

# Online Payment Processing

What You Need To Know



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## Introduction

### Accepting Payments Online Securely And Reliably-An Essential Step For Your Business

Over 60% of U.S. households are online, and more than half of these households shop from home on a weekly basis. In fact, according to Ipsos-Reid, a leading research company, of the 100 million Americans who use the Internet, half of them will spend at least \$500 shopping online this year. This means that if you're not selling online, you're missing a significant revenue opportunity. And with advances in technology, selling online has never been easier, safer or more cost-effective.

An online store allows you to be open for business 24 hours a day, 7 days a week. Not only is this an important convenience for your customers, it also means more revenue for you. An online store also helps you to reduce your overhead costs since you don't need to hire reception staff and people to take orders. With the right payment processing tools, these functions are all done automatically for you. And lastly, an online store helps you to reach new markets-across the country or even outside the U.S.. A secure online store is no longer an option for a successful business, it's a critical step in managing and growing your business.

The most important part of selling online is accepting payments from your customers for a single transaction (i.e. the purchase of an item from your Web site) or for a series of transactions (i.e. the payment of membership fees or installment payments via your Web site). Online payment processing offers a customer the convenience of submitting their credit card or other form of payment on your Web site, and for you to actually receive the money from this transaction. Recurring payment processing allows you to set up regularly scheduled payments for your customers for a series of transactions.

With online fraud rates climbing, it's also important to make sure your online store is secure. According to FBI estimates, online fraud reports tripled from 2001 to 2002. With VeriSign® Payment Services, you have access to a variety of comprehensive, value-add services like VeriSign Fraud Protection Services and Recurring Billing Services. And VeriSign Payment Services allow you to offer your customers the added benefit of peace of mind by using a brand they know and trust.

Online payment processing requires coordinating the flow of transactions among a complex network of financial institutions and processors. Fortunately, technology has simplified this process so that, with the right solution, payment processing is easy, secure and seamless for both you and your customers.

This guide will provide you with what you need to know about online payment processing:

- Online Payment Processing Basics
  - The Payment Processing Network
  - How Payment Processing Works
- What You Should Know About Fraud
- What to Look for in a Payment Processing Solution
- VeriSign Payflow® Payment Processing Tools-Easy, Secure, and Reliable
- What You Need To Get Started

Once you've reviewed this guide, you'll understand the essential elements of accepting payments online, the most important step in putting your Web site to work for you.

## Online Payment Processing Basics

Purchasing online may seem to be quick and easy, but most consumers give little thought to the process that appears to work instantaneously. For it to work correctly, merchants must connect to a network of banks (both acquiring and issuing banks), processors, and other financial institutions so that payment information provided by the customer can be routed securely and reliably. The solution is a payment processing service that connects your online store to these institutions and processors. Because payment information is highly sensitive, trust and confidence are essential elements of any payment transaction. This means the payment processing service should be provided by a company with in depth experience in payment processing and security such as VeriSign.

### THE PAYMENT PROCESSING NETWORK

Here's a breakout of the participants and elements involved in processing payments:

- **Acquiring Bank:** In the online payment processing world, an Acquiring Bank provides Internet Merchant Accounts. A merchant must open an Internet Merchant Account with an Acquiring Bank to enable online credit card authorization and payment processing. Examples of Acquiring Banks include Merchant eSolutions and most major banks.
- **Authorization:** The process by which a customer's credit card is verified as active and that they have the credit available to make a transaction. In the online payment processing world, an authorization also verifies that the billing information the customer has provided matches up with the information on record with their credit card company.
- **Credit Card Association:** A financial institution that provides credit card services that are branded and distributed by Customer Issuing Banks. Examples include Visa® and MasterCard®.
- **Customer:** The holder of the payment instrument—such as credit card, debit card, or electronic check.
- **Customer Issuing Bank:** A financial institution that provides a customer with a credit card or other payment instrument. Examples include Citibank, Suntrust, etc. During a purchase, the Customer Issuing Bank verifies that the payment information submitted to the merchant is valid and that the customer has the funds or credit limit to make the proposed purchase.
- **Internet Merchant Account:** A special account with an Acquiring Bank that allows the merchant to accept credit cards over the Internet. The merchant typically pays a processing fee for each transaction processed, also known as the discount rate. A merchant applies for an Internet Merchant Account in a process similar to applying for a commercial loan. The fees charged by the Acquiring Bank will vary.
- **Merchant:** Someone who owns a company that sells products or services.
- **Payment Processing Service:** A service that provides connectivity among merchants, customers, and financial networks to process authorizations and payments. The service is usually operated by a third-party provider such as VeriSign.
- **Processor:** A large data center that processes credit card transactions and settles funds to merchants. The processor is connected to a merchant's site on behalf of an Acquiring Bank via a Payment Processing Service.

