



Product Overview

The patented Tranwall system offers card holders and issuers the ability to control the status of debit and credit cards in real time. Tranwall can also offer second-factor authentication to internet banking services using any mobile phone. The Tranwall system offers fine-grained control, at transaction level, over the approval of card transactions. These transactions can be differentiated by type, amount, merchant country and category, and currency, amongst others. The Tranwall platform is customizable, allowing for a variety of permissions to be defined and implemented. However, the following simplified on/off switches are included in a standard Tranwall configuration, offering the card holder a significant tightening of security:

The **Point Of Sale** Switch - Activates a card for a purchase just before paying

The **ATM** Switch - Activates a card before making a cash withdrawal

The **Online** Switch - Activates a card for an internet purchase just before checkout

Lost Card **Disabling** - Disables a card to block all transactions if the card is lost or stolen

New Card **Activation** - Activates a new card only once it is received

The **Foreign Travel** Switch - Activates a card for use in particular countries before or on arrival

The **Master** Switch - Completely deactivates a card or reactivates it when desired



As 97% of all cardholders own a mobile phone, the mobile phone is the most convenient device available to the cardholder to interact with the Tranwall system in order to alter permissions and to control the status of their card or account.

Whether issuing a VISA, MasterCard, Amex, Diners, JCB, CUP, Discover or a co-branded card, the card issuer is able to control card usage per card or range of cards. Existing cards can be Tranwall enabled without any need to reissue.

Tranwall supports SMS, USSD and Smart Phone applications in multiple languages, and speed dials linked to USSD commands remove the need for the customer to remember USSD commands.

Tranwall evaluates all transaction authorization requests against permissions set for the card in real-time, before the card management system makes an authorization decision. Tranwall will block a transaction lacking the necessary permissions before it ever reaches the card management system.

Tranwall has the ability to communicate directly with the cardholder using mobile phone messaging or email. Such notifications include acknowledgement of card permission changes as well as transaction outcomes, such as issuer approval, issuer decline or blocking by Tranwall. The reason for a transaction being blocked is clearly communicated.

In addition, Tranwall offers the cardholder an opportunity to remedy instantly most failed checks so as to allow the transaction to proceed securely.

Benefits and Application

While Tranwall was first developed as a fraud prevention system, customers have discovered that the intrinsic features of the system are highly valuable in differentiating card products and in creating new card product offerings.

Fraud solved, increased interchange revenue and improved customer experience

Unlike any other fraud prevention technology, Tranwall prevents fraud across all channels, card-present and cardnot-present, and is not dependent on the cooperation of merchants and acquirers to support the technology.

Neural-based fraud detection systems are no longer as effective as they used to be. These systems may cause as much revenue loss as they save in fraud prevention.



Recent research undertaken at Tranwall customers shows that false positives, where the neural fraud system blocks transactions suspected of being fraudulent, cause as much interchange revenue loss as the potential fraud prevented. A massive 84% of transactions declined based on limit criteria are never represented by the customer due to the inconvenience of obtaining a voice referral.

The wider impact of falsely suspecting fraud is on customer satisfaction. It is thought that most customers present another card in order to complete a blocked transaction. If this behaviour recurs, it is likely that the card that gives the fewest problems will get to the "top of wallet".

Tranwall and the Customer's need for Control

Tranwall solves fraud equally effectively for debit and credit cards. While the majority of fraud losses are credit-card based, Tranwall has discovered that debit card customers have responded most positively to the product. Interviews with cardholders have revealed that because a debit card by definition links to a deposit (a savings or prepaid balance), when such a card is compromised, it is the customer's actual cash that is lost. Whereas when credit cards are compromised, cardholders typically have the luxury of an interestfree period to resolve any misuse or fraud issues. Thus, debit card customers are eager to use Tranwall as it offers them personally a high level of control over access to their funds.

Tranwall in Product Creation and Product Differentiation

Tranwall interrogates fields in the ISO8583 authorization message received from ATM, POS, Internet, Mobile or other channels. Tranwall can thus establish whether a transaction is a purchase, a cash withdrawal, or a card-not-present purchase, and whether it is from a particular country or category of merchants.

