

- [PayPal Home](#)
- [Support](#)
- Search PayPal Developer Central

Search

- [Developer Home](#)
- [Partner Solutions](#)
- [How to](#)
- [Library](#)
- [Training](#)
- [Community](#)
- [Integration Overview](#)
- [HTML](#)
  - [Overview](#)
  - [Website Payments Standard](#)
  - [Payflow Link](#)
  - [IPN and PDT Variables](#)
  - [Standard Variable Reference](#)
- [API](#)
  - [Summary](#)
  - [Express Checkout](#)
  - [Digital Goods For Express Checkout](#)
  - [Website Payments Pro](#)
  - [Adaptive Payments](#)
  - [Adaptive Accounts](#)
  - [Permissions](#)
  - [Mass Payments](#)
  - [Invoicing API](#)
  - [Button Manager](#)
  - [Payflow Pro](#)
  - [Website Payments Pro Payflow Edition](#)
  - [API Endpoints](#)
  - [Go Live Checklist](#)
  - [API Reference](#)
- [Administration / Back Office](#)
  - [Overview](#)
  - [Setup and Administration](#)
  - [Refunds](#)
  - [Authorization & Capture](#)
  - [Virtual Terminal](#)
  - [Fraud Management Filters](#)
  - [Instant Payment Notification](#)
  - [Reporting](#)
  - [Recurring Payments](#)
- [Testing](#)
  - [PayPal Sandbox](#)
  - [Using the Sandbox](#)
  - [Sign up](#)
  - [Log In](#)
  - [Sandbox Forum](#)
- [Product Availability](#)
  - [Overview](#)
- [Developer Home](#) >
- [How to](#) >
- [HTML](#) >
- [IPN and PDT Variables](#)
- Updated on November 22, 2011

## HTML

- [Overview](#)

- [Website Payments Standard](#)
- [Payflow Link](#)
- [IPN and PDT Variables](#)
- [Standard Variable Reference](#)
- Other Resources
- [Documentation](#)
- [Payment Buttons](#)

## IPN and PDT Variables

PayPal returns related variables for each kind of IPN or PDT message. Not all variables are returned for each type of transaction.

- [IPN Transaction Types](#)
- [Transaction and Notification-Related Variables](#)
- [Buyer Information Variables](#)
- [Payment Information Variables](#)
- [Auction Variables](#)
- [Mass Pay Variables](#)
- [Recurring Payments Variables](#)
- [Subscription Variables](#)
- [Dispute Resolution Variables](#)
- [Pay Message Variables](#)
- [Preapproval Message Variables](#)
- [Adaptive Accounts IPN Messages](#)
- [PDT-Specific Variables](#)

IPN and PDT variable names are case-sensitive. All constant values are lowercase, except those for `payment_status`, whose constant values have an initial capital letter.

Note:

Values posted by IPN are URL-encoded. For example, a colon in the value `http://...` is encoded as `%3A` in an IPN post, as in `http%3A//...`

## IPN Transaction Types

Typically, your back-end or administrative processes will perform specific actions based on the kind of IPN message received. You can use the `txn_type` variable in the message to trigger the kind of processing you want to perform.

Transaction Type ( <code>txn_type</code> )	Description
—	Credit card chargeback if the <code>case_type</code> variable contains <code>chargeback</code>
<code>adjustment</code>	A dispute has been resolved and closed
<code>cart</code>	Payment received for multiple items; source is Express Checkout or the PayPal Shopping Cart.
<code>express_checkout</code>	Payment received for a single item; source is Express Checkout

<code>masspay</code>	Payment sent using MassPay
<code>mp_signup</code>	Created a billing agreement
<code>merch_pmt</code>	Monthly subscription paid for Website Payments Pro
<code>new_case</code>	A new dispute was filed
<code>recurring_payment</code>	Recurring payment received
<code>recurring_payment_expired</code>	Recurring payment expired
<code>recurring_payment_profile_created</code>	Recurring payment profile created
<code>recurring_payment_skipped</code>	Recurring payment skipped; it will be retried up to a total of 3 times, 5 days apart
<code>send_money</code>	Payment received; source is the Send Money tab on the PayPal website
<code>subscr_cancel</code>	Subscription canceled
<code>subscr_eot</code>	Subscription expired
<code>subscr_failed</code>	Subscription signup failed
<code>subscr_modify</code>	Subscription modified
<code>subscr_payment</code>	Subscription payment received
<code>subscr_signup</code>	Subscription started
<code>virtual_terminal</code>	Payment received; source is Virtual Terminal
<code>web_accept</code>	Payment received; source is a Buy Now, Donation, or Auction Smart Logos button

## Transaction and Notification-Related Variables

Transaction and notification-related variables identify the merchant that is receiving a payment or other notification and transaction-specific information.