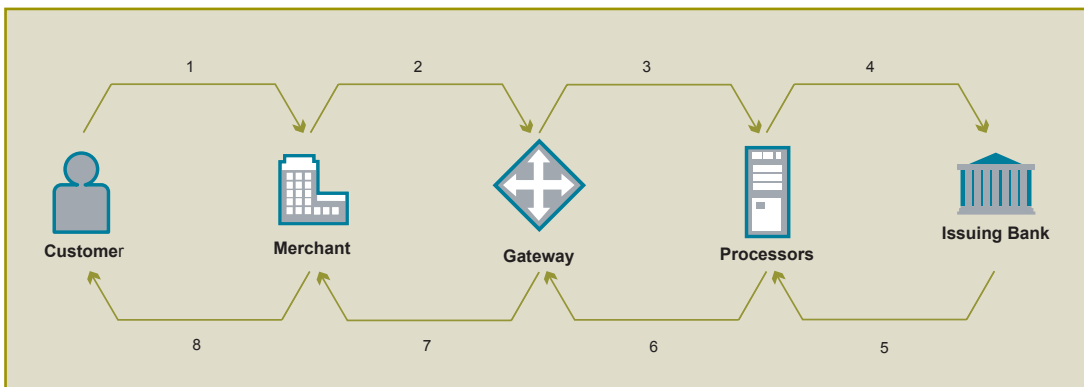
- **Settlement:** The process by which transactions with authorization codes are sent to the processor for payment to the merchant. Settlement is a sort of electronic bookkeeping procedure that causes all funds from captured transactions to be routed to the merchant's acquiring bank for deposit.

For a complete glossary of terms related to online payments, please visit <http://www.verisign.com/products/payflow/glossary.html>

### HOW PAYMENT PROCESSING WORKS

Payment processing in the online world is similar to payment processing in the offline or "brick and mortar" world, with a few exceptions. In the online world, the store and the transaction are virtual. This means that the card is "not present" at the transaction and that the transaction information is submitted and processed via the merchant store network. Because of this, merchants are held liable for fraudulent transactions by the credit card associations. Merchants must take additional steps against online fraud, including verifying that the card information is being submitted by the actual owner of the card and protecting their store and network infrastructure against hacking attempts.

Payment processing can be divided into two major phases or steps: authorization and settlement. Authorization verifies that the card is active and that the customer has sufficient credit available to make the transaction. Settlement involves transferring money from the customer's account to the merchant's account. Online payment processing may also allow you to set up automatically recurring billing payments, if your payment processing service provider offers this feature.



### Payment Processing-Authorization

#### Online

1. Customer decides to make a purchase on Merchant's Web site, proceeds to check-out and inputs credit card information.
2. The Merchant's Web site receives customer information and sends transaction information to Payment Processing Service.
3. Payment Processing Service routes information to the Processor.
4. Processor sends information to the Issuing Bank of the Customer's credit card.
5. Issuing Bank sends transaction result (authorization or decline) to the Processor.
6. Processor routes transaction result to the Payment Processing Service.
7. Payment Processing Service passes result information to Merchant.

