



# The Green Sheet

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## The Evolution of Internet Payment Gateway Solutions

By Peter Scharnell

Processing over the Internet using a payment gateway is a common solution within our industry yet many of us do not truly understand just how the transactions work and some of the features that are available to the merchant. When processing a typical transaction via the Internet, the customer's transaction information is collected with a form that captures the necessary customer information (name, address, credit card number, etc.) from a merchant's secure website.

The customer's credit card information is encrypted using 40 or 128 bit Secure Socket Layer technology and then sent to a Internet transaction server. The server then transmits the data through the authorization network to the appropriate card issuer's bank, using a secure connection. When the authorization process is complete the customer receives an approval or decline response and the secure server stores the transaction. A typical transaction takes about 3 to 5 seconds and the transactions are automatically settled each day and are usually funded within two to three business days.

Merchants can check the status of transactions or run reports on past activity by going to their individual gateway Website where they can then login to their own password-protected Virtual Terminal / administration site. Internet-based merchants can also use the Virtual Terminal to enter payment information manually if customers prefer to phone, mail order or fax their credit card or bank account information.

This is how a standard Internet transaction takes place however, there are many great new features that merchants can now take advantage of to further enhance their business' payment acceptance.

### Shopping Cart Integration

Incorporating a shopping cart within a merchant's Website is perhaps the most common way to utilize Internet-based payment processing. All of the major gateway's support shopping cart software so that they typically integrate fairly easily with e-commerce solutions. A merchant can create a "virtual checkout" for customers shopping at a Website. There are many shopping carts to choose from and it can be confusing to determine which one is best for your merchant. Several of the better gateway providers will have a list of certified shopping carts or will have standardized on one or more brands. Check with your processor or gateway provider to see what shopping carts they recommend for your merchants.

### Batch Processing

Merchants can take advantage of the batch processing option to mass upload transactions to the payment gateway. This is an ideal solution if they have an internal application that collects transactions and they would like to process them "off-line" in bulk. The customer can use Microsoft Excel or another program that can create a "flat file" of data that conforms to the batch processing format. Then they can automatically transmit the file for processing. The transactions are typically processed immediately and most gateway solutions provide reporting to notify you of

the status of each transaction. Batch processing can also be automated and scheduled to run at preset times. Not all gateways provide batch processing so it's important to check with your provider to ensure that they support this feature.

### **Recurring Billing**

One of the most popular features that the majority of the gateway providers now offer is recurring billing. This feature allows administrators to set up scheduled payments and eliminates the need to re-enter the customer's credit card information each time a payment is required. Membership dues, installment plans, subscription fees and charitable donations are all examples of services that are typically billed on a recurring basis. Recurring billing features can help to eliminate the need for merchants to assume the risk of storing confidential payment data. This is extremely important for meeting compliance regulations for the Visa and MasterCard security mandates. Once again, check with your provider to see about recurring billing availability.

### **Internet Check Payment**

Let's face it, paying by check is still the most preferred method of payment in the United States. Internet check payment solutions allow merchants to accept and process payments from personal and business checking accounts directly from their Website or via their virtual terminal. Accepting electronic checks allows merchants to expand their payment options while increasing their revenues. Internet check services replace the need for paper checks and customers can benefit from an option that is as secure and easy as a traditional paper check. The best online check processing providers take advantage of fraud scrubbing through both negative and positive database searches as well as address verification system (AVS). Check with your provider to see what check processing capabilities they offer.

### **Retail POS Transactions**

Another popular feature for Internet gateway's is the ability to support card present credit card transactions, PIN based debit transactions, and check conversion at a retail location. By processing retail POS transactions merchants can take advantage of reduced card present merchant account transaction fees using a virtual terminal and an economical credit card swipe reader and a PIN pad for accepting debit transactions. It's important to note that you need to check with your processor to ensure that your network supports IP-based PIN debit. Merchants can also begin to process check services over the Internet by attaching a paper check MICR reader attached to a PC. Check with your processor or gateway provider to see if their solution will support retail POS features.

### **Level III Processing**

Businesses that are selling to other businesses, large corporate clients, and the government have specific processing needs and requirements. Some Internet-based gateways now provide Level III processing programs that allow ISO's to address the needs of these large corporate and government clients. Level III line-item detail provides more specific purchase information such as; item description, quantity, price, freight amount and other specific detail. There are specific interchange rates available from Visa and MasterCard that will significantly reduce the transaction costs on average of around 30%. Merchants that are processing Level 3 data with their transactions will realize considerable savings by always receiving the best available processing rate. Not all gateways provide Level III processing so it's important to check with your processor to identify the best solutions for this market.

## **Fraud Detection and Prevention**

One of the biggest concerns for Internet card-not-present transactions is fraudulent activity. We've all seen the news reports of identity theft and credit card fraud. Perhaps the most important new features that gateway providers are adding revolve around fraud detection and prevention. The more sophisticated payment gateway's all have fraud detection features available. In addition to the standard address verification and CVV2 features, some gateways offer rules-based fraud detection components that provide Internet merchants with filters and tools to identify, administer and prevent fraudulent transactions. Merchants now have the ability to customize fraud detection filters to match their specific business needs and to control how potentially fraudulent transactions are handled. With several of the more advanced gateways, you even have the ability to hold the transaction for manual review.

## **Cardholder Authentication**

Cardholder Authentication programs are in place to reduce chargeback fees for Internet merchants while also reducing the potential for fraud. Gateway providers are rapidly implementing features that support the Verified by Visa and MasterCard SecureCode programs (3D Secure Standard). The 3D Secure component will validate the identity of registered cardholders during Web-based transactions by requiring a unique personal identification number at checkout. By implementing this additional layer of authentication, merchants can protect themselves from the costs associated with fraudulent and disputed transactions. Check to ensure that the gateway solution you provide meets the Visa and MasterCard compliance regulations.

Most processors offer several gateway solutions to choose from and some will even provide integration and implementation services. This will allow you to approach larger and more complex customers who need an integrated solution with their existing software or POS hardware. Whether you're setting up a small Web-based merchant or a large business with many card-not-present processing needs, it's important to understand the options that each payment gateway provider has available and make the best selection for your customer.

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