



PLIMUS
Take Charge™

Plimus Instant Notification Process
October 2009

Overview

Plimus Instant Notifications (also referred to as **IPNs**) integrate information from the Plimus Platform with a Vendor or Affiliate's backend operations.

Basic transaction details, such as price, product, and buyer's information, are automatically transmitted to a unique URL set up and defined by you on your site server and can be connected to your backend system.

The information transmitted and collected is similar to that contained in a confirmation email relating to the transaction. The main advantage is that the content is sent immediately and optionally stored in your system or database.

This is helpful as you get real time reporting of relevant events, such as sale and refund requests. By collecting such data in a databank, you will be better able to observe results over time and plan your ongoing sales strategy more effectively.

Instant Notifications are delivered via an HTTP POST and are triggered by an appropriate event, such as authorization, payment acceptance, or refund confirmation.

Terms of Use & Implementation Advice

The Plimus Instant Notification service is provided free of charge by Plimus. A sample PHP code script is provided as well, and you are invited to test and install this on your server. Plimus reserves the right to expand, modify or restrict the service in the future.

We recommend that IPNs are only set up and used by persons familiar with such services. IPNs require a minimum level of expertise to work successfully. If you are not familiar with these services, Plimus suggests you contact a consultant in this field for assistance.

The Plimus Instant Notifications service is offered on an 'as is' basis, and Plimus provides the service and related scripts without warranty or liability as to its functioning on your particular system. Effective use of IPNs can increase the value of information flowing into your backend system and improve commercial decision-making processes.

To protect the script from unauthorized use, connection availability is limited to the following public Plimus IP addresses:

62.216.234.(196-222)
72.20.107.(242-250)
209.128.93.(97-110)
209.128.93.(225-255)

What are Plimus Instant Notifications?

Plimus Instant Notifications are simple HTTP(S) POST communications, which transmit all data elements of a payment transaction to the Plimus user, except personal payment method data (i.e. credit card number).

In order to assign the data from a Plimus Instant Notification to another program, such as CRM or ERP, the Plimus Vendor or Affiliate needs to prepare a web-available script to which the IPN is directed. This script takes all the details contained on the IPN and distributes them across any and all affected systems for update.

The IPN communication comprises a batch of URL parameters related to the online transaction. Each notification contains a post request and contains pre-defined parameters. The data will either be in a 'Yes' or 'No' format, a number, an information string or date and time details. Typical data would be a Plimus reference number, payment method, contract id, contract price, referrer URL, shipping address details, invoice amount, and so on.

What Can I Do With Plimus Instant Notifications?

Using Plimus Instant Notifications enables you to collect and store relevant business data in real time. This makes it easier to track what is happening across your enterprise. You will be able to store accurate records, keep details of licenses, fulfill orders, provide technical support, maintain customer lists for use with newsletters, review affiliate performance and perform reconciliations with Plimus payments, and accounts reports.

In addition to providing data on transactions, Plimus offers IPN capability to receive details of customer logins to their accounts through Plimus. This is especially helpful when customers are dealing with a subscription or recurring charge-based product. A customer login account can be created which will recognize return visits from your customers through the Plimus Instant Notification process.

How Do Plimus Instant Notifications Work?

After setting the appropriate URL to receive information postings, the Plimus platform initiates an information output to your stated URL, each time a triggering event within a transaction occurs. Plimus only issues data posts that conform to the items as set out in our published list of Instant Payment Notification Variables as noted below. Your URL must be correctly set up to process these posts.

List of Variables for Vendors:

<https://secure.plimus.com/html/httpNotificationVariable.html>

<https://secure.plimus.com/html/httpNotificationVariableContractUsers.html>

List of Variables for Affiliates:

<https://secure.plimus.com/html/httpNotificationVariableForAffiliate.html>

Transaction Types

The following transaction events are recognized by the Plimus system and act to trigger an instant notification post:

Charge: This is the IPN event most commonly monitored by Plimus Vendors. The system issues a notification when a new purchase has been completed. The monies have been received by Plimus, and are held on account for the respective Vendor. A Charge notification will be issued, specifying payment details of the first installment in a recurring contract or subscription contract.

Refund: Notification is given as soon as a refund is issued. Following a refund request by a customer, the Vendor may issue a refund, or this may be activated by Plimus. Immediately after the refund is granted, monies are moved to the customer's account and a notification is sent.

Chargeback: The Chargeback procedure is usually instigated by a customer. A notification is sent when the Chargeback is filed at Plimus, and the monies are re-credited back to the Customer.

Authorization Only: A recurring contract or subscription transaction can be set to check the validity of a purchaser's account details. This step is known as an 'Authorization Only' process. In this instance, when the initial transaction occurs, the Vendor can opt for the BuyNow page to trigger an account check to verify the purchaser's account details. In such circumstances an 'Authorization Only' notification will be sent indicating the account is authorized. No charges occur at this stage.