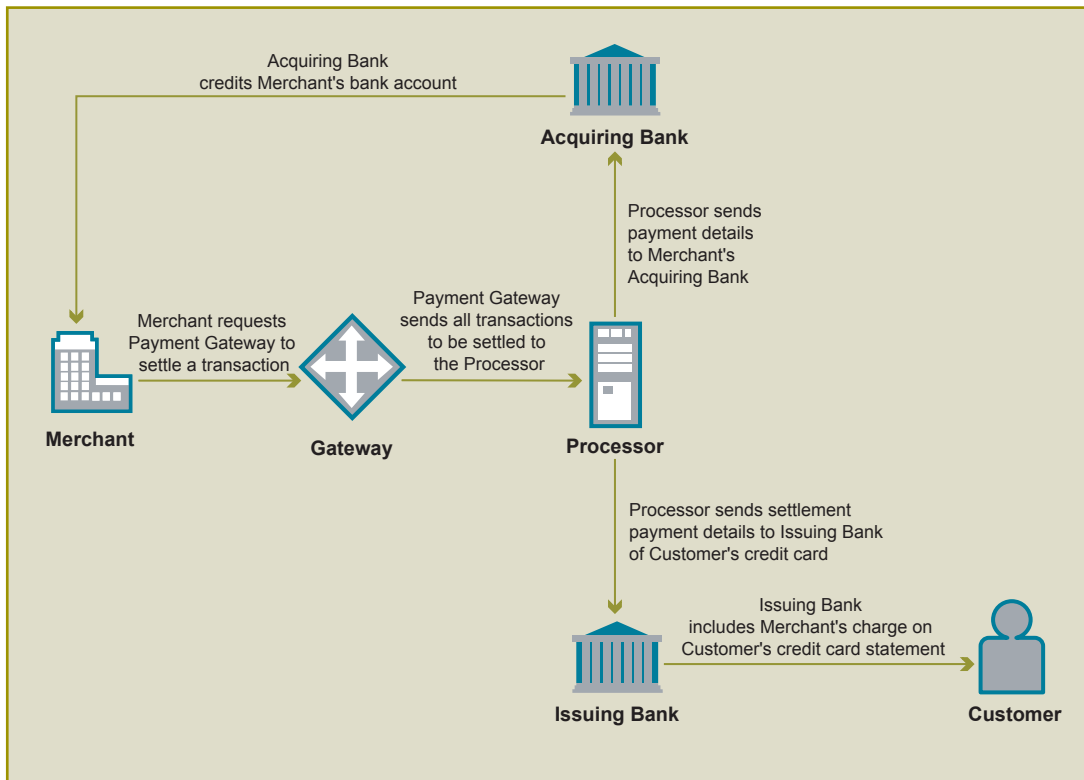
8. Merchant accepts or rejects transaction and ships goods if necessary. Because this is a "card not present" transaction, the Merchant should take additional precautions to ensure that the card has not been stolen and that the customer is the actual owner of the card. See the "What You Should Know About Fraud" section for more information on preventing fraudulent transactions.

**"Brick and Mortar"**

1. Customer selects item(s) to purchase, brings them to cashier, and hands credit card to Merchant.
2. Merchant swipes card and transfers transaction information to a point of sale terminal.
3. Point of sale terminal routes information to the Processor via dial-up connection (for the purposes of the graphic above, the point of sale terminal takes the place of the Payment Processing Service in the offline world).
4. Processor sends information to the Issuing Bank of the Customer's credit card.
5. Issuing Bank sends transaction result (authorization or decline) to the Processor.
6. Processor routes transaction result to the point of sale terminal.
7. Point of sale terminal shows Merchant whether the transaction was approved or declined.
8. Merchant tells the Customer the outcome of the transaction. If approved, Merchant has the Customer sign the credit card receipt and gives the item(s) to the Customer.

**Payment Processing-Settlement**

The settlement process transfers authorized funds for a transaction from the customer's bank account to the merchant's bank account. The process is basically the same whether the transaction is conducted online or offline.



