## **PayPal**<sup>™</sup>

# Button Manager API (SOAP)

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#### **Intended Audience**

This document is intended for merchants and developers implementing PayPal Payment Standard (previously known as Website Payments Standard) buttons using an API.

#### **Revision History**

Revision history for Button Manager API (SOAP).

TABLE P.1 Revision History

Date	Description
04/03/12	Updated references to Website Payments Standard and Website Payments Pro to PayPal Payments Standard and PayPal Payments Pro, respectively.
02/13/12	Maintenance release.
05/10/10	Added information about installment plans, automatic billing, and subscribe buttons.
02/03/10	Added error code.
01/11/10	Added download key information and updated for version 61.0.
06/03/09	Added HTML Variable appendix and updated for version 57.0.
03/31/09	Initial draft.

# 1

## PayPal Payments Standard Button Manager API Overview

The PayPal Payments Standard (previously known as Website Payments Standard) Button Manager API lets you programatically create, manage, edit, and delete PayPal Payment Standard buttons, which are the same kind of buttons that you can create from the PayPal Profile. Hosted buttons created by this API reside on PayPal and can use all features, including inventory management; however, you can use this API to create code for non-hosted Standard buttons as well.

- Button Manager Introduction
- Generated Button Code
- Button Hosting
- Hosted Button Manipulation
- Inventory Management Using Hosted Buttons
- Inventory Management for Digital Downloads
- Button Manager API Summary
- Hosted Solution Links
- Granting Third-Party Permission for APIs

#### **Button Manager Introduction**

You should consider creating and managing your buttons with the Button Manager API when you are creating more than just a few PayPal Payment Standard buttons or when you manage buttons for others; for example, if you provide a shopping cart for merchants.

The Button Manager API enables you to manage PayPal Payment Standard buttons programatically in the same way that you can manage them on PayPal from the My Saved Buttons page of your Profile.

NOTE: You can access your My Saved Buttons page on PayPal by choosing My Saved Buttons from the Profile's My selling tools. If no buttons exist, the menu item is Create New Button.

You can use the API to create these Website Payment Standard and Hosted Sole Solution buttons:

- Buy Now
- Add to Cart and View Cart
- Donate
- Buy Gift Certificate

#### Generated Button Code

- Subscribe and Unsubscribe
- Pay Now (Hosted Sole Solution only)
- Installment Plan
- Automatic Billing

The following buttons are some of those that you can create using the Button Manager API:



#### **Generated Button Code**

When you create a button, PayPal responds by generating code that you can paste into your web page or document.

The generated code includes:

- HTML code for including the button in web pages
- URL link code for adding buttons to email and documents that support links

**NOTE:** Not all merchants in every country can use all the buttons that can be created. For example, German merchants cannot use **Subscribe** buttons even though they can be

created through the API. If you can create the button for the specified country using <a href="Create PayPal payment button">Create PayPal payment button</a> on PayPal, your merchant will be able to use the button.

This example shows the PayPal code for displaying a hosted **Add to Cart** button to sell a wireless mouse:

```
<form target="paypal" action="https://www.sandbox.paypal.com/cgi-</pre>
bin/webscr" method="post">
<input type="hidden" name="cmd" value="_s-xclick">
<input type="hidden" name="hosted_button_id" value="19218">
<input type="hidden" name="on0"
value="Color">Color<select name="os0">
  <option value="Red">Red $10.00
  <option value="Blue">Blue $8.00
  <option value="Green">Green $12.00
</select> 
<input type="hidden" name="on1"
value="Size">Size<select name="os1">
  <option value="Small">Small
 <option value="Large">Large
</select> 
<input type="hidden" name="currency_code" value="USD">
<input type="image"</pre>
src="https://www.sandbox.paypal.com/en_US/i/btn/btn_cart_LG.gif" border="0"
name="submit" alt="">
<imq alt="" border="0"</pre>
src="https://www.sandbox.paypal.com/en_US/i/scr/pixel.gif" width="1"
height="1">
</form>
```

When you display a web page with this code, this button appears:



PayPal-generated code for a link would be as follows:

```
https://www.sandbox.paypal.com/cgi-bin/webscr?cmd=_s-xclick&hosted_button_id=19218
```

For a link, PayPal does not generate code for options.

#### **Button Hosting**

The Button Manager API can create four kinds of buttons: hosted, encrypted, clear text, and token buttons. Buttons that you can view on the My Saved Buttons page of your PayPal profile are called *hosted* buttons.

• **Hosted buttons** are stored on PayPal. The parameters associated with this kind of button are secure.

Hosted buttons provide the greatest flexibility because you can instruct PayPal to change them dynamically, and PayPal maintains information about their state, such as the inventory level associated with the button.

**NOTE:** You cannot use hosted buttons with Hosted Sole Solution; you should use token buttons instead.

• **Encrypted buttons** are not stored on PayPal. The parameters associated with this kind of button are encrypted.

Encrypted buttons are similar to hosted buttons with regard to secure operation; however, you must update the web pages that use an encrypted button each time the button or its associated information changes. You should use an encrypted button only if a hosted button cannot be used.

• Clear text buttons are not stored on PayPal. The parameters associated with this kind of button are not encrypted.

Clear text buttons are not hosted and are not encrypted. They can be used dynamically because you can change the value of a parameter "on the fly." However, if you use them, recognize the risk that sensitive information can be altered or stolen.

• **Token buttons** are not stored on PayPal. They are only used with Hosted Solution and the parameters associated with this kind of button are secure.

Token buttons are dynamic and initiate the Hosted Solution checkout flow. They have a lifetime of approximately 2 hours if not used.

#### **Hosted Button Manipulation**

When you create a hosted button, the response includes an ID that allows you to manipulate the button using the Button Manager API. Do not confuse a hosted button with a button used as part of Hosted Solution, which is a product that supports token, encrypted, and cleartext buttons.

With hosted buttons, you can:

- Get a list of all hosted buttons, which lets you identify buttons for further programmatic manipulation
- Get details about a hosted button, which lets you to identify the parameters and values associated with a button

- Update a hosted button, which lets you to change individual parameters, such as price, in a hosted button
- Manage hosted button status; currently, you can only delete a button
- Get and set inventory information associated with the button

#### **Inventory Management Using Hosted Buttons**

You can get or set the inventory level for the item associated with a hosted button. You can also track inventory on options within an item, such as color or size.

If you enable inventory management for a button, PayPal tracks inventory for you and also lets your buyer know if the item is sold out. You can specify inventory tracking on an item-by-item basis, and also by option, such as color or size, within the item.

An e-mail alerts you if inventory falls below the threshold you specify. If an item is sold out, you can specify whether or not to accept a payment anyway. Optionally, you can specify a URL where your buyer's browser is redirected if the item is sold out.

You can also enable profit and loss tracking for an item or option associated with a button. If you enable this feature, you must provide the cost of the item or option. PayPal then calculates your gross profit, which is the selling price of the item less the specified cost.

#### **Inventory Management for Digital Downloads**

If you use hosted buttons, you can chose to specify a list of download keys, which are keys that you define and are associated with the item being sold. These keys are useful when you want to sell digital goods with a key to enable access.

To use this feature, you set the inventory for the button to include one or more download keys, up to a maximum of 1,000 keys. These keys are then available when you get the inventory for a button.

For example, when a customer orders software or music, you could obtain an unused key from the list of download keys and email it to your customer so they can download the item. You are responsible for choosing the appropriate key from the list and how it is used. PayPal only stores the inventory of keys and does not track how a specific key is used, although PayPal does provide options for making this process simpler.

When you specify the inventory for a button, you can specify the usage of download keys:

- Whether the keys you specify should be appended to the current list of keys or whether the list of keys should be replaced, which allows you to replenish the list of keys or replace the list entirely
- Whether the list of keys are to be reused or not

If you do not reuse keys, PayPal will also notify you when the item is "sold out," meaning that there are no more keys available.

#### **Button Manager API Summary**

The Button Manager API is available for both NVP and SOAP.