Recurring: This notification is given once a charge has been made on a recurring or subscription contract. This applies only to the second and subsequent charges, as the first payment on such contracts is treated as a standard Charge, and results in a 'Charge' notification.

Cancellation: A cancellation notification is issued when a recurring charge is cancelled - such cancellation may be activated by the customer, the Vendor or Plimus.

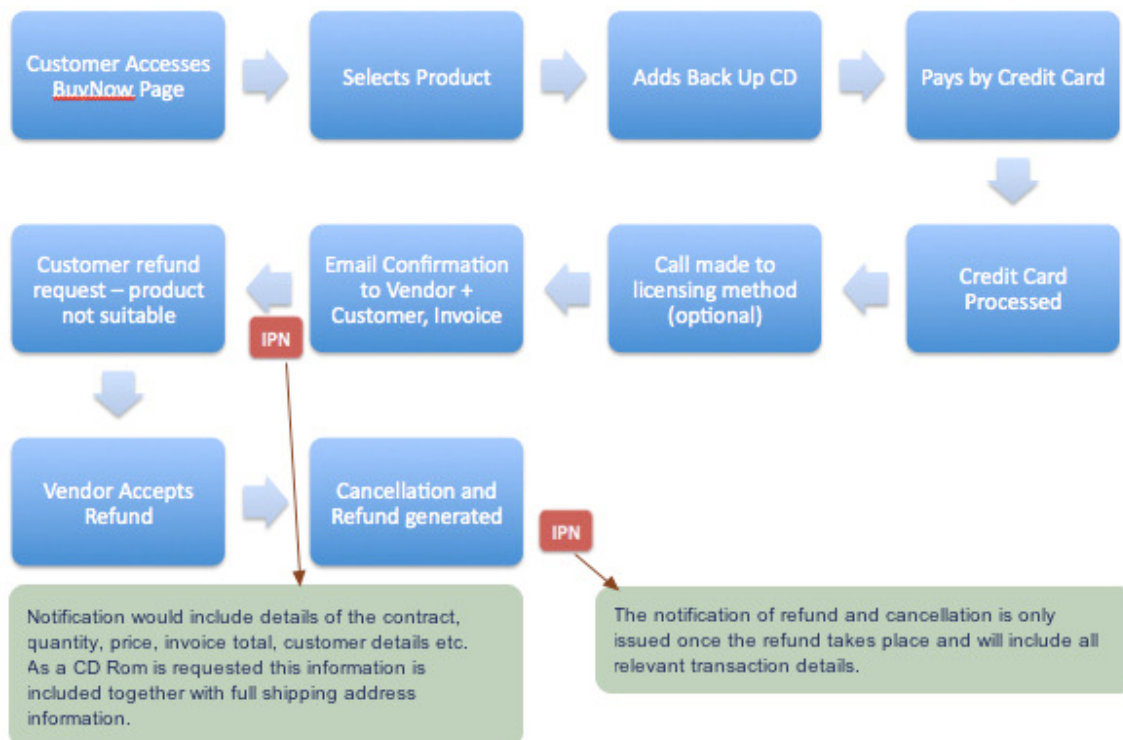
Cancellation Refund: A Cancellation Refund notification is sent when a contract is cancelled as above **and** a refund is processed.

Contract Change: This notification is issued when the contract associated with a recurring charge or a subscription contract is replaced with another contract, such as a customer moving from one service plan to another

Transaction Flow Example

The graphic below depicts an example transaction in which a customer has purchased a software program with a CD on Demand, using a Credit Card for payment.

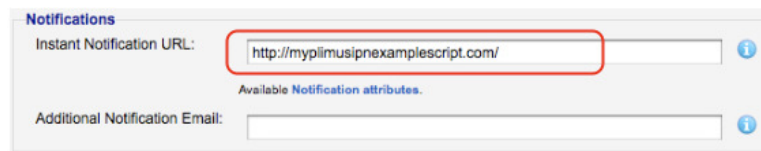
Subsequently the customer discovers that the program is unsuitable and issues a refund request, which is accepted by the Vendor. As a result the transaction is cancelled and monies are refunded. The IPN incidences are marked below.



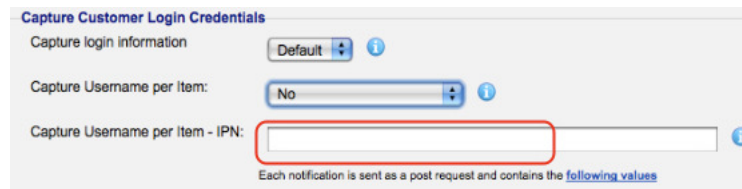
Set Up On Plimus Platform

For the most part, setting up IPN functionality on Plimus is straightforward. The challenge is on setting up a script that will work with your back end system.