## What You Should Know About Fraud

Many business owners don't realize that in the online world, merchants are held liable for fraudulent credit card transactions. This means that if you process a fraudulent transaction on your Web site, you could incur severe penalties and fees imposed by credit card associations. This is in addition to the loss of the stolen goods and shipping charges.

You should also know that every merchant is at risk for online fraud, so it's important for all businesses to take steps to prevent fraud. Even businesses just starting to sell online or businesses with low transaction volumes.

Fortunately, there are many ways to protect your online business from criminals. The most important thing you can do is choose a payment solution that is secure and reliable. The solution should include standard processing level anti-fraud features such as Card Security Code and Address Verification Service as well as options that allow you to upgrade to the new Buyer Authentication solutions, such as Mastercard® SecureCode and Verified by Visa®. These new Buyer Authentication programs provide essential merchant liability protection against fraudulent credit card transactions. Every VeriSign Payflow payment processing service includes standard anti-fraud features, and offers seamless integration of advanced anti-fraud features such as Buyer Authentication.\*

Lastly, you should look for a solution that saves you time and money while protecting your business from fraud. VeriSign's Fraud Protection Services not only give you added protection against credit card, cash fraud and hacking attempts, but also allow you to manage all of these features quickly and easily with a single, plain English interface. With VeriSign Fraud Protection Services, you don't need technical or fraud expertise to ensure the integrity and profitability of your business.

For more information on fraud and what you can do to prevent it get our guide "[What Every Merchant Should Know About Internet Fraud](http://www.verisign.com/resources/gd/internetFraud/index.html)" located at <http://www.verisign.com/resources/gd/internetFraud/index.html>.

*\*As this service becomes commercially available. Buyer Authentication prompts consumers to share a password with their card issuers at checkout-similar to providing a PIN number for ATM transactions.*

## What to Look for in a Payment Processing Solution

Finding a reliable, secure, and flexible payment processing solution for your business is critical, so it's important to take the time to investigate and assess the options available to you. A payment processing solution should:

1. Reliably and cost-effectively accept and process a variety of payment types, including credit cards and electronic checks. Not only does this reduce lost sales, but it also enhances the quality of your site by allowing your customers the freedom and flexibility to pay you quickly and conveniently.
2. Provide real-time credit card authorization results allowing you to accept or reject orders immediately and reduce the risk of fraudulent transactions.
3. Easily track and manage payments from multiple payment types or processors so you can spend more time on your business, not on managing transactions.
4. Be able to act as a virtual terminal to allow for processing offline transactions. This gives you the flexibility to process orders received via telephone, fax, e-mail, or in person.
5. Provide and store transaction records letting you to easily search for transactions and create transaction reports.

6. Scale rapidly and seamlessly to accommodate increased transaction volumes so your systems grow as your business grows.
7. Provide flexible, easy integration with the Merchant's Web site. The sooner you can start accepting payments, the sooner you start generating revenue from your site.
8. Provide standard processing level anti-fraud features such as Card Security Code (CSC) and Address Verification Service (AVS).
9. Offer the option to seamlessly upgrade to card sponsored Buyer Authentication programs such as MasterCard SecureCode and Verified by Visa to provide merchant protection against credit card fraud liability.
10. Offer comprehensive on-line fraud protection feature options that protect your online business from fraud. These options should be integrated seamlessly into the payment processing solution. Most importantly, these options should be cost-effective and simple to understand, so that you don't waste valuable time and money while protecting your on-line business against fraud.
11. Provide recurring billing payment services. This allows you to set up recurring charges for your customers. For example, you can set up automatically recurring charges for items such as membership dues or for installment payments. Recurring billing is an important feature that provides added convenience for both you and your customer.
12. Be able to work with all the leading Internet Merchant Accounts, which allows you to switch your banking relationship and not have to worry about installing new software or performing new integrations.
13. Be provided by a well-established and trustworthy company. This ensures that your payment service provider will continue to provide reliable payment services as well as new features.