API Operation	Description
BMCreateButton	Create button code
BMUpdateButton	Update a hosted button
BMManageButtonStatus	Delete a button
BMGetButtonDetails	Obtain information about the parameters associated with a button
BMButtonSearch	Obtain a list of all buttons
BMGetInventory	Obtain the inventory levels associated with a button
BMSetInventory	Specify the inventory levels associated with a button

#### **Hosted Solution Links**

Hosted Solution links are URLs you create with the Button Manager API to initiate the Hosted Solution checkout flow.

NOTE: Although you can use the Button Manager API to create buttons that initiate the Hosted Solution checkout flow, do not confuse a button for Hosted Solution with hosted buttons that you also create with the Button Manager API.

You create the Hosted Solution checkout link dynamically when your buyer attempts to check out. For example, when your buyer clicks your check out button, you call the BMCreateButton API operation to create the link and then redirect the buyer's browser to PayPal using the link. The buyer then pays on the PayPal Hosted Solution page. After making the payment, PayPal returns the buyer to the page you specified when you created the link.

#### **Granting Third-Party Permission for APIs**

If you allow a shopping cart or another party to create buttons on your behalf, you must grant the party permission to execute Button Manager API operations for you.

To grant third-party permissions

- 1. Log in to your PayPal account.
- 2. Select My Account Profile.
- **3.** Click **API Access** from the Profile Summary.
- 4. Click Grant API Permission.

- 5. Click Configure a custom API authorization.
- **6.** Enter your Partner API username, as specified by your shopping cart or third party.
- 7. Check each Button Manager API you want to provide access to:
  - BMManageButtonStatus
  - BMCreateButton
  - BMUpdateButton
  - BMSetInventory
  - BMGetInventory
  - BMButtonSearch
  - BMGetButtonDetails
- 8. Click Submit.

Granting Third-Party Permission for APIs

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## Using the Button Manager API With SOAP

These examples show basic Button Manager API capabilities. The examples show how to create buttons and set inventory levels.

- Specifying HTML Variables
- Creating a Button Using SOAP
- Tracking Inventory for a Button Using SOAP

#### **Specifying HTML Variables**

When you create or update a button using the Button Manager API, you must specify the same HTML variables that you specify when creating any PayPal Payments Standard button. Although you can use the ButtonVar field to specify any HTML variables, some variables are commonly used in specific ways.

The following table provides additional information about some of these variables:

HTML Variable	Notes	
item_name	Name or description of item. Must be specified for <b>Add to Cart</b> buttons. Character length and limitations: 127 single-byte alphanumeric characters.	
amount	The price or amount of the item. Required for <b>Add to Cart</b> buttons. May not be used when a dropdown with price (L_OPTIONOPRICE <i>n</i> ) is defined. Limitations: Value must be a positive number. No currency symbol. Must have two decimal places, decimal separator must be a period (.), and the optional thousands separator must be a comma (,).	
a3	Price of subscription. Must be specified for <b>Subscribe</b> buttons. Value must be a positive number. No currency symbol. Must have two decimal places, decimal separator must be a period (.), and the optional thousands separator must be a comma (,).	
р3	Regular billing cycle. Must be specified for <b>Subscribe</b> buttons. Limitations: Must be a positive integer greater than 0 and less than or equal to 30	
t3	Regular billing cycle units. Must be specified for <b>Subscribe</b> buttons.	
shopping_url	URL where recipients can shop and redeem gift certificates. Required for <b>Gift Certificate</b> buttons. Character length and limitations: 255 single-byte alphanumeric characters	

Creating a Button Using SOAP

HTML Variable	Notes
no_note	Must be specified for <b>Subscribe</b> buttons. Enables a subscriber to not be prompted to include a note with the subscription, a function which PayPal subscriptions does not support. This variable must be included, and the value must be set to 1.
business	<ul> <li>Secure Merchant ID or Email Address. When omitted, defaults to the secure merchant ID of the merchant. If an email address is specified then it the following requirements apply:</li> <li>A merchant or 3rd Party calling the API directly may specify an unregistered email and create an unencrypted button only.</li> <li>A 3rd Party calling the API on behalf of a registered merchant must specify an email address associated with the merchant account.</li> <li>Character length and limitations: 127 single-byte characters.</li> </ul>
item_number	Item number or ID. Character length and limitations: 127 single-byte alphanumeric characters.
lc	If specified, it overrides the value set in the ButtonCode field.

For a complete list of HTML variables and complete information, see <u>HTML Variables for PayPal Payments Standard</u>.

#### **Creating a Button Using SOAP**

The example sets up a SOAP request message to create a button.

```
<com.paypal.soap.api.BMCreateButtonRequestType>
<buttonType>
<__value__>
  <m__value>CART</m__value>
</__value__>
 </buttonType>
 <buttonCode>
 <__value__>
  <m__value>HOSTED</m__value>
 </__value__>
 </buttonCode>
<buttonSubType>
 <__value__>
  <m__value>PRODUCTS</m__value>
 </__value__>
 </buttonSubType>
 <buttonVar>
<string>business=XX-usbiz@paypal.com</string>
 <string>item_name=Item-123</string>
```

```
<string>item_number=#1234</string>
<string>shipping=0.50</string>
<string>tax rate=2.50</string>
<string>address1=</string>
<string>state=</string>
<string>city=</string>
<string>zip=</string>
<string>no_shipping=0</string>
<string>address override=0</string>
</buttonVar>
<optionDetails>
 <com.paypal.soap.api.OptionDetailsType>
 <optionName>DD1</optionName>
 <optionSelectionDetails>
 <com.paypal.soap.api.OptionSelectionDetailsType>
    <optionSelection>AAAA</optionSelection>
    <price>1.55</price>
 </com.paypal.soap.api.OptionSelectionDetailsType>
 <com.paypal.soap.api.OptionSelectionDetailsType>
    <optionSelection>BBBB</optionSelection>
 <price>10.55</price>
 </com.paypal.soap.api.OptionSelectionDetailsType>
 <com.paypal.soap.api.OptionSelectionDetailsType>
    <optionSelection>CCCCC</optionSelection>
 <price>10.55</price>
 </com.paypal.soap.api.OptionSelectionDetailsType>
  </optionSelectionDetails>
</com.paypal.soap.api.OptionDetailsType>
<com.paypal.soap.api.OptionDetailsType>
 <optionName>DD2</optionName>
 <optionSelectionDetails>
 <com.paypal.soap.api.OptionSelectionDetailsType>
    <optionSelection>XXXXX</optionSelection>
 </com.paypal.soap.api.OptionSelectionDetailsType>
 <com.paypal.soap.api.OptionSelectionDetailsType>
    <optionSelection>ZZZZ</optionSelection>
 </com.paypal.soap.api.OptionSelectionDetailsType>
 </optionSelectionDetails>
</com.paypal.soap.api.OptionDetailsType>
</optionDetails>
<buttonImage>
< value >
 <m value>REG</m value>
</ value >
</buttonImage>
<buttonImageURL></buttonImageURL>
```

Tracking Inventory for a Button Using SOAP

```
<buyNowText>
< value >
  <m__value>BUYNOW</m__value>
</ value >
</buyNowText>
 <subscribeText>
<__value__>
  <m__value>SUBSCRIBE</m__value>
</ value >
</subscribeText>
<buttonCountry>
<__value__>
  <m_value>US</m_value>
</__value__>
</buttonCountry>
 <buttonLanguage></buttonLanguage>
</com.paypal.soap.api.BMCreateButtonRequestType>
```

#### **Tracking Inventory for a Button Using SOAP**

The example shows the SOAP parameters that enable tracking of inventory and profit and loss for a button.

### **Button Manager API Reference**

The Button Manager API enables you to programatically create, edit, and delete PayPal Payments Standard buttons hosted on PayPal, and track product inventory associated with these buttons. You can also create non-hosted buttons with the Button Manager API; however, only hosted buttons support button maintenance and inventory management.