Variable Name	Description
<code>business</code>	<p>Email address or account ID of the payment recipient (that is, the merchant). Equivalent to the values of <code>receiver_email</code> (if payment is sent to primary account) and <code>business</code> set in the Website Payment HTML.</p> <p>Note:</p> <p>The value of this variable is normalized to lowercase characters.</p> <p>Length: 127 characters</p>
<code>charset</code>	Character set

custom	Custom value as passed by you, the merchant. These are pass-through variables that are never presented to your customer  Length: 255 characters
ipn_track_id	Internal; only for use by MTS and DTS
notify_version	Message's version number
parent_txn_id	In the case of a refund, reversal, or canceled reversal, this variable contains the <code>txn_id</code> of the original transaction, while <code>txn_id</code> contains a new ID for the new transaction.  Length: 19 characters
receipt_id	Unique ID generated during guest checkout (payment by credit card without logging in).
receiver_email	Primary email address of the payment recipient (that is, the merchant). If the payment is sent to a non-primary email address on your PayPal account, the <code>receiver_email</code> is still your primary email.  Note:  The value of this variable is normalized to lowercase characters.  Length: 127 characters
receiver_id	Unique account ID of the payment recipient (i.e., the merchant). This is the same as the recipient's referral ID.  Length: 13 characters
resend	Whether this IPN message was resent (equals <code>true</code> ); otherwise, this is the original message.
residence_country	ISO 3166 country code associated with the country of residence  Length: 2 characters
test_ipn	Whether the message is a test message. It is one of the following values: <ul style="list-style-type: none"> <li>1 – the message is directed to the Sandbox</li> </ul>
txn_id	The merchant's original transaction identification number for the payment from the buyer, against which the case was registered.
txn_type	The kind of transaction for which the IPN message was sent.
verify_sign	Encrypted string used to validate the authenticity of the transaction

## Buyer Information Variables

Buyer information identifies the buyer or initiator of a transaction by payer ID or email address. Additional contact or shipping information may be provided.

### Variable Name

### Description

Country of customer's address

<code>address_country</code>	Country of customer's address Length: 64 characters
<code>address_city</code>	City of customer's address Length: 40 characters
<code>address_country_code</code>	ISO 3166 country code associated with customer's address Length: 2 characters
<code>address_name</code>	Name used with address (included when the customer provides a Gift Address) Length: 128 characters
<code>address_state</code>	State of customer's address Length: 40 characters
<code>address_status</code>	Whether the customer provided a confirmed address. It is one of the following values: <ul style="list-style-type: none"> <li><code>confirmed</code> – Customer provided a confirmed address.</li> <li><code>unconfirmed</code> – Customer provided an unconfirmed address.</li> </ul>
<code>address_street</code>	Customer's street address. Length: 200 characters
<code>address_zip</code>	Zip code of customer's address. Length: 20 characters
<code>contact_phone</code>	Customer's telephone number. Length: 20 characters
<code>first_name</code>	Customer's first name Length: 64 characters
<code>last_name</code>	Customer's last name Length: 64 characters
<code>payer_business_name</code>	Customer's company name, if customer is a business Length: 127 characters
<code>payer_email</code>	Customer's primary email address. Use this email to provide any credits. Length: 127 characters
<code>payer_id</code>	Unique customer ID. Length: 13 characters

# Payment Information Variables

Payment information identifies the amount and status of a payment transaction, including fees.

Variable Name	Description
<code>auth_amount</code>	Authorization amount
<code>auth_exp</code>	Authorization expiration date and time, in the following format: HH:MM:SS DD Mmm YY, YYYY PST Length: 28 characters
<code>auth_id</code>	Authorization identification number Length: 19 characters
<code>auth_status</code>	Status of authorization
<code>echeck_time_processed</code>	The time an eCheck was processed; for example, when the status changes to Success or Completed. The format is as follows: hh:mm:ss MM DD, YYYY ZONE, e.g. 04:55:30 May 26, 2011 PDT.
<code>exchange_rate</code>	Exchange rate used if a currency conversion occurred.
<code>fraud_managment_pending_filters_x</code>	<p>One or more filters that identify a triggering action associated with one of the following <code>payment_status</code> values: Pending, Completed, Denied, where <i>x</i> is a number starting with 1 that makes the IPN variable name unique; <i>x</i> is not the filter's ID number. The filters and their ID numbers are as follows:</p> <ul style="list-style-type: none"><li>• 1 – AVS No Match</li><li>• 2 – AVS Partial Match</li><li>• 3 – AVS Unavailable/Unsupported</li><li>• 4 – Card Security Code (CSC) Mismatch</li><li>• 5 – Maximum Transaction Amount</li><li>• 6 – Unconfirmed Address</li><li>• 7 – Country Monitor</li><li>• 8 – Large Order Number</li><li>• 9 – Billing/Shipping Address Mismatch</li><li>• 10 – Risky ZIP Code</li><li>• 11 – Suspected Freight Forwarder Check</li><li>• 12 – Total Purchase Price Minimum</li><li>• 13 – IP Address Velocity</li><li>• 14 – Risky Email Address Domain Check</li><li>• 15 – Risky Bank Identification Number (BIN) Check</li><li>• 16 – Risky IP Address Range</li></ul>

