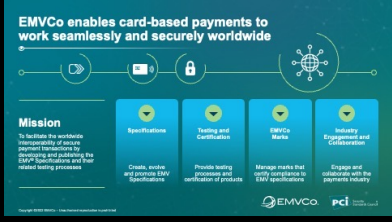
Exploring What's in Store with EMV 3-D Secure

- Welcome to this presentation on Enhancing authentication and security with EMV® 3-D Secure.
- I'm Brian Byrne, Director of Engagement and Operations for EMVCo.

Next Slide: EMVCo enables card-based payments …

EMVCo enables card-based payments …



- EMVCo's mission is to facilitate card-based payments that work seamlessly and securely worldwide.
- We deliver on this mission by developing specifications and supporting testing, certification and marks programmes for products that enable the delivery of consistent and convenient payments for merchants, businesses and consumers, around the world.
- Key to EMVCo's work is close collaboration with the payments industry to adapt and evolve these specifications, so that they continue to support technology innovations, the needs of different marketplaces, and changes in consumer behaviour.

EMV® 3-D Secure

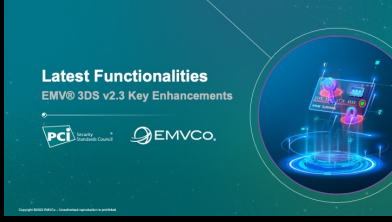
- Today we’re looking at EMV 3DS and how it helps prevent unauthorised transactions and ensures that the payment process is seamless.

Key Benefits of EMV® 3DS Solutions

- EMV 3DS solutions help card issuers to identify fraudulent transactions more quickly and accurately, so that merchants can prevent e-commerce fraud with minimal disruption to the purchase process, and consumers can expect a safe and easy checkout experience.

1. For issuers, it enables enhanced authentication and fraud management
2. For merchants, it offers greater security and reduced friction
3. And consumers get a better, safer checkout experience

Latest Functionalities

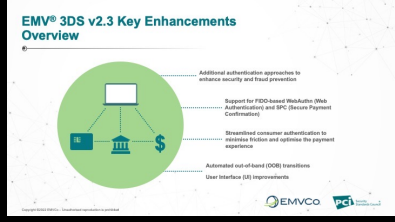


- EMVCo reviews and evaluates EMV Specifications on a regular cycle to determine updates required to enhance and evolve specifications in line with advancements in payments technology and industry needs.

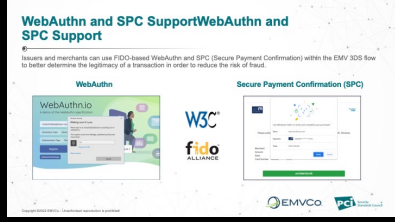
1. Payment industry stakeholders actively participate in this process through the EMVCo Associates Programme.
2. EMVCo Associates reviewed and provided input on the proposed changes to EMV 3DS version 2.3 – the latest version – via business and technical Special Interest Meetings (SIMs) and a Request for Comments.
3. The final draft specification was then approved to be published by EMVCo's Board of Advisors.

- I'm now going to talk you through the key enhancements introduced.

EMV® 3DS v2.3 Key Enhancements Overview



- The EMV 3DS specifications include the Protocol and Core Functions Specification, SDK Specification, and the Split-SDK Specification.
- Version 2.3 introduces additional authentication approaches to enhance security and fraud prevention. It also provides streamlined consumer authentication to minimise friction and optimise the payment experience.
- Updates include:
  - Support for Web Authentication (WebAuthn) and Secure Payment Confirmation (SPC) that issuers and merchants can use within the EMV 3DS flow to better determine the legitimacy of a transaction, in order to reduce the risk of fraud.
  - Automated out-of-band transitions, for a more seamless user experience to help the consumer switch seamlessly between a merchant application and an authentication application.
  - And also user interface improvements, to simplify how information is communicated to consumers.
- Other updates include:
  - A new Split-SDK model – making it easier to implement EMV 3DS across newer channels and devices, including gaming consoles, smart speakers and other IoT devices
  - Device binding – enabling consumers to specify that they would like to be remembered on their devices
  - Additional recurring transaction data and EMV Payment Token data – helping issuers better identify the transaction and simplify the authentication experience for future purchases.



WebAuthn and SPC SupportWebAuthn a nd SPC Support

Let's look briefly at how WebAuthn and SPC support has been integrated….

EMVCo has collaborated with the World Wide Web Consortium (W3C) and FIDO Alliance to include support for WebAuthn and SPC.

- **Firstly, WebAuthn is used as an ACS Challenge Method, if additional cardholder authentication is required, such as with a high-value transaction.**

1. There is no 3DS flow change for ACS to use WebAuthn
2. EMV 3DS 2.3 enables new data elements for WebAuthn Support
3. Web Authentication API (WebAuthn) prompts the FIDO challenge
4. The user interface is controlled by the Browser and Operating System

[CLICK FOR 2ND NOTES SLIDE]

WebAuthn and SPC SupportWebAuthn a nd SPC Support

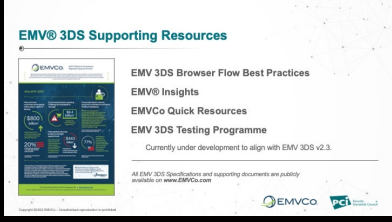
For example:

- A cardholder can register an “authenticator” from their browser and device
- A challenge prompt is provided by the browser and the operating system when the API is invoked

Secondly, we have Secure Payment Confirmation, which within EMV 3DS 2.3 uses FIDO-based authentication to securely confirm the transaction via the SPC API.