- BMCreateButton API Operation
- BMUpdateButton API Operation
- BMButtonSearch API Operation
- BMGetButtonDetails API Operation
- BMManageButtonStatus API Operation
- BMSetInventory API Operation
- BMGetInventory API Operation

#### **BMCreateButton API Operation**

Use the BMCreateButton API operation to create a PayPal Payments Standard button. You can create either a button that is hosted on PayPal or a non-hosted button.

- BMCreateButton Request
- BMCreateButton Response
- BMCreateButton Errors

#### **BMCreateButton Request**

The request fields specify the characteristics of your button, which include associated menu items related to the button. You can specify up to 5 menu items, each of which can include up to 10 possible selections.

#### **Button Manager API Reference**

#### BMCreateButton API Operation



#### **BMCreateButton Request Fields**

Field	Description
ButtonCode	ebl:ButtonCodeType
	(Optional) The kind of button code to create. It is one of the following values:
	<ul> <li>HOSTED - A secure button stored on PayPal; default for all buttons except</li> <li>View Cart, Unsubscribe, and Pay Now</li> </ul>
	<ul> <li>ENCRYPTED - An encrypted button, not stored on PayPal; default for View Cart button</li> </ul>
	<ul> <li>CLEARTEXT - An unencrypted button, not stored on PayPal; default for Unsubscribe button</li> </ul>
	<ul> <li>TOKEN - A secure button, not stored on PayPal, used only to initiate the Hosted Solution checkout flow; default for Pay Now button. Since version 65.1</li> </ul>
ButtonType	ebl:ButtonTypeType
	(Required) The kind of button you want to create. It is one of the following values:
	BUYNOW - Buy Now button
	CART - Add to Cart button
	<ul> <li>GIFTCERTIFICATE - Gift Certificate button</li> </ul>
	SUBSCRIBE - Subscribe button
	• DONATE - <b>Donate</b> button
	• UNSUBSCRIBE - Unsubscribe button
	<ul> <li>VIEWCART - View Cart button</li> </ul>
	• PAYMENTPLAN - <b>Installment Plan</b> button; since version 63.0
	• AUTOBILLING - Automatic Billing button; since version 63.0
	<ul> <li>PAYMENT - Pay Now button; since version 65.1</li> </ul>
	<b>NOTE:</b> Do not specify BUYNOW if BUTTONCODE=TOKEN; specify PAYMENT instead. Do not specify PAYMENT if BUTTONCODE=HOSTED.
ButtonSubType	ebl:ButtonSubTypeType
	( <i>Optional</i> ) The use of button you want to create. It is one of the following values:
	<ul> <li>PRODUCTS - button is used to purchase products; default for Buy Now and Add to Cart buttons</li> </ul>
	<ul> <li>SERVICES - button is used to purchase services</li> </ul>
ButtonVar	xs:string
	(Optional) HTML standard button variables

#### **Option Details Fields**

string  tional) The menu name

#### **Button Manager API Reference**

#### BMCreateButton API Operation

Field	Description
OptionSelectionDetails	ns:OptionSelectionDetailsType (Optional) Menu items
Option Selectio	n Details Fields
OptionSelection	xs:string (Optional) The menu item's name
Price	xs:string (Optional) The price associated with the first menu item  NOTE: If you specify a price, you cannot set a button variable to amount.
OptionType	ebl:OptionTypeListType (Optional) The installment option type for an OPTIONANAME, which is one of the following values:  • FULL - Payment in full  • VARIABLE - Variable installments  • EMI - Equal installments
	NOTE: Only available for <b>Installment Plan</b> buttons.
PaymentPeriod	ns:InstallmentDetailsType (Optional) Information about an installment option
Installment Deta	ails
BillingPeriod	ebl:BillingPeriodType (Optional) The installment cycle unit, which is one of the following values:  NoBillingPeriodType - None (default)  Day  Week  SemiMonth  Month  Year
BillingFrequency	xs:int (Optional) The installment cycle frequency in units, e.g. if the billing frequency is 2 and the billing period is Month, the billing cycle is every 2 months. The default billing frequency is 1.
TotalBillingCycles	xs:int (Optional) The total number of billing cycles, regardless of the duration of a cycle; 1 is the default
Amount	xs:string (Optional) The base amount to bill for the cycle.

ShippingAmount	xs:string (Optional) The shipping amount to bill for the cycle, in addition to the base amount.
TaxAmount	xs:string (Optional) The tax amount to bill for the cycle, in addition to the base amount.

#### **Button Language Options**

The button language must be compatible with the country identified by the country code.

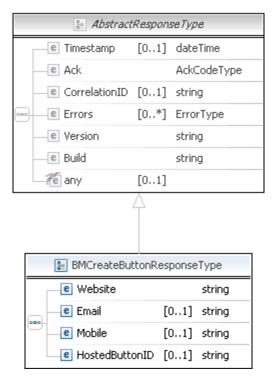
Country	Button Language Options
All countries not identified below	• en - English; default
Austria	<ul><li>de - German; default</li><li>en - English</li></ul>
Belgium	<ul> <li>en - English; default</li> <li>nl - Dutch</li> <li>fr - French</li> </ul>
Canada	<ul><li>en - English; default</li><li>fr - French</li></ul>
China (worldwide)	<ul><li>en - English; default</li><li>zh - Chinese</li></ul>
France	<ul><li>fr - French; default</li><li>en - English</li></ul>
Germany	<ul><li>de - German; default</li><li>en - English</li></ul>
Hong Kong	<ul><li>zh - Chinese; default</li><li>en - English</li></ul>
Italy	<ul><li>it - Italian; default</li><li>en - English</li></ul>
Japan	<ul><li>ja - Japanese; default</li><li>en - English</li></ul>
Mexico	<ul><li>es - Spanish; default</li><li>en - English</li></ul>
Netherlands	<ul><li>nl - Dutch; default</li><li>en - English</li></ul>
Poland	<ul><li>pl - Polish; default</li><li>en - English</li></ul>
Spain	<ul><li>es - Spanish; default</li><li>en - English</li></ul>

#### BMCreateButton API Operation

Country	Button Language Options
Switzerland	<ul> <li>de - German; default</li> <li>fr - French</li> <li>en - English</li> </ul>
United States	<ul> <li>en - English; default</li> <li>fr - French</li> <li>es - Spanish</li> <li>zh - Chinese</li> </ul>

#### **BMCreateButton Response**

The response contains an ID if the button is hosted on PayPal, and code for HTML in a website and for a link in email.



#### **BMCreateButton Response Fields**

Field	Description
Website	xs:string HTML code for web pages
Email	xs:string  Code for email links, links in other documents that support external links, and links to the Hosted Solution checkout flow

Field	Description
HostedButtonID	xs:string ID of a PayPal-hosted button or a Hosted Solution token

#### **BMCreateButton Errors**

Error Code	Short Message	Long Message	Correcting This Error
10001	Internal Error	Internal Error	
11923	Invalid Argument	The button image value specified is invalid.	
11924	Invalid Argument	The button image URL specified is invalid.	
11925	Invalid Argument	The button type specified is invalid.	
11926	Invalid Data	One of the parameters specified using ButtonVar is invalid.	
11927	Invalid Argument	The buy now button text specified is invalid.	
11928	Invalid Argument	The email or merchant ID specified is invalid.	
11929	Invalid Data	A cart button must have an item name and amount specified.	
11930	Invalid Data	A gift certificate button must have a valid shopping URL specified.	
11931	Invalid Argument	The subscription button text specified is invalid.	
11932	Invalid Data	You must specify a corresponding number of entries for option names and selections.	
11933	Invalid Data	You cannot skip index numbers for option selections. Option selections must be specified sequentially.	
11934	Invalid Data	You must specify the same number of entries for option prices and selections.	
11936	Invalid Data	You cannot specify both an item price and prices for individual selections within an option.	
11937	Invalid Argument	A text box name specified is invalid. Text box names must not exceed 64 characters.	