invoice	<p>Passthrough variable you can use to identify your Invoice Number for this purchase. If omitted, no variable is passed back.</p> <p>Length: 127 characters</p>
item_name <i>x</i>	<p>Item name as passed by you, the merchant. Or, if not passed by you, as entered by your customer. If this is a shopping cart transaction, PayPal will append the number of the item (e.g., item_name1, item_name2, and so forth).</p> <p>Length: 127 characters</p>
item_number <i>x</i>	<p>Pass-through variable for you to track purchases. It will get passed back to you at the completion of the payment. If omitted, no variable will be passed back to you. If this is a shopping cart transaction, PayPal will append the number of the item (e.g., item_number1, item_number2, and so forth)</p> <p>Length: 127 characters</p>
mc_currency	<ul style="list-style-type: none"> <li>• For payment IPN notifications, this is the currency of the payment.</li> <li>• For non-payment subscription IPN notifications (i.e., txn_type= signup, cancel, failed, eot, or modify), this is the currency of the subscription.</li> <li>• For payment subscription IPN notifications, it is the currency of the payment (i.e., txn_type = subscr_payment)</li> </ul>
mc_fee	<p>Transaction fee associated with the payment. mc_gross minus mc_fee equals the amount deposited into the receiver_email account. Equivalent to payment_fee for USD payments. If this amount is negative, it signifies a refund or reversal, and either of those payment statuses can be for the full or partial amount of the original transaction fee.</p>
mc_gross	<p>Full amount of the customer's payment, before transaction fee is subtracted. Equivalent to payment_gross for USD payments. If this amount is negative, it signifies a refund or reversal, and either of those payment statuses can be for the full or partial amount of the original transaction.</p>
mc_gross_ <i>x</i>	<p>The amount is in the currency of mc_currency, where <i>x</i> is the shopping cart detail item number. The sum of mc_gross_ <i>x</i> should total mc_gross.</p>
mc_handling	<p>Total handling amount associated with the transaction.</p>
mc_shipping	<p>Total shipping amount associated with the transaction.</p>
mc_shipping <i>x</i>	<p>This is the combined total of shipping1 and shipping2 Website Payments Standard variables, where <i>x</i> is the shopping cart detail item number. The shipping <i>x</i> variable is only shown when the merchant applies a shipping amount for a specific item. Because profile shipping might apply, the sum of shipping <i>x</i> might not be equal to shipping.</p>
memo	<p>Memo as entered by your customer in PayPal Website Payments note field.</p> <p>Length: 255 characters</p>
num_cart_items	<p>If this is a PayPal Shopping Cart transaction, number of items in cart.</p>

Option 1 name as requested by you. PayPal appends the number of the item when a

option\_name1

Option 1 name as requested by you. PayPal appends the number of the item where  $x$  represents the number of the shopping cart detail item (e.g., option\_name1, option\_name2).

Length: 64 characters

option\_name2

Option 2 name as requested by you. PayPal appends the number of the item where  $x$  represents the number of the shopping cart detail item (e.g., option\_name2, option\_name2).

Length: 64 characters

option\_selection1

PayPal appends the number of the item where  $x$  represents the number of the shopping cart detail item (e.g., option\_selection1, option\_selection2).

Length: 200 characters

option\_selection2

Option 2 choice as entered by your customer.

PayPal appends the number of the item where  $x$  represents the number of the shopping cart detail item (e.g., option\_selection1, option\_selection2).

Length: 200 characters

Whether the customer has a verified PayPal account.

payer\_status

- `verified` – Customer has a verified PayPal account.
- `unverified` – Customer has an unverified PayPal account.

payment\_date

Time/Date stamp generated by PayPal, in the following format: HH:MM:SS DD Mmm YY, YYYY PST

Length: 28 characters

payment\_fee

USD transaction fee associated with the payment. `payment_gross` minus `payment_fee` equals the amount deposited into the receiver email account. Is empty for non-USD payments. If this amount is negative, it signifies a refund or reversal, and either of those payment statuses can be for the full or partial amount of the original transaction fee.

Note:

This is a deprecated field. Use `mc_fee` instead.

payment\_fee\_x

If the payment is USD, then the value is the same as that for `mc_fee_x`, where  $x$  is the record number; if the currency is not USD, then this is an empty string.

Note:

This is a deprecated field. Use `mc_fee_x` instead.

payment\_gross

Full USD amount of the customer's payment, before transaction fee is subtracted. Will be empty for non-USD payments. This is a legacy field replaced by `mc_gross`. If this amount is negative, it signifies a refund or reversal, and either of those payment statuses can be for the full or partial amount of the original transaction.

payment\_gross\_x

If the payment is USD, then the value for this is the same as that for the `mc_gross_x`, where  $x$  is the record number the mass pay item. If the currency is not USD, this is an empty string.

Note:



note.

This is a deprecated field. Use `mc_gross_x` instead.

The status of the payment:

**Canceled\_Reversal:** A reversal has been canceled. For example, you won a dispute with the customer, and the funds for the transaction that was reversed have been returned to you.

**Completed:** The payment has been completed, and the funds have been added successfully to your account balance.

**Created:** A German ELV payment is made using Express Checkout.

**Denied:** You denied the payment. This happens only if the payment was previously pending because of possible reasons described for the `pending_reason` variable or the `Fraud_Management_Filters_x` variable.

**Expired:** This authorization has expired and cannot be captured.

**Failed:** The payment has failed. This happens only if the payment was made from your customer's bank account.

**Pending:** The payment is pending. See `pending_reason` for more information.

**Refunded:** You refunded the payment.

**Reversed:** A payment was reversed due to a chargeback or other type of reversal. The funds have been removed from your account balance and returned to the buyer. The reason for the reversal is specified in the `ReasonCode` element.

**Processed:** A payment has been accepted.

**Voided:** This authorization has been voided.

**echeck:** This payment was funded with an eCheck.

**instant:** This payment was funded with PayPal balance, credit card, or Instant Transfer.

This variable is set only if `payment_status = Pending`.

**address:** The payment is pending because your customer did not include a confirmed shipping address and your Payment Receiving Preferences is set to allow you to manually accept or deny each of these payments. To change your preference, go to the Preferences section of your Profile.

**authorization:** You set the payment action to Authorization and have not yet captured funds.

**echeck:** The payment is pending because it was made by an eCheck that has not yet cleared.

**intl:** The payment is pending because you hold a non-U.S. account and do not have a withdrawal mechanism. You must manually accept or deny this payment from your Account Overview.

**multi-currency:** You do not have a balance in the currency sent, and you do not have your Payment Receiving Preferences set to automatically convert and accept this payment. You must manually accept or deny this payment.