Vendors and Affiliates set up an IPN by pasting the relevant URL address in the IPN box on the relevant contract page.



In addition, Vendors may also set up an Instant Logging Code on the contract set up pages to enable customers to log in to a purchase account, by adding the appropriate URL address to the box depicted below.



Plimus will post the relevant HTML Notification Variables to your stated URL. The URL you're using must include relevant scripts to handle the various data parameters posted by Plimus. If you encounter difficulties setting up the script, Plimus provides a PHP sample as referred to in the appendix to this document.

IPN Parameters Table & Explanation, Field Usage

| INSTANT PAYMENT NOTIFICATION VARIABLES – VENDORS | | |
|--|------------------------|---|
| Variable | Type | Description |
| testMode | Y/N | Test transaction made by the vendor |
| referenceNumber | Number | Plimus Reference Number |
| originalReferenceNumber | Number | Plimus Original Reference |
| paymentMethod | String | Method of payment, i.e. CC/PAYPAL/WIRE etc |
| creditCardType | String | Type of credit-card, i.e. AMEX/VISA etc |
| transactionDate | mm/dd/yyyy hh:mi AM/PM | Date & Time transaction occurred |
| untilDate | mm/dd/yyyy hh:mi AM/PM | Subscription expiration date |
| productID | Number | Plimus Product ID |
| productName | String | Product name |
| contractID | Number | Plimus Contract ID |
| contractName | String | Contract name |
| contractOwner | String | Contract owner |
| oldProductId | Number | In the event of a subscription contract switch, the old product id |
| oldContractId | Number | In the event of a subscription contract switch, the old contract id |
| newProductId | Number | In the event of a subscription contract switch, the new product id |
| newContractId | Number | In the event of a subscription contract switch, the new contract id |
| contractPrice | Number #,###.## | Contract price |
| transactionType | String | AUTH_ONLY - orders that were authorized for a future charge |
| | | CHARGE - orders that were successfully charged |
| | | REFUND - orders that were refunded |
| | | CHARGEBACK - ordered that were charged back by the customer |
| | | CANCELLATION - orders that were cancelled (for cancelled subscriptions) |

| | | |
|----------------------------|-----------------|--|
| | | RECURRING - subscription orders that were successfully charged |
| | | CANCELLATION_REFUND - orders that were refunded and cancelled (for cancelled subscriptions) |
| | | CANCELLATION_CHARGEBACK - subscription orders that were charged back by the customer |
| | | CONTRACT_CHANGE - subscription orders that had their contract switched |
| | | CANCEL - invalid orders that were rejected |
| | | DECLINE - orders that were rejected |
| quantity | Number | Quantity ordered |
| currency | String | Currency code used in the order according to ISO-4217 |
| addCD | Y/N | Did the Customer also order a CD on Demand? |
| coupon | Y/N | Did the Customer use a coupon? |
| couponValue | Number #,###.## | Coupon value |
| couponCode | String | coupon Code used |
| referrer | String | The Affiliate name. If that is not present then the referring URL that the Customer came from to the BuyNow page. |
| invoiceAmount | Number | The invoice amount in USD |
| invoiceInfoURL | String | Order Information web-page URL as supplied to customer |
| promoteContractID # | Number | Promotion Contract ID . The # sign from 0 to number of the promotion contracts in the order |
| promoteContractName# | String | Promotion contract name. The # sign from 0 to number of the promotion contracts in the order |
| promoteContractOwner# | String | Promotion contract owner. The # sign from 0 to number of the promotion contracts in the order |
| promoteContractPrice# | Number #,###.## | Promotion contract price. The # sign from 0 to number of the promotion contracts in the order |
| promoteContractQuantity# | Number | Promotion contract quantity. The # sign from 0 to number of the promotion contracts in the order |
| promoteContractLicenseKey# | String | Promotion contract license key. The # sign from 0 to number of the promotion contracts in the order |
| promoteContractsNum | Number | Number of promotions. |
| custom fields | String | Contract custom fields as defined in the contract page (up to 5 per contract). All spaces are deleted from the field name for this purpose |
| Additional Charges | String | Parameter name is the category/group name as entered by you and the value is the selected option name. All spaces are deleted from the field name for this purpose |