Error Code	Short Message	Long Message	Correcting This Error
11938	Invalid Argument	The button code value specified is invalid.	
11940	Invalid Argument	An option name specified is invalid. Option names must not exceed 64 characters.	
11941	Invalid Argument	An option selection value specified is invalid. Option selection values must not exceed 64 characters.	
11942	Invalid Argument	An option price value specified is invalid. Make sure any punctuation marks are in the correct places.	
11943	Invalid Argument	The button country value specified is invalid.	
11945	Invalid Data	The button country and language code combination specified is invalid.	
11947	Invalid Argument	The tax rate specified is invalid. Make sure any punctuation marks are in the correct places and value specified is in the range 0.0 to 100.	
11948	Invalid Argument	The amount specified is invalid. Make sure any punctuation marks are in the correct places.	
12210	Invalid Argument	The currency code value specified is invalid.	
13117	Invalid Argument	Subtotal amount is not valid.	
13118	Invalid Argument	Tax amount is not valid.	
13119	Invalid Argument	Handling amount is not valid.	
13120	Invalid Argument	Shipping amount is not valid.	

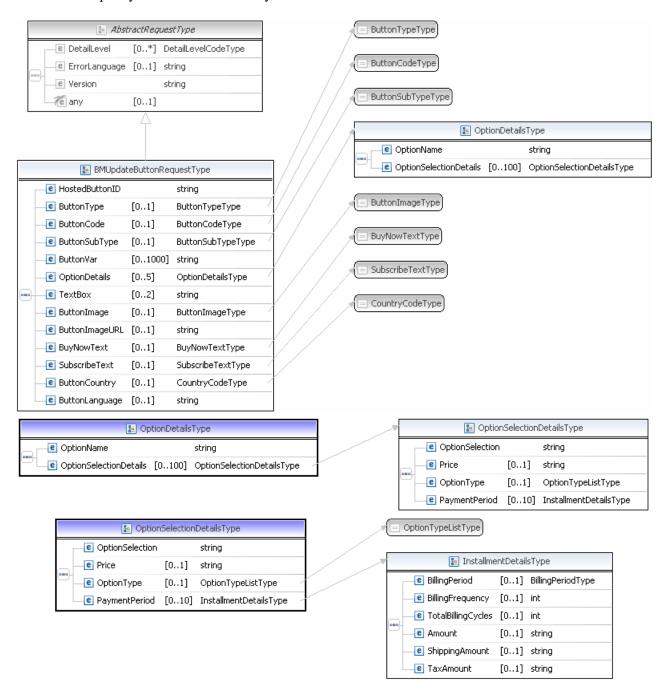
#### **BMUpdateButton API Operation**

Use the BMUpdateButton API operation to modify a PayPal Payments Standard button that is hosted on PayPal. This operation replaces all fields in the specified button; therefore, you must specify a value for each field you want to include for the button, whether or not it changed.

- BMUpdateButton Request
- BMUpdateButton Response
- BMUpdateButton Errors

#### **BMUpdateButton Request**

The hosted button ID identifies the button you want to modify. The remaining request fields specify the characteristics of your button.



#### **BMUpdateButton Request Fields**

Field	Description
HostedButtonID	xs:string
	(Required) The ID of the hosted button you want to modify.
ButtonType	ebl:ButtonTypeType (Required) The kind of button you want to update. It is one of the following values:  • BUYNOW - Buy Now button • CART - Add to Cart button • GIFTCERTIFICATE - Gift Certificate button • SUBSCRIBE - Subscribe button • DONATE - Donate button • UNSUBSCRIBE - Unsubscribe button • VIEWCART - View Cart button • PAYMENTPLAN - Installment Plan button; since version 63.0 • AUTOBILLING - Automatic Billing button after the button has been created.
ButtonCode	<ul> <li>ebl:ButtonCodeType</li> <li>(Optional) The kind of button code to create. It is one of the following values</li> <li>HOSTED - A secure button stored on PayPal; default for all buttons except View Cart and Unsubscribe</li> <li>ENCRYPTED - An encrypted button, not stored on PayPal; default for View Cart button</li> <li>CLEARTEXT - An unencrypted button, not stored on PayPal; default for Unsubscribe button</li> </ul>
	<b>NOTE:</b> You cannot change the kind of button code after after the button has been created.
ButtonSubType	<ul> <li>ebl:ButtonSubTypeType</li> <li>(Optional) The use of button you want to create. It is one of the following values:</li> <li>PRODUCTS - button is used to purchase products; default for Buy Now and Add to Cart buttons</li> <li>SERVICES - button is used to purchase services</li> <li>NOTE: You cannot change the button usage after after the button has been created.</li> </ul>
ButtonVar	xs:string (Optional) HTML standard button variables It is a list of variables, in which n is a digit between 0 and 999, inclusive; do not include leading zeros. Character length and limitations: 63 single-byte alphanumeric characters each

Field	Description
OptionDetails	ns:OptionDetailsType
	(Optional) Menu items
TextBox	xs:string
	(Optional) Text description for a menu item
	It is a list of variables, in which $n$ is a digit between 0 and 1, inclusive.
ButtonImage	ebl:ButtonImageType
	<ul><li>(Optional) The kind of button image. It is one of the following values:</li><li>REG - regular; default</li></ul>
	• SML - small
	<ul> <li>CC - small button image with credit card logos; not applicable for Unsubscribe or View Cart buttons</li> </ul>
	NOTE: Specify either the kind of button image or the URL.
ButtonImageURL	xs:string
	(Optional) The button's URL
	NOTE: Specify either the kind of button image or the URL.
BuyNowText	ebl:BuyNowTextType
	( <i>Optional</i> ) The button text for a Buy Now button. It is one of the following values:
	<ul> <li>BUYNOW - button text is Buy Now; default</li> </ul>
	<ul> <li>PAYNOW - button text is Pay Now</li> </ul>
SubscribeText	ebl:SubscribeTextType
	( <i>Optional</i> ) The button text for a Subscribe button. It is one of the following values:
	<ul> <li>BUYNOW - button text is Buy Now</li> </ul>
	• SUBSCRIBE - button text is <b>Subscribe</b> ; default
ButtonCountry	ebl:CountryCodeType
	(Optional) The country in which the transaction occurs. By default, it is the merchant's country of registration with PayPal.
ButtonLanguage	xs:string
	( <i>Optional</i> ) The language in which to display the button text. It must be compatible with the country code.
	Character length and limitations: 2 single-byte alphanumeric characters

#### **Option Details Fields**

Field	Description
OptionName	xs:string (Optional) The menu name

#### BMUpdateButton API Operation

Field	Description
OptionSelectionDetails	ns:OptionSelectionDetailsType
	(Optional) Menu items
Option Selectio	n Details Fields
OptionSelection	xs:string
	(Optional) The menu item's name
Price	xs:string
	(Optional) The price associated with the first menu item
	NOTE: If you specify a price, you cannot set a button variable to amount.
OptionType	ebl:OptionTypeListType
	(Optional) The installment option type for an OPTION $n$ NAME, which is one of
	the following values:
	<ul> <li>FULL - Payment in full</li> <li>VARIABLE - Variable installments</li> </ul>
	VARIABLE - Variable installments     EMI - Equal installments
	NOTE: Only available for <b>Installment Plan</b> buttons.
	·
PaymentPeriod	ns:InstallmentDetailsType
	(Optional) Information about an installment option
Installment Deta	ails
BillingPeriod	ebl:BillingPeriodType
	(Optional) The installment cycle unit, which is one of the following values:
	NoBillingPeriodType - None (default)
	• Day
	• Week
	• SemiMonth
	• Month
	• Year
BillingFrequency	xs:int
	(Optional) The installment cycle frequency in units, e.g. if the billing frequency is 2 and the billing period is Month, the billing cycle is every 2 months. The default billing frequency is 1.
TotalBillingCycles	xs:int
	(Optional) The total number of billing cycles, regardless of the duration of a cycle; 1 is the default

(Optional) The base amount to bill for the cycle.

xs:string

Amount

ShippingAmount	xs:string (Optional) The shipping amount to bill for the cycle, in addition to the base amount.
TaxAmount	xs:string (Optional) The tax amount to bill for the cycle, in addition to the base amount.