**order:** You set the payment action to Order and have not yet captured funds.

**paymentreview:** The payment is pending while it is being reviewed by PayPal for risk.

**unilateral:** The payment is pending because it was made to an email address that is not yet registered or confirmed.

**upgrade:** The payment is pending because it was made via credit card and you must upgrade your account to Business or Premier status in order to receive the funds. `upgrade` can also mean that you have reached the monthly limit for transactions on your account.

`payment_status`

`payment_type`

`pending_reason`

	can also mean that you have reached the monthly limit for transactions on your account.
	<b>verify:</b> The payment is pending because you are not yet verified. You must verify your account before you can accept this payment.
	<b>other:</b> The payment is pending for a reason other than those listed above. For more information, contact PayPal Customer Service.
protection_eligibility	ExpandedSellerProtection: Seller is protected by Expanded seller protection
	SellerProtection: Seller is protected by PayPal's Seller Protection Policy
	None: Seller is not protected under Expanded seller protection nor the Seller Protection Policy
quantity	Quantity as entered by your customer or as passed by you, the merchant. If this is a shopping cart transaction, PayPal appends the number of the item (e.g. <code>quantity1</code> , <code>quantity2</code> ).
	This variable is set if <code>payment_status = Reversed, Refunded, or Canceled_Reversal</code> .
	<b>adjustment_reversal:</b> Reversal of an adjustment
	<b>buyer-complaint:</b> A reversal has occurred on this transaction due to a complaint about the transaction from your customer.
	<b>chargeback:</b> A reversal has occurred on this transaction due to a chargeback by your customer.
reason_code	<b>chargeback_reimbursement:</b> Reimbursement for a chargeback
	<b>chargeback_settlement:</b> Settlement of a chargeback
	<b>guarantee:</b> A reversal has occurred on this transaction due to your customer triggering a money-back guarantee.
	<b>other:</b> Non-specified reason.
	<b>refund:</b> A reversal has occurred on this transaction because you have given the customer a refund.
	<b>Note:</b> Additional codes may be returned.
remaining_settle	Remaining amount that can be captured with Authorization and Capture
settle_amount	Amount that is deposited into the account's primary balance after a currency conversion from automatic conversion (through your Payment Receiving Preferences) or manual conversion (through manually accepting a payment).
settle_currency	Currency of <code>settle_amount</code> .
shipping	Shipping charges associated with this transaction. Format: unsigned, no currency symbol, two decimal places.
shipping_method	The name of a shipping method from the Shipping Calculations section of the merchant's account profile. The buyer selected the named shipping method for this transaction.
tax	Amount of tax charged on payment. PayPal appends the number of the item (e.g., <code>item_name1</code> , <code>item_name2</code> ). The <code>tax x</code> variable is included only if there was a specific tax amount applied to a particular shopping cart item. Because total tax may apply to other items in the cart, the sum of <code>tax x</code> might not total to <code>tax</code> .

items in the cart, the sum of tax *x* might not total to tax.

transaction\_entity

Authorization and Capture transaction entity

## Auction Variables

Auction information identifies the auction for which a payment is made and additional information about the auction.

Variable Name	Description
<code>auction_buyer_id</code>	The customer's auction ID. Length: 64 characters
<code>auction_closing_date</code>	The auction's close date, in the following format: HH:MM:SS DD Mmm YY, YYYY PST Length: 28 characters
<code>auction_multi_item</code>	The number of items purchased in multi-item auction payments. It allows you to count the <code>mc_gross</code> or <code>payment_gross</code> for the first IPN you receive from a multi-item auction ( <code>auction_multi_item</code> ), since each item from the auction will generate an Instant Payment Notification showing the amount for the entire auction.
<code>for_auction</code>	This is an auction payment—payments made using Pay for eBay Items or Smart Logos—as well as Send Money/Money Request payments with the type eBay items or Auction Goods (non-eBay).

## Mass Pay Variables

Mass pay information identifies the amounts and status of transactions related to mass payments, including fees.

Variable Name	Description
<code>masspay_txn_id_x</code>	For Mass Payments, a unique transaction ID generated by the PayPal system, where <i>x</i> is the record number of the mass pay item Length: 19 characters
<code>mc_currency_x</code>	For Mass Payments, the currency of the amount and fee, where <i>x</i> is the record number the mass pay item
<code>mc_fee_x</code>	For Mass Payments, the transaction fee associated with the payment, where <i>x</i> is the record number the mass pay item
<code>mc_gross_x</code>	The gross amount for the amount, where <i>x</i> is the record number the mass pay item
<code>mc_handlingx</code>	The <i>x</i> is the shopping cart detail item number. The <code>handling_cart</code> cart-wide Website Payments variable is also included in the <code>mc_handling</code> variable; for this reason, the sum of <code>mc_handling x</code> might not be equal to <code>mc_handling</code>
<code>payment_date</code>	For Mass Payments, the first IPN is the date/time when the record set is processed and the second IPN is the date/time when all payments are completed/returned. Format: HH:MM:SS DD Mmm YY, YYYY PST Length: 28 characters
	Completed: For Mass Payments, this means that all of your payments have been claimed, or after a period of 30 days, unclaimed payments have been returned to you