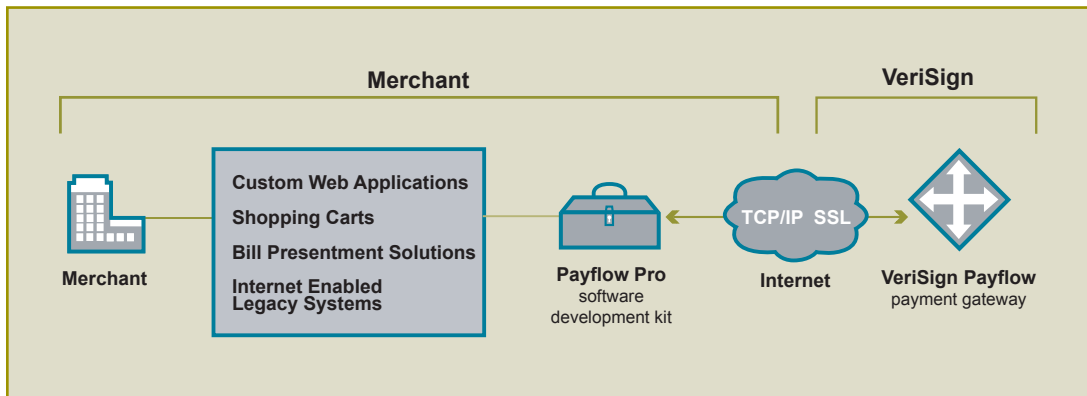
### **VeriSign Payflow Payment Processing Services-Easy, Secure and Reliable**

The VeriSign Payflow service, now the industry standard for online payment processing solutions, was developed to meet the demanding and diverse needs of online merchants. VeriSign Payflow is an Internet payment processing service that simplifies online payment processing by providing reliable, secure, and affordable payment connectivity among merchants, customers, and financial networks. VeriSign Payflow services allow merchants to securely and easily authorize, process, and manage multiple payment types-without investing in or maintaining significant technological resources. Developed to fit a variety of merchant needs, VeriSign Payflow services offer important value-add options, like our Fraud Protection Service, Payflow Recurring Billing Service, and customer service packages that include professional integration support. The Payflow suite of services was also designed to scale quickly and seamlessly as your business grows. Most importantly, VeriSign offers the industry's only payment processing service with immediate connectivity to all major processors and most shopping carts.

#### **PAYFLOW PRO®**

Scalable and fully customizable, the Payflow Pro service is recommended for merchants who require peak site performance and direct control over payment functionality on their site. Payflow Pro allows merchants to process payments through their Web site with a software download that includes a software development kit for simple API integration. Payflow Pro features credit card, debit card, and check processing as well as purchase card levels 2 & 3. Payflow Pro is integrated with most major shopping cart software.

Go to <http://www.verisign.com/products/payflow/partners/cartPartners.html> for a complete list of shopping carts integrated with Payflow Pro.



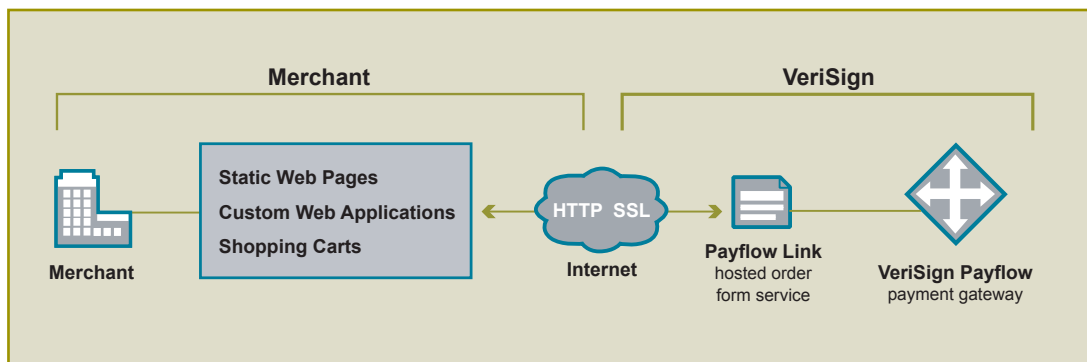
VeriSign also offers Commerce Site Services, a complete, integrated e-commerce solution that is ideal for online stores. Commerce Site Services combines Payflow Pro with a VeriSign SSL (Secure Sockets Layer) Certificate. The addition of an SSL Certificate allows customers to submit information online with the assurance that they are really doing business with you (not an impostor's spoof site) and that the information they send you—such as credit card numbers—is protected from interception or alteration over the Web.