#### **Button Language Options**

The button language must be compatible with the country identified by the country code.

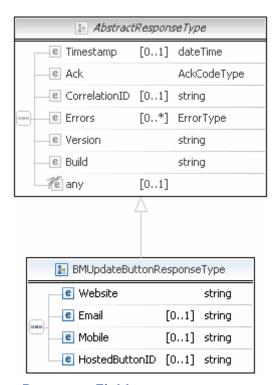
Country	Button Language Options
All countries not identified below	• en - English; default
Austria	<ul><li>de - German; default</li><li>en - English</li></ul>
Belgium	<ul> <li>en - English; default</li> <li>nl - Dutch</li> <li>fr - French</li> </ul>
Canada	<ul><li>en - English; default</li><li>fr - French</li></ul>
China (worldwide)	<ul><li>en - English; default</li><li>zh - Chinese</li></ul>
France	<ul><li>fr - French; default</li><li>en - English</li></ul>
Germany	<ul><li>de - German; default</li><li>en - English</li></ul>
Hong Kong	<ul><li>zh - Chinese; default</li><li>en - English</li></ul>
Italy	<ul><li>it - Italian; default</li><li>en - English</li></ul>
Japan	<ul><li>ja - Japanese; default</li><li>en - English</li></ul>
Mexico	<ul><li>es - Spanish; default</li><li>en - English</li></ul>
Netherlands	<ul><li>nl - Dutch; default</li><li>en - English</li></ul>
Poland	<ul><li>pl - Polish; default</li><li>en - English</li></ul>
Spain	<ul><li>es - Spanish; default</li><li>en - English</li></ul>

#### BMUpdateButton API Operation

Country	Button Language Options
Switzerland	<ul> <li>de - German; default</li> <li>fr - French</li> <li>en - English</li> </ul>
United States	<ul> <li>en - English; default</li> <li>fr - French</li> <li>es - Spanish</li> <li>zh - Chinese</li> </ul>

#### **BMUpdateButton Response**

The response contains the hosted button ID, code for HTML in a website, and code for a link in email.



#### **BMUpdateButton Response Fields**

Field	Description
Website	xs:string HTML code for web pages
Email	xs:string  Code for email links and links in other documents that support external links

Field	Description
HostedButtonID	xs:string ID of a PayPal hosted button

#### **BMUpdateButton Errors**

Error Code	Short Message	Long Message	Correcting This Error
10001	Internal Error	Internal Error	
11923	Invalid Argument	The button image value specified is invalid.	
11924	Invalid Argument	The button image URL specified is invalid.	
11925	Invalid Argument	The button type specified is invalid.	
11926	Invalid Data	One of the parameters specified using ButtonVar is invalid.	
11927	Invalid Argument	The buy now button text specified is invalid.	
11928	Invalid Argument	The email or merchant ID specified is invalid.	
11929	Invalid Data	A cart button must have an item name and amount specified.	
11930	Invalid Data	A gift certificate button must have a valid shopping URL specified.	
11931	Invalid Argument	The subscription button text specified is invalid.	
11932	Invalid Data	You must specify a corresponding number of entries for option names and selections.	
11933	Invalid Data	You cannot skip index numbers for option selections. Option selections must be specified sequentially.	
11934	Invalid Data	You must specify the same number of entries for option prices and selections.	
11936	Invalid Data	You cannot specify both an item price and prices for individual selections within an option.	
11937	Invalid Argument	A text box name specified is invalid. Text box names must not exceed 64 characters.	

Error Code	Short Message	Long Message	Correcting This Error
11938	Invalid Argument	The button code value specified is invalid.	
11940	Invalid Argument	An option name specified is invalid. Option names must not exceed 64 characters.	
11941	Invalid Argument	An option selection value specified is invalid. Option selection values must not exceed 64 characters.	
11942	Invalid Argument	An option price value specified is invalid. Make sure any punctuation marks are in the correct places.	
11943	Invalid Argument	The button country value specified is invalid.	
11945	Invalid Data	The button country and language code combination specified is invalid.	
11947	Invalid Argument	The tax rate specified is invalid. Make sure any punctuation marks are in the correct places and value specified is in the range 0.0 to 100.	
11948	Invalid Argument	The amount specified is invalid. Make sure any punctuation marks are in the correct places.	
12210	Invalid Argument	The currency code value specified is invalid.	
13117	Invalid Argument	Subtotal amount is not valid.	
13118	Invalid Argument	Tax amount is not valid.	
13119	Invalid Argument	Handling amount is not valid.	
13120	Invalid Argument	Shipping amount is not valid.	

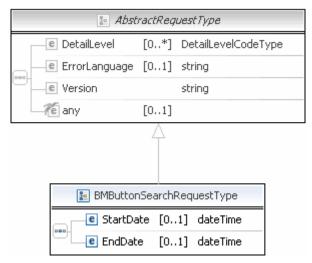
#### **BMButtonSearch API Operation**

Use the BMButtonSearch API operation to obtain a list of your hosted PayPal Payments Standard buttons.

- BMButtonSearch Request
- BMButtonSearch Response
- BMButtonSearch Errors

#### **BMButtonSearch Request**

The request contains optional fields that are not currently used. All hosted buttons are automatically requested.

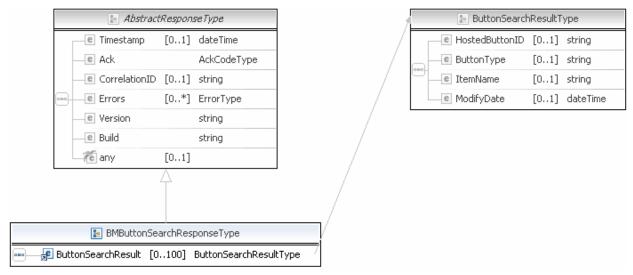


#### **BMButtonSearch Request Fields**

Field	Description
StartDate	xs:dateTime
	( <i>Required</i> ) Starting date for the search. The value must be in UTC/GMT format; for example, 2009-08-24T05:38:48Z. No wildcards are allowed.
EndDate	xs:dateTime
	( <i>Optional</i> ) Ending date for the search. The value must be in UTC/GMT format; for example, 2010-05-01T05:38:48Z. No wildcards are allowed.

#### **BMButtonSearch Response**

The response contains a list of all hosted buttons and their associated characteristics.



#### **BMButtonSearch Response Fields**

Name	Description
_	ebl:ButtonSearchResult
	Search results

#### **ButtonSearchResult**

HostedButtonID	xs:string The hosted button ID
HButtonType	xs:string The hosted button ID
ItemName	xs:string The item name
ModifyDate	xs:dateTime The date created or last changed

#### **BMButtonSearch Errors**

Error Code	Short Message	Long Message	Correcting This Error
10001	Internal Error	Internal Error	
11994	Search Warning	You have exceeded the maximum number of buttons that can be returned. Please adjust your seach parameters if required.	
11997	Invalid Argument	A start date value must be specified.	
11998	Invalid Argument	The start date specified is invalid.	
11999	Invalid Argument	The end date specified is invalid.	

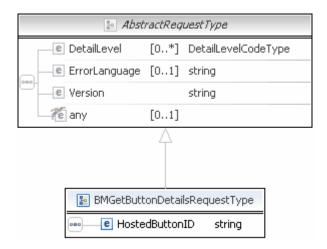
# **BMGetButtonDetails API Operation**

Use the BMGetButtonDetails API operation to obtain information about a hosted PayPal Payments Standard button. You can use this information to set the fields that have not changed when updating a button.

- BMGetButtonDetails Request
- BMGetButtonDetails Response
- BMUpdateButton Errors

#### **BMGetButtonDetails Request**

The request includes only the ID of the hosted button whose details you want to obtain.