	days, unclaimed payments have been returned to you.
payment_status	<p>Denied: For Mass Payments, this means that your funds were not sent and the Mass Payment was not initiated. This may have been caused by lack of funds.</p> <p>Processed: Your Mass Payment has been processed and all payments have been sent.</p> <p>This variable is only set if <code>status = Failed</code>.</p>
reason_code	<p>1001: Invalid UserID.</p> <p>1003: Country of Residence check failure</p> <p>1004: Country of Funding Source check failure</p>
receiver_email_x	<p>For Mass Payments, the primary email address of the payment recipient, where <math>x</math> is the record number of the mass pay item.</p> <p>Length: 127 characters</p>
status_x	<p>For Mass Payments, the status of the payment, where <math>x</math> is the record number</p> <p>Completed: The payment has been processed, regardless of whether this was originally a unilateral payment</p> <p>Failed: The payment failed because of insufficient PayPal balance.</p> <p>Returned: Payment has been returned after 30 days.</p> <p>Reversed: This is for unilateral payments that were not claimed after 30 days and have been returned to the sender. Or the funds have been returned because the Receiver's account was locked.</p> <p>Unclaimed: This is for unilateral payments that are unclaimed.</p>
unique_id_x	<p>For Mass Payments, the unique ID from input, where <math>x</math> is the record number. This allows the merchant to cross-reference the payment</p> <p>Length: 13 characters</p>

## Recurring Payments Variables

Recurring payments information identifies the amounts and status associated with recurring payments transactions.

Variable Name	Description
amount	Amount of recurring payment
amount_per_cycle	Amount of recurring payment per cycle
initial_payment_amount	Initial payment amount for recurring payments
next_payment_date	Next payment date for a recurring payment
outstanding_balance	Outstanding balance for recurring payments
payment_cycle	Payment cycle for recurring payments
period_type	Kind of period for a recurring payment
product_name	Product name associated with a recurring payment

product_name	Product name associated with a recurring payment
product_type	Product name associated with a recurring payment
profile_status	Profile status for a recurring payment
recurring_payment_id	Recurring payment ID
rp_invoice_id	The merchant's own unique reference or invoice number, which can be used to uniquely identify a profile. Length: 127 single-byte alphanumeric characters
time_created	When a recurring payment was created

**Table 1. Summary of recurring payment variables**

Variables	Profile created message	Recurring payment message
<b>Basic Information</b>		
business		X
receiver_email	X	X
receiver_id		X
<b>Transaction Information</b>		
payment_status		X
payment_type		X
payment_date		X
txn_id		X
initial_payment_status	X	
initail_payment_txn_id		X
txn_type	recurring_payment_profile_created	recurring_payment
<b>Currency and Exchange</b>		
mc_gross		X
mc_fee		X
mc_currency		X

payment_gross		X
---------------	--	---

currency_code	X	X
---------------	---	---

payment_fee		X
-------------	--	---

**Buyer Information**

first_name	X	X
------------	---	---

last_name	X	X
-----------	---	---

address_name		X
--------------	--	---

address_street		X
----------------	--	---

address_city		X
--------------	--	---

address_state		X
---------------	--	---

address_zip		X
-------------	--	---

address_country		X
-----------------	--	---

payer_email	X	X
-------------	---	---

payer_id	X	X
----------	---	---

payer_status	X	X
--------------	---	---

residence_country	X	X
-------------------	---	---

address_country_code		X
----------------------	--	---

address_status		X
----------------	--	---

**Recurring Payment**

recurring_payment_id	X	X
----------------------	---	---

rp_invoice_id	X	X
---------------	---	---

product_name	X	X
--------------	---	---

product_type	X	X
--------------	---	---

period_type	X	X
-------------	---	---

payment_cycle	X	X
outstanding_balance	X	X
amount_per_cycle	X	X
initial_payment_amount	X	X
profile_status	X	X
amount	X	X
time_created	X	X
next_payment_date	X	X

### Other Information

notify_version	X	X
charset	X	X

## Subscription Variables

Subscription information identifies the amounts and parameters associated with subscription transactions.

Variable Name	Description
amount1	Amount of payment for trial period 1 for USD payments; otherwise blank (optional).
amount2	Amount of payment for trial period 2 for USD payments; otherwise blank (optional).
amount3	Amount of payment for regular subscription period for USD payments; otherwise blank.
mc_amount1	Amount of payment for trial period 1, regardless of currency (optional).
mc_amount2	Amount of payment for trial period 2, regardless of currency (optional).
mc_amount3	Amount of payment for regular subscription period, regardless of currency.
password	(optional) Password generated by PayPal and given to subscriber to access the subscription (password will be encrypted). Length: 24 characters
period1	(optional) Trial subscription interval in days, weeks, months, years (example: a 4 day interval is “period1: 4 D”).
period2	(optional) Trial subscription interval in days, weeks, months, or years.
period3	Regular subscription interval in days, weeks, months, or years.

Subscription Payment Information: [Subscription Payment Information](#)

reattempt	Indicates whether reattempts should occur upon payment failures (1 is yes, blank is no).
recur_times	The number of payment installments that will occur at the regular rate.
recurring	Indicates whether regular rate recurs (1 is yes, blank is no).
retry_at	Date PayPal will retry a failed subscription payment.
subscr_date	Start date or cancellation date depending on whether transaction is <code>subscr_signup</code> or <code>subscr_cancel</code> . Time/Date stamp generated by PayPal, in the following format: HH:MM:SS DD Mmm YY, YYYY PST
subscr_effective	Date when the subscription modification will be effective (only for <code>txn_type = subscr_modify</code> ). Time/Date stamp generated by PayPal, in the following format: HH:MM:SS DD Mmm YY, YYYY PST
subscr_id	ID generated by PayPal for the subscriber. Length: 19 characters
username	(optional) Username generated by PayPal and given to subscriber to access the subscription. Length: 64 characters

