customers are who they

## SOLUTIONS



### Card Issuers

Implement SCA across devices without friction while gaining insight into who is behind the transaction.

Our solution offers SCA-compliant verification and rich fraud insights through existing 3DS2 data flows, giving your customers safe and seamless experiences.



### Payment Service Providers

Add BehavioSec to your 3DS2 protocol for SCA inference with as little behavioral input as a single, one-time passcode.

The inference profile can be safely stored at the Access Control Server (ACS) and allow for secure transactions across merchants worldwide.



### Merchants

Deploy BehavioSec throughout the customer journey for continuous authentication and improved fraud detection.

With 3DS2, you can send more data to the ACS provider, aiding SCA compliance while removing checkout friction for your customers.

say they are – without driving them away.

## SUPERIOR IDENTITY, SEAMLESS CHECKOUTS, LESS CHURN

Your customer protections and user experience should be your competitive advantage. Sadly, complicated authentication and validation procedures that force customers to abandon shopping carts and sites yield the opposite results. Now you can meet strict compliance requirements, implement SCA, and improve customer experience by invisibly verifying identities with another independent element.

How does this work? 3DS2 lets merchants and payment providers send richer data on each transaction to card issuers for validation. This includes:

- Purchase data like a shipping address.
- Contextual data like a device ID.
- Transactional information from previous purchases.

The enforcement of SCA across Europe makes payment protocols like 3DS2 more important than ever, as the rich data flow it allows can be used to meet SCA without negative impact on eCommerce conversion rates.

Using our extensive data expertise across billions of transactions over many years, BehavioSec now offers a seamless 3DS2 solution that is fully compliant with GDPR, PSD2, and SCA. The solution captures behavioral biometrics inputs and device information and shares a score using standard 3DS2 communication flows – all while keeping the customer disruption-free during the merchant's checkout flow.

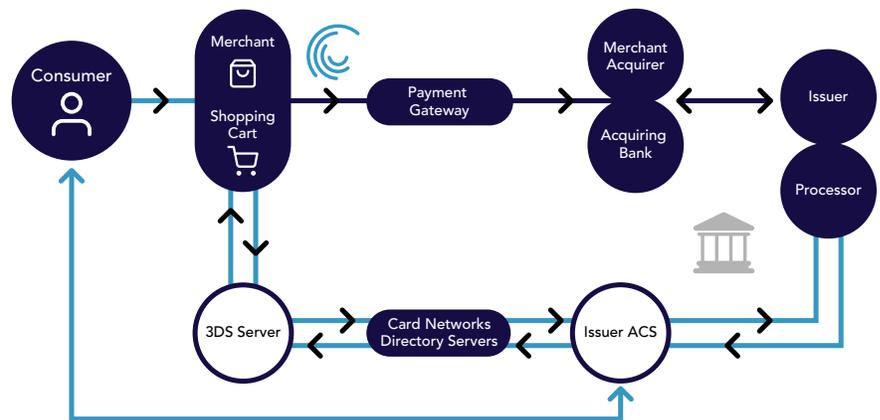


Figure 1 – 3DS2 authentication flow with BehavioSec

With behavioral biometrics profiles stored at the ACS, any 3DS2 merchant can securely and transparently share information captured during consumer engagement and complete SCA verification without adding friction to the customer experience.

In short, with BehavioSec you can:

- Reduce customer churn and cart abandonment rates.
- Detect card-not-present fraud, bot automation, and remote access attacks.
- Validate users regardless of device or location changes.

## BUILDING ON SEAMLESS DIGITAL PAYMENTS

A first-rate eCommerce experience is necessary for merchants to thrive across online environments. Both 3DS2 and SCA can have UX drawbacks if not implemented with care. Requiring unnecessary customer inputs can add friction to the checkout flow and cause customers to abandon the purchase – turning mandates meant to protect customers into experiences they wish to avoid.

BehavioSec helps you comply with 3DS2 and SCA across eCommerce merchants worldwide and provides a foundation for success in a digital-first world. Instead of forcing customers to create accounts or leave the merchant flow to verify by text message or email, payments that require SCA can get authenticated through a simple, invisible behavioral input – without the consumer ever noticing that they were securely and safely verified.

### HOW IT WORKS

Our solution installs as software components on-premises or in your Cloud environments. We then integrate your applications and services with our backend engine using our SDKs that are fully compliant with the 3DS2 framework.