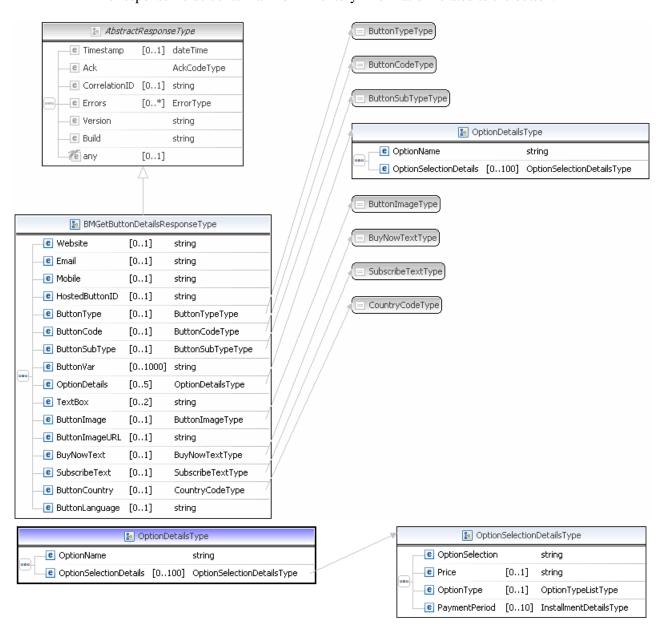


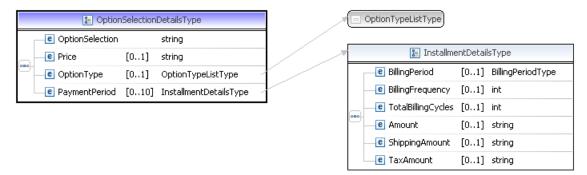
#### **BMGetButtonDetails Request Fields**

Field	Description
HostedButtonID	xs:string (Required) The ID of the hosted button whose details you want to obtain.

#### **BMGetButtonDetails Response**

The response fields contain all non-inventory information related to the button.





#### **BMGetButtonDetails Response Fields**

Field	Description
ButtonType	ebl:ButtonTypeType
	The kind of button. It is one of the following values:
	BUYNOW - Buy Now button
	CART - Add to Cart button
	<ul> <li>GIFTCERTIFICATE - Gift Certificate button</li> </ul>
	• SUBSCRIBE - Subscribe button
	• DONATE - <b>Donate</b> button
	• UNSUBSCRIBE - Unsubscribe button
	<ul> <li>VIEWCART - View Cart button</li> </ul>
	<ul> <li>PAYMENTPLAN - Installment Plan button; since version 63.0</li> </ul>
	• AUTOBILLING - <b>Automatic Billing</b> button; since version 63.0
ButtonCode	ebl:ButtonCodeType
	The kind of button code. It is one of the following values:
	<ul> <li>HOSTED - A secure button stored on PayPal</li> </ul>
	<ul> <li>ENCRYPTED - An encrypted button, not stored on PayPal</li> </ul>
	<ul> <li>CLEARTEXT - An unencrypted button, not stored on PayPal</li> </ul>
ButtonSubType	ebl:ButtonSubTypeType
	The use of button. It is one of the following values:
	<ul> <li>PRODUCTS - button is used to purchase products</li> </ul>
	<ul> <li>SERVICES - button is used to purchase services</li> </ul>
HostedButtonID	xs:string
	ID of a PayPal hosted button
Website	xs:string
	HTML code for web pages
Email	xs:string
	Code for email links and links in other documents that support external links
ButtonVar	xs:string
	HTML standard button variables

#### **Option Details Fields**

Field	Description
OptionName	xs:string (Optional) The menu name
OptionSelectionDetails	ns:OptionSelectionDetailsType (Optional) Menu items

# **Option Selection Details Fields**

OptionSelection	xs:string (Optional) The menu item's name
Price	xs:string (Optional) The price associated with the first menu item  NOTE: If you specify a price, you cannot set a button variable to amount.
OptionType	ebl:OptionTypeListType (Optional) The installment option type for an OPTIONANAME, which is one of the following values:  • FULL - Payment in full  • VARIABLE - Variable installments  • EMI - Equal installments  NOTE: Only available for Installment Plan buttons.
PaymentPeriod	ns:InstallmentDetailsType (Optional) Information about an installment option

#### **Installment Details**

BillingPeriod	<ul> <li>ebl:BillingPeriodType</li> <li>(Optional) The installment cycle unit, which is one of the following values:</li> <li>NoBillingPeriodType - None (default)</li> <li>Day</li> <li>Week</li> <li>SemiMonth</li> <li>Month</li> <li>Year</li> </ul>
BillingFrequency	xs:int (Optional) The installment cycle frequency in units, e.g. if the billing frequency is 2 and the billing period is Month, the billing cycle is every 2 months. The default billing frequency is 1.

TotalBillingCycles	xs:int (Optional) The total number of billing cycles, regardless of the duration of a cycle; 1 is the default
Amount	xs:string (Optional) The base amount to bill for the cycle.
ShippingAmount	xs:string (Optional) The shipping amount to bill for the cycle, in addition to the base amount.
TaxAmount	xs:string (Optional) The tax amount to bill for the cycle, in addition to the base amount.

#### **BMGetButtonDetails Errors**

Error Code	Short Message	Long Message	Correcting This Error
10001	Internal Error	Internal Error	
11950	Invalid Data	A hosted button ID must be specified.	
11951	Invalid Argument	The hosted button ID specified is invalid.	
11951	Invalid Argument	The hosted button ID specified is invalid.	
11992	Invalid Argument	You do not have permissions to access this button. Please check the hosted button ID and try again.	

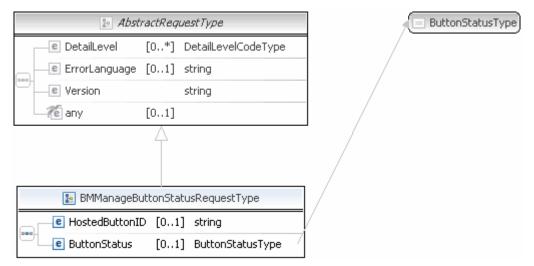
# **BMM**anageButtonStatus API Operation

Use the BMManageButtonStatus API operation to change the status of a hosted button. Currently, you can only delete a button.

- BMManageButtonStatus Request
- BMManageButtonStatus Response
- BMUpdateButton Errors

## **BMManageButtonStatus Request**

The request specifies the hosted button's ID and the status you want to set the button to.



**BMManageButtonStatus Request Fields** 

Field	Description
HostedButtonID	xs:string (Required) The ID of the hosted button whose status you want to change.
ButtonStatus	<ul> <li>ebl:ButtonStatusType</li> <li>(Required) The new status of the button. It is one of the following values:</li> <li>DELETE - the button is deleted from PayPal</li> </ul>

## **BMManageButtonStatus Response**

The response does not include any fields that are specific to the BMManageButtonStatus API operation.

## **BMManageButtonStatus Errors**

Error Code	Short Message	Long Message	Correcting This Error
10001	Internal Error	Internal Error	
11950	Invalid Data	A hosted button ID must be specified.	
11951	Invalid Argument	The hosted button ID specified is invalid.	
11951	Invalid Argument	The hosted button ID specified is invalid.	

Error Code	Short Message	Long Message	Correcting This Error
11992	Invalid Argument	You do not have permissions to access this button. Please check the hosted button ID and try again.	
11993	Invalid Argument	The button status value specified is not valid.	

# **BMSetInventory API Operation**

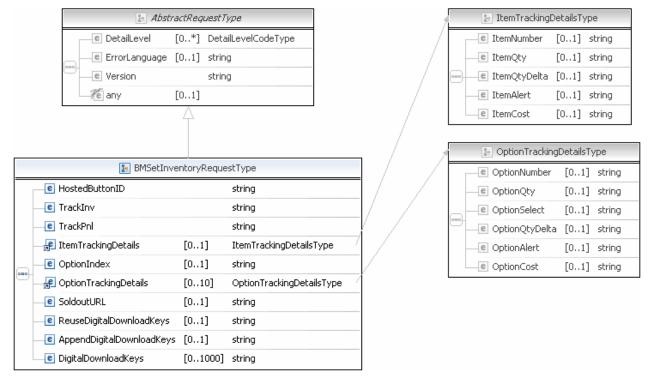
Use the BMSetInventory API operation to set the inventory level and inventory management features for the specified button. When you set the inventory level for a button, PayPal can track inventory, calculate the gross profit associated with sales, send you an alert when inventory drops below a specified quantity, and manage sold out conditions.