**Table 2. Summary of subscription variables**

Variable	Signup	Cancel	Modify	USD Payment	Multi-CurrencyPayment	Re-fund	Failed	EOT
<b>Basic Information</b>								
business	X	X	X	X	X		X	X
receiver_email	X	X	X	X	X		X	X
receiver_id				X	X			
item_name	X	X	X	X	X		X	X
item_number	X	X	X	X	X		X	X
<b>Advanced and Custom Information</b>								
invoice	X	X	X	X	X		X	X
custom	X	X	X	X	X		X	X
option_name1	X	X	X	X	X		X	X



option_selection1	X	X	X	X	X	X	X
option_name2	X	X	X	X	X	X	X
option_selection2	X	X	X	X	X	X	X

### Transaction Information

payment_status				X	X	X	
pending_reason				X	X		
reason_code				X	X		
payment_date				X	X		
txn_id				X	X		
parent_txn_id				X	X		
txn_type	subscr_signup	subscr_cancel	subscr_modify	subscr_payment		subscr_failed	subscr_eot

### Currency and Exchange information

mc_gross				X	X		
mc_fee				X	X		
mc_currency	X	X	X	X	X	X	X
settle_amount				X	X		
exchange_rate				X	X		
payment_gross				X		X	X
payment_fee				X			

### Buyer Information

first_name	X	X	X	X	X	X	X
last_name	X	X	X	X	X	X	X
payer_business_name	X	X	X	X	X	X	
address_name	X	X	X	X	X	X	

-							
address_street	X	X	X	X	X	X	
address_city	X	X	X	X	X	X	
address_state	X	X	X	X	X	X	
address_zip	X	X	X	X	X	X	
address_country	X	X	X	X	X	X	
payer_email	X	X	X	X	X	X	X
payer_id	X	X	X	X	X	X	X
payer_status	X	X	X	X	X	X	X
payment_type				X	X		

### Subscription Information

subscr_date	X	X	X				
subscr_effective			X				
period1	X	X	X				
period2	X	X	X				
period3	X	X	X				
amount1	X	X	X				
amount2	X	X	X				
amount3	X	X	X				
mc_amount1	X	X	X				
mc_amount2	X	X	X				
recurring	X	X	X				
reattempt	X	X	X				
retry_at						X	
recur_times	X	X	X				

username	X	X	X	X	X	X	X
password	X	X	X	X	X	X	X
subscr_id	X	X	X	X	X	X	X

## Dispute Resolution Variables

Dispute resolution information identifies the case ID and status associated with a dispute.

Variable Name	Description
case_creation_date	Date and time case was registered, in the following format: HH:MM:SS DD Mmm YY, YYYY PST
case_id	Case identification number. Format: PP-nnn-nnn-nnn-nnn where n is any numeric character.
case_type	<ul style="list-style-type: none"> <li><b>chargeback:</b> A buyer has filed a chargeback with his credit card company, which has notified PayPal of the reason for the chargeback.</li> <li><b>complaint:</b> A buyer has logged a complaint through the PayPal Resolution Center.</li> <li><b>dispute:</b> A buyer and seller post communications to one another through the Resolution Center to try to work out issues without intervention by PayPal.</li> </ul> <p>Reason for the case.</p> <p>Values for case_type set to complaint:</p> <ul style="list-style-type: none"> <li><b>non_receipt:</b> Buyer claims that he did not receive goods or service.</li> <li><b>not_as_described:</b> Buyer claims that the goods or service received differ from merchant's description of the goods or service.</li> </ul> <p>Values for case_type set to chargeback:</p>
reason_code	<ul style="list-style-type: none"> <li><b>unauthorized</b></li> <li><b>adjustment_reimburse:</b> A case that has been resolved and close requires a reimbursement.</li> <li><b>non_receipt:</b> Buyer claims that he did not receive goods or service.</li> <li><b>duplicate:</b> Buyer claims that a possible duplicate payment was made to the merchant.</li> <li><b>merchandise:</b> Buyer claims that the received merchandise is unsatisfactory, defective, or damaged.</li> <li><b>special:</b> Some other reason. Usually, special indicates a credit card processing error for which the merchant is not responsible and for which no debit to the merchant will result. PayPal must review the documentation from the credit card company to determine the nature of the dispute and possibly contact the merchant to resolve it.</li> </ul>

## Pay Message Variables

PayPal generates an IPN message that contains information about the pay request or payment in response to the Adaptive Payments

Variable	Description
	The type of transaction. Possible values are:
transaction_type	<ul style="list-style-type: none"><li>Adaptive Payment PAY</li></ul> <p>This notification occurs when a payment is made due to a <code>PayRequest</code>. The variables for the <code>Adaptive Payment Pay</code> notification are similar to the <code>PaymentDetailsResponse</code> fields.</p> <ul style="list-style-type: none"><li>Adjustment</li></ul> <p>This can be for a chargeback, reversal, or refund; check the <code>reason_code</code> to see which it is.</p>
	The status of the payment. Possible values are:
status	<ul style="list-style-type: none"><li>CREATED – The payment request was received; funds will be transferred once the payment is approved</li><li>COMPLETED – The payment was successful</li><li>INCOMPLETE – Some transfers succeeded and some failed for a parallel payment or, for a delayed chained payment, secondary receivers have not been paid</li><li>ERROR – The payment failed and all attempted transfers failed or all completed transfers were successfully reversed</li><li>REVERSALERROR – One or more transfers failed when attempting to reverse a payment</li><li>PROCESSING – The payment is in progress</li><li>PENDING – The payment is awaiting processing</li></ul>
sender_email	Sender's email address.
	Whether the <code>Pay</code> API is used with or without the <code>SetPaymentOptions</code> and <code>ExecutePayment</code> API operations. Possible values are:
action_type	<ul style="list-style-type: none"><li>PAY – If you are not using the <code>SetPaymentOptions</code> and <code>ExecutePayment</code> API operations</li><li>CREATE – If you are using the <code>SetPaymentOptions</code> and <code>ExecutePayment</code> API operations</li></ul>
payment_request_date	The date on which the payment request was initiated.
	Whether the payment request specified to reverse parallel payments if an error occurs. Possible values are:
reverse_all_parallel_payments_on_error	<ul style="list-style-type: none"><li>true – Each parallel payment is reversed if an error occurs</li><li>false – Only incomplete payments are reversed (default)</li></ul>

