
Visa Best Practices for Primary Account Number Storage and Truncation

Introduction

Due to misinterpretation of Visa dispute processing rules, some acquirers require their merchants to unnecessarily store full Primary Account Numbers (PANs)¹ for exception processing to resolve disputes. The unnecessary storage of full card PAN information by merchants has led to incidents of data compromise, theft or unintended disclosure during disposal. Additional confusion exists due to inconsistent dispute resolution practices by issuers and acquirers in use across different geographies, leading some merchants to conclude that PAN data must be retained for all transactions.

*To clarify, Visa **does not** require merchants to store PANs, but **does recommend** that merchants rely on their acquirer / processor to manage this information on the merchants' behalf. Visa also recommends that acquirers / processors evolve their systems to provide merchants with a substitute transaction identifier to reference transaction details (in lieu of using PANs).*

Some countries already have laws mandating PAN truncation and the suppression of expiration dates on cardholder receipts. For example, the United States Fair and Accurate Credit Transactions Act (FACTA) of 2006 prohibits merchants from printing more than the last five digits of the PAN or the card expiration date on any cardholder receipt. (Please visit <http://www.ftc.gov/os/statutes/fcrajump.shtm> for more information on the FACTA.)

To reinforce its commitment to protecting consumers, merchants, and the overall payment system, Visa is pursuing a global security objective that will enable merchants to eliminate the storage of full PAN and expiration date information from their payment systems when not needed for specific business reasons. To ensure consistency in PAN truncation methods, Visa has developed a list of best practices to be used until any new global rules go into effect.

¹ A PAN is the 16-digit number embossed, engraved, or imprinted on a payment card.

PAN Truncation Best Practice

In addition to required compliance with applicable card data security standards, including the Payment Card Industry Data Security Standard (PCI DSS), and Visa Best Practices for Tokenization of Cardholder Information, Visa strongly recommends that acquirers and merchants follow these best practices:

Domain	Best Practice
Cardholder Receipts	<p>1. Disguise or suppress all but the last four digits of the PAN, and suppress the full expiration date, on the cardholder's copy of a transaction receipt created at a point of sale (POS) terminal or an ATM (already required for merchants in the U.S., Europe, and CEMEA; Visa will apply this rule across all regions in the near future to provide global consistency).</p> <ul style="list-style-type: none"> • Example: XXXXXXXXXXXXX1234 for the PAN and XXXX for the expiration date.
Merchant Receipts	<p>2. Disguise or suppress the PAN to display a maximum of the first six and last four digits, and suppress the full expiration date, on the merchant's copy of a transaction receipt created at a POS terminal. Note: Many merchants already follow this best practice by truncating the PAN to the last four digits on both the cardholder's and merchant's receipts.</p> <ul style="list-style-type: none"> • Example: 412345XXXXXX6789 or XXXXXXXXXXXXX1234 for the PAN and XXXX for the expiration date.
Merchant Transaction Data Storage by Acquirers	<p>3. Acquirers should support their merchants by providing transaction data storage, thereby allowing merchants to retain only disguised or suppressed PANs on the merchant's copy of an electronically generated receipt and in their transaction records (unless the merchant has a business need to retain the full card PAN).</p>
Enhanced Acquirer Systems	<p>4. Acquirers should enhance their systems to provide merchants with substitute transaction identifiers (such as the Visa Transaction Identifier) or software tokens to facilitate retrieval of transaction data stored by the acquirer, in lieu of using the PAN as a reference for individual transactions.</p>
Merchant Communications from Acquirers	<p>5. Acquirers should disguise or suppress all PANs sent to merchants in any communications (e-mail, reports, etc.).</p> <p>Reminder: PCI DSS already requires a PAN transmitted over a public network to be rendered unreadable by encryption, truncation, or hashing.</p>

Conclusion

Due to legacy practices and a misinterpretation by issuers and acquirers of Visa dispute resolution processing rules, many merchants unnecessarily store and/or print full card PANs on cardholder and merchant receipts. Visa rules do not require merchants to store full card PANs after settlement, and do allow merchant receipts with truncated PAN information to be retained for copy retrieval and dispute fulfillment.

Visa encourages 1) merchants to only print truncated PANs on cardholder and merchant receipts; and 2) acquirers to not require merchants to store PANs, and to provide alternate means for merchants to reference individual transactions. Visa has developed best practices to increase data security without affecting merchants' ability to meet dispute resolution requirements. Acquirers and processors are strongly encouraged to support their merchants in following these best practices.

Respond With Comments by August 31, 2010

Visa would appreciate stakeholder feedback on these best practices by August 31, 2010. Please submit any comments via e-mail to inforisk@visa.com with "PAN Truncation Best Practices" in the subject line.

Related Documents

"Visa Best Practices for Data Field Encryption" – October 2009

"Visa Best Practices for Tokenization of Cardholder Information" – July 2010