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Thales Gemalto Dynamic Code Verification

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Banking & Payment Services

Gemalto's Dynamic Code Verification is an issuer-centric card-not-present (CNP) security solution based on a payment display card, a mobile solution and a validation server. It allows banks to mitigate fraud while preserving the consumer's online shopping experience.

In 2013, 41.3%[1] of global internet users had purchased products online. In 2017, this figure is expected to grow to 46.4%. With the increasing volume of online purchases and the strengthening of card-present security, it is only natural that payment fraud is migrating to the next most rewarding – and weakest – link in the chain: CNP transactions. The total value of fraudulent transactions conducted using cards issued within SEPA and acquired worldwide amounted to €1.44 billion[2] in 2013, which represented an increase of 8% from 2012. The increase was due to CNP fraud, which saw €958 million in fraud losses in 2013.

That's why preventing and fighting CNP fraud is becoming imperative to preserve online shopping's versatility and freedom.

Shoppers want a seamless online shopping experience

Most consumers understand the need for security but also want the most convenient way to shop. The average abandonment rate at checkout is as high as 68.53%[3], as consumers will discontinue a transaction if it is too time-consuming or complicated.

Issuers want minimal impact on existing infrastructure

The increase in fraud has pushed issuing banks and merchants to implement 3D Secure authentication solutions. But these don't fit comfortably with the payments infrastructure and they're not all widely adopted by consumers.

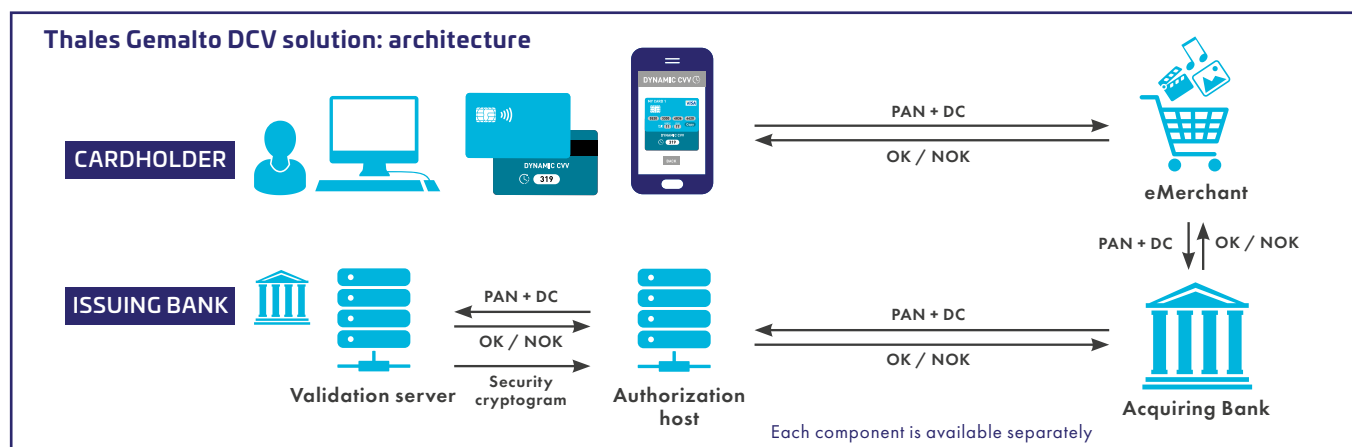## The Thales Gemalto Dynamic Code Verification (DCV) suite

Gemalto's Dynamic Code Verification suite is a complete CNP security solution based on a payment display card, a mobile solution and a validation server.

The solution allows card issuers to replace the static security cryptogram traditionally used for online purchases, with a dynamic code displayed on the customer's EMV card or in a mobile application. This time based code makes it impossible for hackers to reuse stolen static card data for fraudulent transactions. Furthermore, the Gemalto DCV solution enables card issuers to cut fraud without affecting the online payment infrastructure of eMerchants, PSPs and acquirers.

Thales Gemalto DCV card is a classic contact/contactless EMV payment card with a small screen on the back that displays a dynamic code. This code changes automatically over time, without the cardholder's intervention.

Thales Gemalto DCV mobile solution allows your customers to store their cards and read the dynamic codes on their mobile phone. Customers can choose to secure their stored cards with a PIN for a strong authentication layer. This solution provides a secure way to shop online, using the stored cards and the DCV feature.

Thales Gemalto DCV Server stores all information related to users, cards and devices. It validates the dynamic codes generated by the card or the mobile solution and sends the result to the authorization host.