| | | |
|-------------------------|--------|--|
| promotion custom fields | String | Promotion contract custom fields as defined in the promotion contract page (up to 5 per contract). All spaces are deleted from the field name for this purpose |
| accountID | Number | Plimus CustomerAccount ID |
| title | String | Customer title |
| firstName | String | Customer first name |
| lastName | String | Customer last name |
| company | String | Customer company name |
| address1 | String | Customer address line 1 |
| address2 | String | Customer address line 2 |
| city | String | Customer city |
| state | String | Customer state |
| country | String | Customer country code |
| zipCode | String | Customer zip code |
| email | String | Customer email address |
| workPhone | String | Customer work phone number |
| extension | String | Customer work phone extension |
| mobilePhone | String | Customer mobile phone number |
| faxNumber | String | Customer fax number |
| licenseKey | String | License key supplied to the customer |
| shippingFirstName | String | Shipping first name |
| shippingLastName | String | Shipping last name |
| shippingAddress1 | String | Shipping address line 1 |
| shippingAddress2 | String | Shipping address line 2 |
| shippingCity | String | Shipping city |
| shippingState | String | Shipping state |
| shippingCountry | String | Shipping country code |
| shippingZipCode | String | Shipping zip code |
| remoteAddress | String | Customer remote IP address |
| shippingMethod | String | i.e. UPS/USPS |

| INSTANT LOGIN CREDENTIALS NOTIFICATION VARIABLES | | |
|--|--------|---|
| Variable | Type | Description |
| accountID | Number | Plimus Account ID |
| userID | Number | Plimus User ID |
| username | String | User name for license (an email address) |
| password | String | Password for license |
| contractID | Number | Plimus Contract ID |

| INSTANT PAYMENT NOTIFICATION VARIABLES – AFFILIATES | | |
|---|------------------------|---|
| Variable | Type | Description |
| testMode | Y/N | Test transaction made by the Vendor |
| referenceNumber | Number | Plimus Reference Number |
| originalReferenceNumber | Number | Plimus Original Reference Number (for subscriptions) |
| transactionDate | mm/dd/yyyy hh:mi AM/PM | Date & Time transaction occurred |
| untilDate | mm/dd/yyyy hh:mi AM/PM | Subscription expiration date |
| transactionType | String | AUTH_ONLY - orders that were authorized for a future charge |
| | | CHARGE - orders that were successfully charged |
| | | REFUND - orders that were refunded |
| | | CHARGEBACK - ordered that were charged back by the customer |
| | | CANCELLATION - orders that were cancelled (for unapproved orders and cancelled subscriptions) |
| | | RECURRING - subscription orders that were successfully charged |
| | | CANCELLATION_REFUND - orders that were refunded and cancelled (for cancelled subscriptions) |
| | | CONTRACT_CHANGE - subscription orders that had their contract switched |
| productID | Number | Plimus Product ID |
| productName | String | Product name |
| contractID | Number | Plimus Contract ID |
| contractName | String | Contract name |
| contractOwner | String | Contract owner |
| contractPrice | Number #,###.## | Contract price |
| quantity | Number | Quantity ordered |
| currency | String | Currency code used in the order |
| addCD | Y/N | Did the Customer also order a CD on Demand? |
| coupon | String | Did the Customer use a coupon |
| couponValue | Number #,###.## | coupon value |

| | | |
|--------------------------|-----------------|--|
| referrer | String | The referrer URL that the Customer came from to the BuyNow page |
| promoteContractID # | Number | Promotion Contract ID. The # sign from 0 to number of the promotion contracts in the order |
| promoteContractName# | String | Promotion contract name. The # sign from 0 to number of the promotion contracts in the order |
| promoteContractOwner# | String | Promotion contract owner. The # sign from 0 to number of the promotion contracts in the order |
| promoteContractPrice# | Number #,###.## | Promotion contract price. The # sign from 0 to number of the promotion contracts in the order |
| promoteContractQuantity# | Number | Promotion contract quantity. The # sign from 0 to number of the promotion contracts in the order |
| promoteContractsNum | Number | Number of promotions. |
| invoiceAmount# | Number #,###.## | The invoice amount in USD |
| paymentMethod | String | Method of payment, i.e. CC/PAYPAL/WIRE |
| creditCardType | String | Type of credit-card, i.e. AMEX/VISA |
| shippingMethod | String | i.e. UPS/USPS |
| remoteAddress | String | Customer remote IP address |
| invoiceInfoURL | String | Invoice details web-page |

Testing

The IPN can be rigorously tested in the Plimus Sandbox. If you do not already have a logon for the Sandbox, set up a free Vendor or Affiliate account at **sandbox.plimus.com**.

To test a typical credit card transaction you can use a fictitious name and number as supplied to you on request by the Vendor Service team.

Support Issues

You can request support from the Plimus Vendor Support team through the normal control panel link located on the top right hand corner of the control panel.

In the event that the Plimus system is unable to reach the URL you have specified, an automated email will be issued to your account advising of this problem.

Appendix: Coding Example

A PHP coding example is available for your assistance. Kindly note, that Plimus Vendor Support is unable to provide support relating custom coding requests.