`transaction[n].id`

The transaction ID, where [n] is a number from 0 to 5. For simple, single receiver payments, this number will be 0. Numbers larger than 0 indicate the payment to a particular receiver in chained and parallel payments.

The transaction status, where [n] is a number from 0 to 5. For simple single-receiver payments, this number will be 0. Numbers larger than 0 indicate the payment to a particular receiver in chained and parallel payments.

Possible values are:

`transaction[n].status`

- Completed
- Pending
- Refunded

`transaction[n].id_for_sender`

The transaction ID for the sender, where [n] is a number from 0 to 5. For simple, single receiver payments, this number will be 0. Numbers larger than 0 indicate the payment to a particular receiver in chained and parallel payments.

The transaction status, where [n] is a number from 0 to 5. For simple single-receiver payments, this number will be 0. Numbers larger than 0 indicate the payment to a particular receiver in chained and parallel payments.

Possible values are:

`transaction[n].status_for_sender_txn`

- COMPLETED – The sender's transaction has completed
- PENDING – The transaction is awaiting further processing
- CREATED – The payment request was received; funds will be transferred once approval is received
- PARTIALLY\_REFUNDED – Transaction was partially refunded
- DENIED – The transaction was rejected by the receiver
- PROCESSING – The transaction is in progress
- REVERSED – The payment was returned to the sender
- REFUNDED – The payment was refunded
- FAILED – The payment failed

`transaction[n].refund_id`

The identification number for the refund

`transaction[n].refund_amount`

The amount that was refunded.

`transaction[n].refund_account_charged`

The email address of the debit account of the refund.

`transaction[n].receiver`

The receiver's email address for the transaction

`transaction[n].invoiceId`

The invoice number for this transaction

`transaction[n].amount`

The payment amount of the transaction

Whether there is a primary receiver for this transaction, which indicates whether the transaction is a chained payment.

Possible values are:

`transaction[n].is_primary_receiver`

- `true` – There is a primary receiver (chained payment)
- `false` – There is no primary receiver (simple or parallel payment)

`return_url`

The URL to which the sender's browser is redirected after approving a payment on paypal.com. Use the pay key to identify the payment as follows: `payKey=${payKey}`.

`cancel_url`

The URL to which the sender's browser is redirected if the sender cancels the approval for a payment on paypal.com. Use the pay key to identify the payment as follows: `payKey=${payKey}`.

`ipn_notification_url`

The URL to which all IPN messages for this payment are sent.

`pay_key`

The pay key that identifies this payment. This is a token that is assigned by the Pay API after a `PayRequest` message is received and can be used in other Adaptive Payments APIs as well as the `cancelURL` and `returnURL` to identify this payment. The pay key is valid for 3 hours.

`memo`

A note associated with the payment.

The payer of PayPal fees. Possible values are:

`fees_payer`

- `SENDER` – Sender pays all fees (for personal, implicit simple/parallel payments; do not use for chained or unilateral payments)
- `PRIMARYRECEIVER` – Primary receiver pays all fees (chained payments only)
- `EACHRECEIVER` – Each receiver pays their own fee (default, personal and unilateral payments)
- `SECONDARYONLY` – Secondary receivers pay all fees (use only for chained payments with one secondary receiver)

`trackingId`

The tracking ID that was specified for this payment in the `PaymentDetailsRequest` message.

`preapproval_key`

The preapproval key returned after a `PreapprovalRequest`, or the preapproval key that identifies the preapproval key sent with a `PayRequest`.

Whether this transaction is a chargeback, partial, or reversal. Possible values are:

`reason_code`

- `Chargeback Settlement` – Transaction is a chargeback
- `Admin reversal` – Transaction was reversed by PayPal administrators
- `Refund` – Transaction was partially or fully refunded

## Preapproval Message Variables

PayPal generates an IPN message that contains information about a preapproval in response to the Adaptive Payments Preapproval

API operation.