Thales Gemalto DCV solution: architecture

CARDHOLDER

ISSUING BANK

Validation server — Security cryptogram — Authorization host — Acquiring Bank — eMerchant

PAN + DC / OK / NOK

Each component is available separately

[1] http://www.statista.com/statistics/261676/digital-buyer-penetration-worldwide/
[2] https://www.european-atm-security.eu/tag/cnp-fraud/
[3] http://baymard.com/lists/cart-abandonment-rate

Benefits for card issuers

Enhanced security: Gemalto's DCV technology is a real game changer in the global fight against CNP fraud, protecting these transactions so they are no longer the weak link in the card payments business.

Reduced fraud and cost of fraud: The solution helps issuers instantly put a stop to fraud and cut the cost of managing CNP crime: charge-back, call center, claim management and re-issuance of cards.

Easy implementation: The solution is issuer-centric: the issuer is in full control of the solution and there is no merchant-side or acquirer integration.

All the components – card, mobile and server – are fully integrated and the validation server is compliant with standard IT infrastructure components. This all guarantees that it's easy to integrate the Thales Gemalto DCV solution with any existing payment architecture.
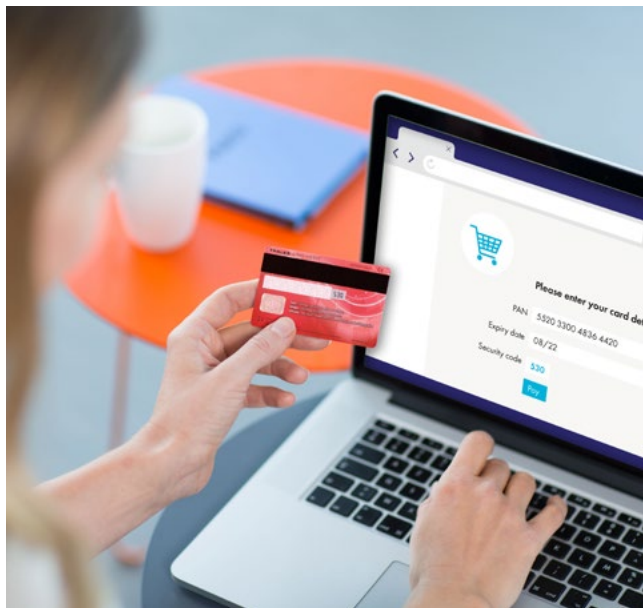
Easy deployment: The DCV solution can be rolled out to every user very quickly as there is no need to dedicate time and resources to user education: the consumer experience will remain unchanged [when they are using the display card] or will be totally intuitive [when using the mobile application].

Happy end-users: Convenience is key: transactions using this solution are more secure and consumers can enjoy a seamless shopping experience!

Business growth: This solution helps banks and issuers grow their business through increased trust whilst being seen as innovative. They can offer greater confidence in the security of online transactions, which will encourage more users to shop online and generate increased revenue.
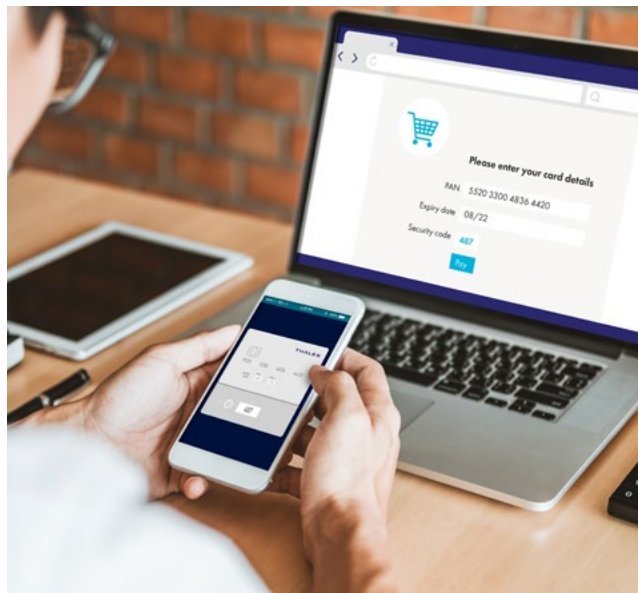
Freedom of choice: Issuers have the flexibility to deploy the card only, the mobile only or a combination of both. This enables them to tailor to the needs of their specific end-user segments, offering them the best user experience.

Benefits from Thales' expertise

Banking expertise and display card technology: Choosing Gemalto's DCV card means benefiting from a market leading expertise in EMV & display card technology, quality, reliable production and issuance from MasterCard and Visa certified facilities.

Mobile security: Thales has unmatched experience in mobile security with its mobile solution already deployed by more than 20 banks worldwide. It provides enhanced security to millions of mobile banking and mobile wallet customers.

eBanking and eCommerce security: Thales is an industry leader with proven expertise in security and a complete portfolio of authentication, end-point protection and fraud management solutions. We have secured over 100 million online users to date.

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