- BMSetInventory Request
- BMSetInventory Response
- BMSetInventory Errors

#### **BMSetInventory Request**

The request specifies inventory values related to a hosted button as well as inventory values that are specific to each menu item.

#### BMSetInventory API Operation



#### **BMSetInventory Request Fields**

Field	Description
HostedButtonID	xs:string
	(Required) The ID of the hosted button whose inventory you want to set.
TrackInv	xs:string
	( <i>Required</i> ) Whether to track inventory levels associated with the button. It is one of the following values:
	• 0 - do not track inventory
	• 1 - track inventory
TrackPnl	xs:string
	( <i>Required</i> ) Whether to track the gross profit associated with inventory changes. It is one of the following values:
	<ul> <li>0 - do not track the gross profit</li> </ul>
	• 1 - track the gross profit
	NOTE: The gross profit is calculated as the price of the item less its cost, multiplied by the change in the inventory level since the last call to BMSetInventory.
_	ebl:ItemTrackingDetails
	(Optional) Item tracking details for the button

Field Description	
OptionIndex	xs:string (Optional) Option index, which identifies the button. Option index 0 is the menu that contains the price if one exists; otherwise, it is the first menu without a price.  Character length and limitations: 1 single-byte alphanumeric character
SoldoutURL	xs:string (Optional) The URL to which the buyer's browser is redirected when the inventory drops to 0.
	<b>NOTE:</b> Specifying a URL in this field also prevents a sale when the inventory drops to 0; otherwise, sales can continue even when inventory is unavailable.
	Character length and limitations: 127 single-byte alphanumeric characters
_	ebl:OptionTrackingDetails (Optional) Option tracking details for menu items associated with the button
ReuseDigitalDownloadKeys	<ul> <li>xs:string</li> <li>(Optional) Whether to reuse download keys:</li> <li>0 - do not reuse keys (default)</li> <li>1 - reuse keys</li> <li>NOTE: If you do not reuse the download keys, you must replenish the keys</li> </ul>
AppendDigitalDownloadKey s	when you sell out of the product being downloaded.  xs:string (Optional) Whether to append download keys:  • 0 - do not append keys (default)  • 1 - append keys
	NOTE: If you do not append the download keys, unused keys will be replaced
DigitalDownloadKeys	xs:string (Optional) One or more digital download keys, up to a maximum of 1,000 keys. Character length and limitations: 1,000 single-byte alphanumeric characters each.

## **Item Tracking Details Fields**

ItemNumber	xs:string (Optional) The ID for an item associated with this button
ItemQty	xs:string  The quantity you want to specify for the item associated with this button.  Specify either the absolute quantity in this field or the change in quantity in the quantity delta field

# **Button Manager API Reference**

# BMSetInventory API Operation

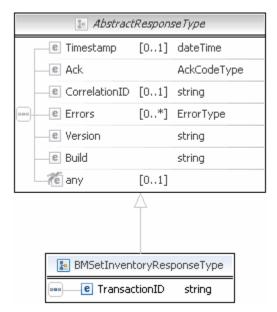
ItemQtyDelta	xs:string
	The change in quantity you want to specify for the item associated with this button. Specify either the change in quantity in this field or the absolute quantity in the item quantity field
ItemAlert	xs:string (Optional) The quantity of the item associated with this button below which PayPal sends you an email notification
ItemCost	xs:string (Optional) The cost of the item associated with this button

## **Option Tracking Details Fields**

OptionNumber	xs:string (Optional) The menu item's ID for an option in a dropdown menu	
OptionQty	xs:string The quantity you want to specify for the option associated with this menu item. Specify either the absolute quantity in this field or the change in quantity in the quantity delta field	
OptionSelect	xs:string (Optional) The menu item's name in a dropdown menu	
OptionQtyDelta	xs:string  The change in quantity you want to specify for the option associated with this menu item. Specify either the change in quantity in this field or the absolute quantity in the quantity field	
OptionAlert	xs:string (Optional) The quantity of the option associated with this menu item below which PayPal sends you an email notification	
OptionCost	xs:string (Optional) The cost of the option associated with this menu item Limitations: Value must be a positive number, with no currency symbol. It must have two decimal places and the decimal separator must be a period (.). It may have an optional comma (,) for the thousands separator.	

# **BMS**etInventory Response

The response contains only the transaction ID.



# **BMSetInventory Response Fields**

Field	Description
TransactionID	xs:string Transaction ID

# **BMSetInventory Errors**

Error Code	Short Message	Long Message	Correcting This Error
10001	Internal Error	Internal Error	
11950	Invalid Data	A hosted button ID must be specified.	
11951	Invalid Argument	The hosted button ID specified is invalid.	
11951	Invalid Argument	The hosted button ID specified is invalid.	
11953	Invalid Data	You can only track inventory and profit & loss for buy now, cart or subscription buttons.	
11954	Invalid Data	A TrackInv value must be specified.	
11955	Invalid Data	A TrackPnl value must be specified.	
11956	Invalid Argument	The TrackInv value specified is invalid.	
11957	Invalid Argument	The TrackPnl value specified is invalid.	

# BMSetInventory API Operation

Error Code	Short Message	Long Message	Correcting This Error
11958	Invalid Data	You cannot specify both an ItemQty and ItemQtyDelta value.	
11959	Invalid Data	You cannot specify both an OptionQty and OptionQtyDelta value.	
11960	Invalid Data	You cannot specify item level or option level inventory when TrackInv is 0.	
11961	Invalid Data	You must either track inventory by item or by option when TrackInv is 1. It cannot be tracked by both together or none at all.	
11964	Invalid Data	You must either track inventory and/or track profit & loss.	
11965	Invalid Data  You cannot track inventory by item and cost by option at the same time or vice versa.		
11966	Invalid Argument	Invalid Argument Item number specified is invalid. It must be a string less than 127 characters.	
11967	Invalid Data	You cannot set inventory for more option selections than the number of option selections saved in the button.	
11968	Invalid Data Option numbers must be unique within an individual button.		
11969	Invalid Data	An option name index value must be specified when tracking inventory or profit & loss by option.	
11970	Invalid Argument	Option name index value specified is invalid.	
11971	Invalid Data	Inventory and/or profit & loss must be managed by item or an option with price when one is defined.	
11972	Invalid Data	Option name index value specified does not exist.	
11973	Invalid Data	ItemQty and/or ItemQtyDelta must be an integer.	
11974	Invalid Data	An item quantity or item quantity delta value cannot be specified when TrackInv is 0.	

Error Code	Short Message	Long Message	Correcting This Error
11975	Invalid Data	The number of option quantity or option quantity delta values specified is greater than the number of option selections in the saved button.	
11976	Invalid Data	You must specify either option quantity or option quantity delta values with a valid integer value.	
11977	Invalid Data  An option quantity or option quantity delta value must not be specified when TrackInv is 0.		
11978	Invalid Argument	Item alert must be specified as a positive integer.	
11979	Invalid Argument	Item alert must not be specified when TrackInv is 0.	
11980	Invalid Data	The number of option alert values specified is greater than the number of option selections in the saved button.	
11981	Invalid Argument Option alert values must be specified as a positive integer.		
11982	Invalid Argument Option alert values cannot be specified when TrackInv is 0.		
11983	Invalid Argument	Item cost value must be specified when tracking profit & loss by item.	
11984	Invalid Argument	d Argument The item cost value specified is invalid.	
11985	Invalid Argument	An item cost value cannot be specified when TrackPnl is 0.	
11986	Invalid Data	The number of option cost values specified is greater than the number of option selections in the saved button.	
11987	Invalid Argument	Option cost values must be specified when tracking profit & loss by option.	
11988	Invalid Argument	An option cost value specified is invalid.	
11989	Invalid Argument	An option cost value cannot be specified when TrackPnl is 0.	
11990	Invalid Argument	Invalid Argument The sold out URL specified is invalid.	
12210	Invalid Argument	The currency code value specified is invalid.	

