



Tried and True Tokenization

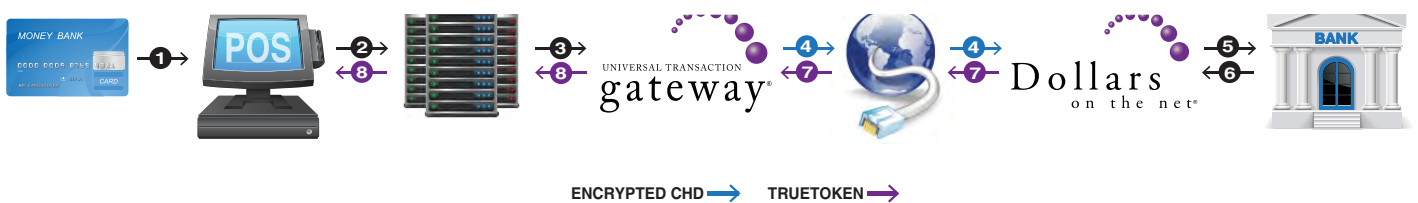
The Original Tokenization Solution for Card Data Security



At Shift4, we know a thing or two about tokenizing payment data. After all, we invented the technology. In 2005, Shift4, provider of the world's largest independent payment gateway, DOLLARS ON THE NET®, introduced both the term and the technology for tokenization at the Transaction Security Summit in Las Vegas, NV. This set the new standard in the industry by eliminating the vulnerability issues associated with the long-term storage of cardholder data in their systems.

Tokenization is now a payment processing best practice, but merchants must be wary of providers selling weak tokenization solutions. With our introduction of tokenization came a mass of copycats who have their own ideas of tokenization, or that are oftentimes just re-branding outdated practices of truncation or encryption and calling it tokenization. We call them tokenization-in-name-only (TINO) solutions. The original, authentic solution is Shift4's TrueTokenization®.

Here's how TrueTokenization® works:



1. The payment card (debit, credit, gift card, etc.) is swiped, inserted, or keyed in.
2. The POS or PMS terminal collects the cardholder data (CHD) and forwards it to the merchant's POS or PMS server.
3. The POS or PMS server sends a copy of the CHD to the Universal Transaction Gateway® (UTG®).
4. The UTG encrypts the CHD and securely sends the data over the Internet to Shift4's PCI-compliant payment gateway, DOLLARS ON THE NET®.
5. Once the information is received by DOLLARS ON THE NET, the CHD is then securely sent with the authorization request to the bank or processor for approval.
6. The bank or processor returns the CHD and the authorization code to DOLLARS ON THE NET.
7. DOLLARS ON THE NET securely stores the CHD and generates a random, unique, alphanumeric ID called a TrueToken® to reference the transaction, which is sent back through the Internet to the UTG.
8. The UTG forwards the TrueToken with the authorization approval to the POS or PMS to complete the sale.

Why Tokenization?

Simplify PCI DSS Assessments and Reduce Costs

Using tokenization can greatly simplify PCI DSS assessments, which could save you thousands of dollars each year. Because tokenization replaces sensitive cardholder data (CHD) with non-decryptable values after bank authorization, no payment data is stored within your environment. When combined with a point-to-point encryption (P2PE) solution that hardware encrypts CHD at the point of interaction between a card and a payment device, you gain a dramatic scope reduction in PCI assessments because you never store, process, or transmit any CHD. No other combination of security technologies provides a better PCI DSS benefit than tokenization and P2PE.

Prevent Breaches

Tokenization, as created and defined by Shift4, involves using a unique, non-decryptable piece of data – a TrueToken® – that replaces sensitive card data from each individual transaction. A TrueToken is a randomized, alphanumeric, 16-character value that does not have a mathematical or one-to-one relationship with actual CHD. Since it cannot be reversed back to payment card information, a TrueToken has no value to thieves or hackers. After all, *They Can't Steal What You Don't Have*®.

The TrueToken® Advantage

Unlike many competing solutions, Shift4's TrueTokens are totally portable – meaning merchants can switch banks or processors as frequently as their business needs require without losing their tokens or transaction data. When DOLLARS ON THE NET holds the tokens, merchants can change financial institutions without losing their data. The freedom to choose and change banks and processors at any time saves merchants from the rate increases that so often accompany long-term financial relationships.

Practically all point-of-sale (POS) and property management system (PMS) reports can use TrueTokens because a TrueToken includes the last four digits of the card number it represents. In addition, DOLLARS ON THE NET retains up to a 24-month rolling archive of a merchant's detailed transaction history, which can be used for auditing, chargeback defense, or future transactions and more. There is no additional charge for merchants to generate, access, or store TrueTokens.

A TrueToken provides the same business functionalities merchants expect of actual card data. If an adjustment or additional authorization is needed, the TrueToken can be used just like real CHD.

Tokenization Your Way®

TrueTokenization provides the basis for secure payment processing with DOLLARS ON THE NET. Shift4 also offers merchants much more. Our full suite of security solutions combine to offer protection for every step of a credit, debit, or gift card transaction, and includes TrueTokenization, True P2PE™, 4Go®, i4Go®, 4Res®, and 4Word®. With these solutions, the merchant's burden of storing, processing, or transmitting CHD is almost entirely eliminated from PCI DSS scope. Best of all, our security solutions are included with DOLLARS ON THE NET.

Security Beyond Compliance®

For merchants who want to reduce their PCI scope, lower the costs of attaining PCI compliance, and employ the best in security, reliability, and flexibility, Shift4's TrueTokenization is the answer. Plus, with Shift4's True P2PE and the introduction of EMV in the U.S., merchants can layer these technologies to achieve *Security Beyond Compliance*®.

To learn more about how DOLLARS ON THE NET and TrueTokenization can provide unrivaled security, please email info@shift4.com or visit www.shift4.com/tokenization.



1491 Center Crossing Road, Las Vegas, NV 89144
702.597.2480 | 800.265.5795

www.shift4.com | info@shift4.com

Copyright © 2016 Shift4 Corporation. All rights reserved.

Universal Transaction Gateway® (UTG®), 4Go®, 4Word®, and i4Go® are covered by one or more of the following U.S. Pat. Nos.: 7770789; 7841523; 7891563; 8328095; 8688589; 8690056; 9082120; 9256874.

Any Shift4 trademarks, registered trademarks, or third-party trademarks are the property of their respective owners.