- Commerce Site includes Payflow Pro and a 40-bit SSL (Secure Server) ID  
40-bit SSL is ideal for security sensitive intranets, extranets and Web sites
- Commerce Site Pro includes Payflow Pro and a 128-bit SSL (Global Server) ID  
128-bit SSL is the world's strongest SSL encryption and is the standard for online merchants

**PAYFLOW LINK®**

The Payflow Link service is designed for merchants who require a simple solution to selling on the Web. Payflow Link is a hosted order form service that allows a customer to securely input credit card information. To use Payflow Link, merchants need only add a small piece of HTML code that will link a customer from their Web site to the order forms hosted by VeriSign. Payflow Link offers merchants a simple package for payment processing, including credit card, debit card and check processing functionality as well as offline order processing. Payflow Link works with most major shopping cart software.

Go to <http://www.verisign.com/products/payflow/partners/cartPartners.html> for a complete list of shopping carts that work with Payflow Link.



Payflow Features	Payflow Link	Payflow Pro
<b>Transaction Processing</b>		
Accept credit cards, debit cards, and checks	✓	✓
Accept purchase card levels 2 & 3		✓
Process offline transactions	✓	✓
Customer stays on merchant's site for transaction		✓
Customer directed to secure VeriSign-hosted order form	✓	
Transaction reporting and search tools	✓	✓
Optional recurring billing service package	✓	✓
<b>Implementation</b>		
Activated by adding a small piece of HTML code that links a merchant site to VeriSign-hosted solution	✓	
Activated by downloading software to merchant site		✓
Fully integrated with most leading shopping cart software		✓
Works with most leading shopping cart software	✓	
Test transaction mode feature	✓	✓
<b>Transaction Security</b>		
Standard processing level anti-fraud features: Address Verification Service and Card Security Code	✓	✓
TCP/IP high performance solution using 128-bit SSL to securely communicate transaction data		✓
Sensitive information is collected on VeriSign-hosted secure forms	✓	
Optional Fraud Protection Services that help you protect your online business	✓	✓
<b>Customer Support Packages</b>		
<b>Standard support:</b> Unlimited e-mail support Toll free telephone support, 5:00AM to 6:00PM PST, M-F	✓	✓
<b>Enhanced support:</b> Unlimited e-mail support Toll free telephone support, 5:00AM to 6:00PM PST, seven days a week, (except VeriSign holidays), Two hours of integration support	✓	✓
<b>Premium support:</b> Unlimited e-mail support Toll free telephone support, 5:00AM to 6:00PM PST, seven days a week, (except VeriSign holidays), Four hours of integration support	✓	✓

#### PAYFLOW PAYMENT PROCESSING PLATFORM FEATURES

Both the Payflow Pro and the Payflow Link services include the following important features:

- **World class security:** From the market leader in Internet security. Both Payflow services use SSL encryption to secure transaction information. Payflow Pro's client encrypts information between the merchant's site and the Payflow payment processing platform. Payflow Link uses secure, VeriSign-hosted order forms for the collection and transmission of transaction information. Every Payflow service comes with standard processing level anti-fraud features such as AVS and CSC. Payflow services also integrate seamlessly with VeriSign Fraud Protection Services, offering you cost-effective options that help you protect your online business as it grows.