Variable	Description
	The type of transaction. For a preapproval, this variable returns <code>Adaptive Payment Preapproval</code> .
<code>transaction_type</code>	<p>Note:</p> <p>If this variable is set to <code>Adaptive Payment Pay</code> or <code>Adjustment</code>, refer to the <a href="#">Pay Message Variable</a> section.</p>
<code>preapproval_key</code>	<p>The preapproval key returned after a <code>PreapprovalRequest</code>.</p> <p>Whether the preapproval request was approved. Possible values are:</p>
<code>approved</code>	<ul style="list-style-type: none"><li><code>true</code> – The preapproval was approved</li><li><code>false</code> – The preapproval was denied</li></ul>
<code>cancel_url</code>	<p>The URL to which the sender's browser is redirected if the sender decides to cancel the preapproval as requested. Use the preapproval key to identify the payment as follows:</p> <pre>preapprovalKey=\${preapprovalKey}</pre>
<code>current_number_of_payments</code>	The current number of payments made for this preapproval.
<code>current_total_amount_of_all_payments</code>	The current total of payments made for this preapproval.
<code>current_period_attempts</code>	The current number of attempts this period for this preapproval.
	<p>The currency code. Possible values are:</p> <ul style="list-style-type: none"><li>Australian Dollar – <code>AUD</code></li><li>Brazilian Real – <code>BRL</code></li></ul> <p>Note:</p> <p>The Real is supported as a payment currency and currency balance only for Brazilian PayPal accounts.</p> <ul style="list-style-type: none"><li>Canadian Dollar – <code>CAD</code></li><li>Czech Koruna – <code>CZK</code></li><li>Danish Krone – <code>DKK</code></li><li>Euro – <code>EUR</code></li><li>Hong Kong Dollar – <code>HKD</code></li><li>Hungarian Forint – <code>HUF</code></li><li>Israeli New Sheqel – <code>ILS</code></li><li>Japanese Yen – <code>JPY</code></li><li>Malaysian Ringgit – <code>MYR</code></li></ul>
<code>currencyCode</code>	<p>Note:</p>

The Ringgit is supported as a payment currency and currency balance only for Malaysian PayPal accounts.

- Mexican Peso – MXN
- Norwegian Krone – NOK
- New Zealand Dollar – NZD
- Philippine Peso – PHP
- Polish Zloty – PLN
- Pound Sterling – GBP
- Singapore Dollar – SGD
- Swedish Krona – SEK
- Swiss Franc – CHF
- Taiwan New Dollar – TWD
- Thai Baht – THB
- Turkish Lira – TRY
- U.S. Dollar – USD

date\_of\_month

The day of the month on which a monthly payment is to be made. A number between 1 and 31 indicates the day of the month. A value of 0 indicates that the payment can be made on any day.

The day of the week that a weekly payment is to be made. Possible values are:

day\_of\_week

- NO\_DAY\_SPECIFIED
- SUNDAY
- MONDAY
- TUESDAY
- WEDNESDAY
- THURSDAY
- FRIDAY
- SATURDAY

starting\_date

First date for which the preapproval is valid.

ending\_date

Last date for which the preapproval is valid. Time is currently not supported.

max\_total\_amount\_of\_all\_payments

The preapproved maximum total amount of all payments.

max\_amount\_per\_payment

The preapproved maximum amount of all payments.

max\_number\_of\_payments

The maximum number of payments that is preapproved.

The payment period.

Possible values are:



payment_period	<ul style="list-style-type: none"> <li>• NO_PERIOD_SPECIFIED</li> </ul>
	<ul style="list-style-type: none"> <li>• DAILY</li> </ul>
	<ul style="list-style-type: none"> <li>• WEEKLY</li> </ul>
	<ul style="list-style-type: none"> <li>• BIWEEKLY</li> </ul>
	<ul style="list-style-type: none"> <li>• SEMIMONTHLY</li> </ul>
	<ul style="list-style-type: none"> <li>• MONTHLY</li> </ul>
	<ul style="list-style-type: none"> <li>• ANNUALLY</li> </ul>
Whether a personal identification number (PIN) is required. It is one of the following values:	
pin_type	<ul style="list-style-type: none"> <li>• NOT_REQUIRED – A PIN is not required</li> <li>• REQUIRED – A PIN is required</li> </ul>
sender_email	The sender's email address.

## Adaptive Accounts IPN Messages

PayPal sends an IPN message whenever a PayPal account is created using the CreateAccount API operation.

Field	Description
notify_version	Message's version number
first_name	Account holder's first name
last_name	Account holder's last name
verify_sign	Encrypted string used to validate the authenticity of the transaction
charset	Character set
account_key	Account key returned by the CreateAccount API operation
confirmation_code	Confirmation code
The kind of event:	
event_type	<ul style="list-style-type: none"> <li>• ACCOUNT_CONFIRMED indicates that the account holder has set a password and the account has been created.</li> <li>• LOGIN_CONFIRMED indicates that the account holder logged into the account.</li> </ul>

### Example IPN message in response to CreateAccount request

notify\_version=UNVERSIONED&first\_name=Someone&verify\_sign=AI.LzRiNYreJbZLZ8BV5FbGKL8hSAupAtXf3haOHWI2NmcJ5C

## Example IPN message in response to account holder setting the password

first\_name=Someone&account\_key=AA-6N5043354R131103K&notify\_version=UNVERSIONED&charset=windows-1252&email\_a

Note:

This message indicates that the account setup is complete.

## Example IPN message in response to account login

first\_name=Someone&account\_key=AA-6N5043354R131103K&notify\_version=UNVERSIONED&charset=windows-1252&email\_a

## PDT-Specific Variables

PDT variables have the same names as IPN variables. Some variables, however, apply *only* to PDT.

Variable	Description
----------	-------------

amt	Amount of the transaction
-----	---------------------------

cc	Currency code
----	---------------

cm	Custom message
----	----------------

sig	
-----	--

st	Transaction status
----	--------------------

tx	Transaction ID/PDT token
----	--------------------------

- [About Us](#)
- [Contact Us](#)
- [Fees](#)
- [Legal Agreements](#)
- [Site Feedback](#) ¶

- Copyright © 1999-2012 PayPal. All Rights Reserved.