As a result of Tranwall's ability to differentiate one transaction from another, compared to the permissions of a particular card set by a particular cardholder, the system has the ability to create differentiated card products with little turnaround time.

Tranwall allows the issuer to assign a particular profile to a card when it is enrolled in Tranwall. A Tranwall profile is a set of pre-defined rules that apply to transactions presented against the card. For example, an issuer could select whether internet purchases are allowed. Taking it a step further, the issuer could determine that the card may be used for internet purchases, but could specify that the cardholder must actively turn the card on for every internet purchase transaction, at the time of purchase. Thus, using the unique and patented Tranwall system, the issuer can select whether a permission can be temporarily changed by the cardholder themselves, using their linked mobile phone.

For example, the issuer could create the following unique types of cards;

Teen cards that offer parental control, where the parent can select a monthly allowance, AND that can block merchants in order to prevent gaming, adult, pharmaceutical and alcohol-related spend AND that must be turned on by both the parent and the Teen.

Corporate cards that can be carried by company sales staff but for which the company's finance department can control when the card is on, the period of travel allowed, the permitted budget AND could prevent general retail use, only allowing hotel, airline or entertainment spend.

Student bursary cards that have monthly limits, only work for approved study-related merchants on campus AND must be turned on per transaction by the student.



Secure Internet cards that can be activated only by the Cardholder's linked mobile phone for one transaction at a time.

International Travel cards that are locked for particular countries AND currencies, AND for use at POS OR ATM terminals, and must be activated using a mobile phone, or may be always ON.

All of the above products and features can be created from within a single existing Visa/MC BIN range by selecting the applicable 'card profile' in Tranwall. This means that one card may be profiled as a Corporate Card, the next card in the same BIN range could be a Kiddie Card, and the following an International Euro Pre-paid Travel Card activated for use in France. It means that Card Marketing can literally create new products as quickly as it takes to get the card design approved. No new BIN's need to be configured or certified.



Integration of Tranwall with the Card Issuing Host System



Intercepted

Tranwall is inserted between the existing source of authorizations and the card issuing host. This means that there is very little effort required by the card issuer, as Tranwall uses adaptors to emulate the current authorization message traffic exactly.

Transaction Sources

Routed

Transactions are switched to Tranwall instead of the host system by means of a routing change in the financial switch. Tranwall sends allowed transactions, destined for the host, back into the switch. To the source and host systems, the functionally of the transactions appears the same and neither needs to be aware of Tranwall or have connections changed to commission Tranwall.





API

The host system is responsible for interrogating the Tranwall system to determine whether or not a transaction is allowed. This requires programming changes to the host system to enable the required logic and communications. In this model Tranwall exposes its functionality as a set of transactional API functions.

High Performance and Scalability

Tranwall supports extremely large card bases, with as many as 10 million cards in a single server deployment and can scale to cope with hundreds of millions of cards. Tranwall is very fast and typically adds only 35 milliseconds to overall transaction processing time during normal operation. It has been independently lab tested proving a processing volume speed of 1,500 transactions per second on a single Stratus FT server.





Company Profile

Tranwall has set a new standard in card control and fraud prevention technology by offering the world's first mobile phone linked application in this arena. Tranwall is a Hong Kong head quartered company, with offices in Australia, New Zealand, and Mauritius, and a highly skilled development group based in South Africa.

Tranwall partners with leading international payment industry firms, including Stratus Technologies, Neural Technologies, Cornastone and Interswitch. These collaborations facilitate in the promotion, integration and support of the Tranwall system around the world.

Partner Profile

PayVas, the Payment Value Added Solutions company, is a leading Payments information technology solutions aggregator that provides services to Financial Institutions, Governments, Transportation as well as Retail and Distribution sectors in the Middle East Africa and Central Asia.

Payvas provides end-to-end solutions that enable organizations to stay ahead in a fast moving, highly competitive and extremely risky business. Our clients are able to meet the many challenges inherent to an ever evolving technological payments environment.

Payvas is an "offshoot" of Payment Systems Consulting, a company incorporated in 2005 in Dubai Internet City."

Partner Contact Details

For further information on the Tranwall solution, please contact PayVas on the following telephone number, or e-mail address:

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