- **Fast, reliable transaction processing:** High-bandwidth, fault-tolerant network connections ensure maximum uptime and processing speed. Real-time authorization and transaction verification: The Payflow payment processing service allow merchants to get authorization results for purchases in a matter of seconds, so merchants can accept or reject orders immediately. Merchants also get immediate confirmation that a transaction has occurred.
- **Convenient payment tracking and management:** VeriSign's secure VeriSign Manager, standard with Payflow Pro and Link, allows merchants to easily search for transactions and create transaction reports. VeriSign Manager also allows merchants to submit offline transactions such as those submitted via telephone, fax, or in person and return/credit transactions. Seamless, scalable growth: VeriSign's product line allows your business to grow easily and seamlessly as your transaction volume grows.
- **Maximum flexibility:** Merchants can switch banking relationships or add new payment types without having to install new software
- **Fast and easy integration:** Payflow Pro is already fully integrated with most major e-commerce solutions and shopping carts. Payflow Link works with most of the leading shopping carts available today. The Payflow payment processing service is the only processing service with connection to all payment processors.
- **Expert technical support:** VeriSign offers various customer support options via its state of the art Customer Care center, including 24x7 phone support.
- **Optional Recurring Billing Services:** An upgrade feature available with VeriSign's Payflow Pro and Payflow Link service that allows you to charge your customers on a recurring basis, automatically. VeriSign's Recurring Billing Service integrates seamlessly with Payflow Pro or Payflow Link services.
- **Trusted solutions from a trusted provider:** The Payflow service is provided by VeriSign, the leading provider of digital trust services that enable businesses and consumers to engage in commerce and communications with confidence. VeriSign has helped millions of businesses and individuals build, promote, and e-commerce-enable their Web sites.

## What You Need To Get Started

Secure e-commerce requires you to establish an online processing system that will allow you to accept secure online payments. VeriSign's secure, cost-effective and customized payment solutions are designed so you can easily buy what you need, when you need it, with the option to upgrade or add services anytime, as your business grows.

In 3 easy steps, you can complete everything you need to accept online payments on your Web site.

### 1) CHOOSE A PAYMENT PROCESSING SERVICE:

**Payflow Pro.** Designed for merchants who want maximum customization, control and scalability.

**Payflow Link.** Designed for merchants who are just getting started on the Web or who have low transaction volumes.

## 2) SET UP AN INTERNET MERCHANT ACCOUNT

All online businesses need to operate with an Internet Merchant Account, primarily for depositing and refunding online payments. VeriSign has made getting one an easy process. As you register for either Payflow Pro or Payflow Link, we will provide you the option to apply for an Internet Merchant Account with our preferred Merchant Account provider.

## 3) CUSTOMIZE YOUR PAYMENT PROCESSING SERVICE WITH ADDITIONAL SERVICES

### **Protect your business and your customers from fraud.**

**VeriSign Fraud Protection Services.** From simple automated credit card fraud screening to enterprise grade perimeter security services, VeriSign can save you time and money while protecting your business.

### **Accept repeat payments from your customers.**

**Payflow Recurring Billing Service.** A fast, cost-effective way to accept repeat payments for installment plans, monthly fees or other subscription based services.

### **Offer your customers an alternative to credit card payments.**

**Payflow ACH Payment Service.** Make sure you don't lose any sales opportunities by offering your customers ACH, a convenient and reliable alternative to credit card payments.

That's it! You've now got everything you need to start accepting payments online, conveniently, reliably and securely.

## For More Information

For additional VeriSign product and pricing information, please call us at 1-888-847-2747 (1-650-426-3898 select option 1), send us an e-mail at [paymentsales@verisign.com](mailto:paymentsales@verisign.com) or visit the Payment Services section of the VeriSign Web site at <http://www.verisign.com/products/payment.html>.

#### About VeriSign

VeriSign, Inc. (Nasdaq: VRSN), delivers critical infrastructure services that make the internet and telecommunications networks more intelligent, reliable and secure. Every day VeriSign helps thousands of businesses and millions of consumers connect, communicate, and transact with confidence.

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