1. EMV 3DS 2.3 enables new data elements and optimized 3DS flow for SPC Support
2. SPC API prompts the FIDO challenge
3. The user interface is controlled by the Browser and Operating System, and the issuer provides the text and images in the user interface.

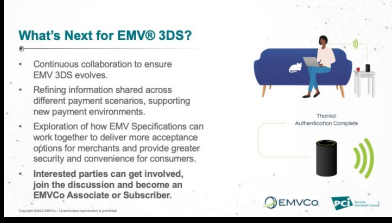
EMV® 3DS Supporting Resources



- There are multiple resources available from EMVCo.com to help support understanding, best practices, and testing.
- This includes EMV 3DS Browser Flow Best Practices, our EMV Insights articles and Quick Resources providing an overview of the technologies. It also includes an EMV 3DS Testing Programme, which is currently under development to align with EMV 3DS v2.3.

Next Slide: What's Next for EMV® 3DS?

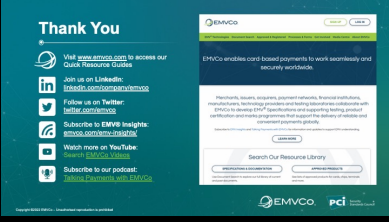
What’s Next for EMV® 3DS?



So what’s next for EMV 3DS?

- Payment and technical communities are continually collaborating to ensure that EMV 3DS evolves in line with technical capabilities, business operations and legislation.
- This includes refining the information that should be shared across different payment scenarios to enable successful risk-based decisioning; and supporting new payment environments such as voice activated transactions.
- With increasingly more ways for payments to be made and accepted, EMVCo is exploring new ways that EMV Specifications can work together to support a consistent, convenient and secure payment experience for consumers wherever they are shopping.

Thank You



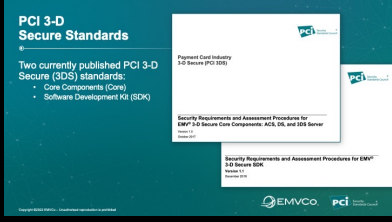
- Thank you for listening. I'll now hand over to Joel, who'll provide an overview of PCI 3DS Standards/Programs.

PCI SSC 3DS Efforts

- [Transitions to Joel]
- Introduce self
- Thank Brian for the information on 3D Secure
- Segway to the Council efforts relative to the EMVCo 3DS Specifications.

Next Slide: PCI 3-D Secure Standards

PCI 3-D Secure Standards



- 3DS Core – v1.0, 2017
- 3DS SDK – v1.1, 2018
- Emphasis that the Council DOES in fact have two 3DS Standards

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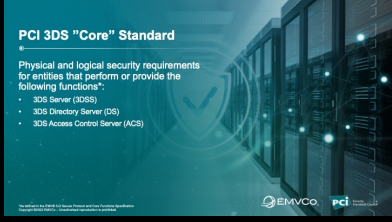
Next Slide: PCI 3DS ”Core” Standard

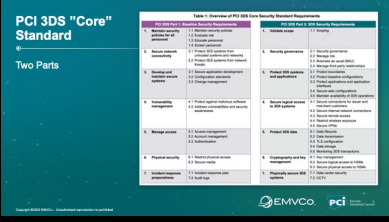
PCI 3DS ”Core” Standard



- Emphasize PURPOSE
- Assessed by 3DS Assessors (found on the PCI SSC Website)
- No PCI SSC listing for 3DS Core Standard

Next Slide: PCI 3DS ”Core” Standard

PCI 3DS ”Core” Standard



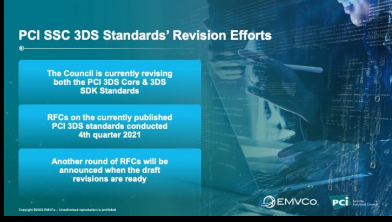
- Briefly discuss Part 1 and Part 2 of 3DS Core
- Part 1 can be met via DSS
- Part 2 – additional 3DS-specific requirements

PCI 3DS ”SDK” Standard

- Emphasize PURPOSE
- Assessed by 3DS SDK Labs (found on the PCI SSC Website)
- PCI SSC listing found on the PCI SSC website

Next Slide: PCI SSC 3DS Standards’ Revision Efforts

PCI SSC 3DS Revision Efforts



- Speak to the current revision efforts for both Standards
- PRIMARY Driver for BOTH:
  - EMVCo v2.3 specifications - tie back to Brian's content.
  - RFC feedback from stakeholders. – also includes 3DS assessors and 3DS SDK labs

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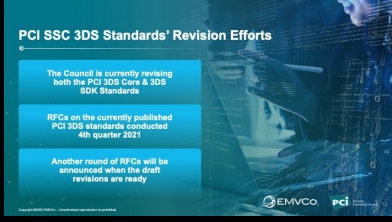
Next Slide: PCI SSC 3DS Revision Efforts continued…

PCI SSC 3DS Revision Efforts



- Core: Additional emphasis
  - alignment w/ DSS v4.0
  - consideration for the 3DS SDK server (i.e., Split-SDK)
- SDK: Additional emphasis
  - Split-SDK (i.e., both Client-Side AND Server-side functionality of SDK)
- Work expected to proceed into next year (2023)

Key Takeaways

- NO NOTES

Thank you

- Thank you to Brian and EMVCO

LAST SLIDE