Once deployed, BehavioSec collects behavioral data when a customer goes through any 3DS2 verification step, and then transmits through 3DS2 standard communication flows. As the user interacts, our platform continuously and silently analyzes behavioral signals in our machine learning engine.

Regardless of merchant, device, country, or region, we are able to collect behavioral biometrics and other contextual information using the 3DS2 protocols. A behavioral score outputs from our analysis in real time, letting legitimate consumers checkout without additional friction and giving you an opportunity to respond to riskier transactions in a way that is consistent with your organization's security policies.

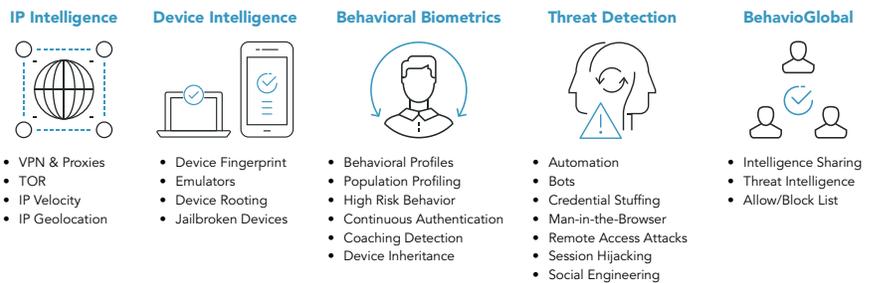


Figure 2 – Fraud and risk signals provided by BehavioSec

Beyond behavioral biometrics, BehavioSec also continuously analyzes each session for a multitude of other environmental risk factors, giving you a rich set of intelligent signals to detect and stop even the most sophisticated fraud attack.

### KEY FEATURES

- **Simple 3DS2 Integration**  
Single SDK integration with any 3DS2 server, configurable to meet security and experience needs.
- **Behavioral Mapping Across Devices**  
Device inheritance mitigates risks from new device onboarding without step-ups or friction.
- **Improved Fraud Detection**  
Device integrity offers better detection of jailbroken devices, cloned applications, location anomalies, and much more.
- **Mitigate Onboarding Risks**  
Identify behavioral anomalies to detect the use of stolen or synthetic identities – a powerful tool for KyC investigations.

## SUPPORT

Customers receive software updates and support from our 24x7 global behavioral biometrics expert team.

As we continue to innovate new features and capabilities, we work with you to ensure you get rapid and maximum value from your partnership with us.

## AVAILABILITY

BehavioSec is available globally as a software subscription. It is licensed per user and year or per transaction, whichever model fits your needs.

Contact our sales team at [sales@behaviosec.com](mailto:sales@behaviosec.com) and let us show you our capabilities with a live demo or proof-of-value.

## ECOSYSTEM

BehavioSec partners with market-leading platform companies and service providers you already know and work with to ensure our solution integrates seamlessly within your environment, solving your needs.

You can employ our technology on-premises or in the Cloud via SDK/API access, plug-ins or pre-integrated, out-of-box solutions listed on partner marketplaces.



<sup>1</sup> <https://thepayers.com/digital-identity-security-online-fraud/3ds2-transactions-in-the-americas-see-26x-growth-compared-to-2020-rsa-reports--1248381>

<sup>2</sup> <https://baymard.com/lists/cart-abandonment-rate>

## ABOUT BEHAVIOSEC

BehavioSec is the industry pioneer and technology leader for behavioral biometrics and continuous authentication, safe-guarding millions of users and billions of transactions today.

Deployed across Global 2000 companies to dramatically reduce fraud, friction, threat, and theft, BehavioSec verifies and protects human digital identities by understanding how we uniquely type and swipe across our ever-changing devices. Whether used in the Cloud or on-premises, BehavioSec delivers the superior user experience, precision, and scale needed by organizations to keep customers engaged while catching evasive, real-time attacks other solutions miss.

Founded in the Nordics in 2008 out of groundbreaking research, industry recognized BehavioSec partners with market leaders and organizations like DARPA, and has earned investment from top firms like Forgepoint Capital, Cisco, ABN AMRO, Conor Ventures, and Octopus Ventures. Headquartered in San Francisco, CA with offices worldwide, BehavioSec is ready to help you reduce risk, improve compliance, and digitally transform your distributed workforce and customer experience.

Global Headquarters  
535 Mission St, 14th Floor  
San Francisco CA 94105 USA  
+1 (833) 248-6732  
[sales@behaviosec.com](mailto:sales@behaviosec.com)