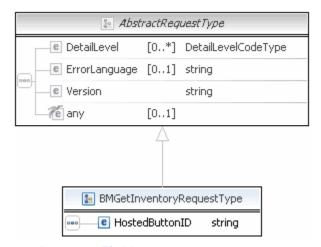
## **BMGetInventory API Operation**

Use the BMGetInventory API operation to determine the inventory levels and other inventory-related information for a button and menu items associated with the button. Typically, you call BMGetInventory to obtain field values before calling BMSetInventory to change the inventory levels.

- BMGetInventory Request
- BMGetInventory Response
- BMGetInventory Errors

## **BMGetInventory Request**

The hosted button ID identifies the button whose inventory you want to track.

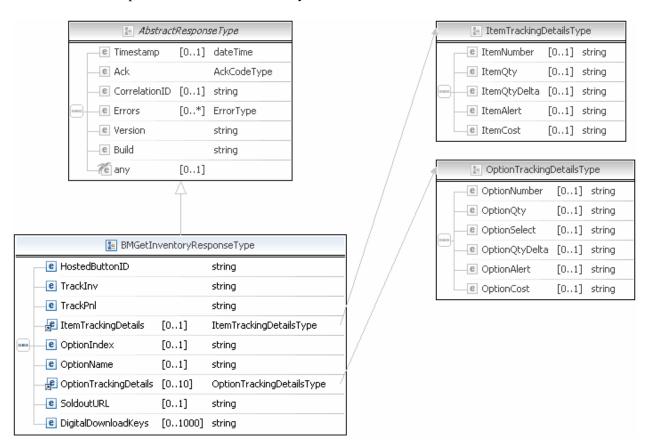


#### **BMGetInventory Request Fields**

Field	Description  xs:string (Required) The ID of the hosted button whose inventory information you want to obtain.	
HostedButtonID		
DigitalDownloadKeys	xs:string (Optional) One or more digital download keys, up to a maximum of 1,000 keys. Character length and limitations: 1,000 single-byte alphanumeric characters each.	

#### **BMGetInventory Response**

The response fields contain inventory information related to the button.



#### **BMGetInventory Response Fields**

Field	Description
HostedButtonID	xs:string The ID of the hosted button whose inventory you want to set.
TrackInv	<ul> <li>xs:string</li> <li>Whether to track inventory levels associated with the button. It is one of the following values:</li> <li>0 - do not track inventory</li> <li>1 - track inventory</li> </ul>

# BMGetInventory API Operation

Field	Description	
TrackPnl	ws:string Whether to track the gross profit associated with inventory changes. It is one of the following values:	
	<ul> <li>0 - do not track the gross profit</li> <li>1 - track the gross profit</li> </ul>	
	NOTE: The gross profit is calculated as the price of the item less its cost, multiplied by the change in the inventory level since the last call to BMSetInventory.	
_	ebl:ItemTrackingDetails	
	Item tracking details for the button	
OptionIndex	xs:string	
	Option index, which identifies the button. Option index 0 is the menu that	
	contains the price if one exists; otherwise, it is the first menu without a price.	
	Character length and limitations: 1 single-byte alphanumeric character	
_	ebl:OptionTrackingDetails	
	Option tracking details for menu items associated with the button	
SoldoutURL	xs:string	
	The URL to which the buyer's browser is redirected when the inventory drops to $\boldsymbol{0}$	
	<b>NOTE:</b> A value in this field also prevents a sale when the inventory drops to 0; otherwise, sales can continue even when inventory is unavailable.	
	Character length and limitations: 127 single-byte alphanumeric characters	

## **Item Tracking Details Fields**

ItemNumber	xs:string
	The ID for an item associated with this button
ItemQty	xs:string
	The current inventory level of the item associated with this button
ItemQtyDelta	xs:string
	Not used
ItemAlert	xs:string
	The quantity of the item associated with this button below which PayPal sends
	you an email notification
ItemCost	xs:string
	The cost of the item associated with this button

## **Option Tracking Details Fields**

OptionNumber	xs:string
	The menu item's ID for an option in a dropdown menu
OptionQty	xs:string
	The current inventory level of the option associated with this menu item
OptionSelect	xs:string
	The menu item's name in a dropdown menu
OptionQtyDelta	xs:string
	Not used
OptionAlert	xs:string
	The quantity of the option associated with this menu item below which PayPal sends you an email notification
OptionCost	xs:string
	The cost of the option associated with this menu item

# **BMGetInventory Errors**

Error Code	Short Message	Long Message	Correcting This Error
10001	Internal Error	Internal Error	
11950	Invalid Data	A hosted button ID must be specified.	
11951	Invalid Argument	The hosted button ID specified is invalid.	
11953	Invalid Data	You can only track inventory and profit & loss for buy now, cart or subscription buttons.	
11991	Invalid Data	The hosted button id specified does not have any inventory or cost associated with it.	
11992	Invalid Argument	You do not have permissions to access this button. Please check the hosted button ID and try again.	

BMGetInventory API Operation



You can use all variables supported for your button: Buy Now, Donation, Subscribe, Add to Cart, and View Cart buttons. You can also use HTML variables supported the Cart Upload command.

#### **Technical HTML Variables**

Technical HTML variables control how PayPal responds technically when people click PayPal Payments Standard payment buttons or when third-party or custom carts initiate payment processing with the Cart Upload command. They also control how your buttons interact with special PayPal features.

#### Allowable Values for the cmd HTML Variable

Value of cmd	Description
_xclick	The button that the person clicked was a Buy Now button.
_cart	For shopping cart purchases. The following variables specify the kind of shopping cart button that the person clicked:  • add – Add to Cart buttons for the PayPal Shopping Cart  • display – View Cart buttons for the PayPal Shopping Cart  • upload – The Cart Upload command for third-party carts
_oe-gift-certificate	The button that the person clicked was a Buy Gift Certificate button.
_xclick-subscriptions	The button that the person clicked was a Subscribe button.
_xclick-auto-billing	The button that the person clicked was an Automatic Billing button.
_xclick-payment-plan	The button that the person clicked was an Installment Plan button.
_donations	The button that the person clicked was a Donate button.
_s-xclick	The button that the person clicked was protected from tampering by using encryption, or the button was saved in the merchant's PayPal account. PayPal determines which kind of button was clicked by decoding the encrypted code or by looking up the saved button in the merchant's account.

Technical HTML Variables

## **HTML Variables for Special PayPal Features**

Name	Required or Optional	Description	Character Length
notify_url	Optional	The URL to which PayPal posts information about the payment, in the form of Instant Payment Notification messages.	255
hosted_button_i d	See description.	Required for buttons that have been saved in PayPal accounts; otherwise, not allowed.  The identifier of a button that was saved in a merchant's PayPal account. PayPal assigns the value when payment buttons are first created and saved in merchants' PayPal accounts.  NOTE: A merchant's PayPal account can have a maximum of 1,000 saved payment buttons.	See description
bn	Optional	An identifier of the source that built the code for the button that the buyer clicked, sometimes known as the build notation. Specify a value using the following format: <pre><company>_<service>_<product>_<country></country></product></service></company></pre> Substitute <service> with an appropriate value from the following list:  BuyNow AddToCart Donate Subscribe AutomaticBilling InstallmentPlan BuyGiftCertifcate ShoppingCart</service>	
		Substitute <product> with WPS always for Website Payments Standard payment buttons and for the Website Payments Standard Cart Upload command. Substitute <country> with an appropriate two-letter country code from codes defined by the ISO 3166-1 standard. For example, a Buy Now button on your website that you coded yourself might have the following line of code: bn="DesignerFotos_BuyNow_WPS_US"  NOTE: HTML button code that you create on the PayPal website includes bn variables with valid values generated by PayPal.</country></product>	

#### **HTML** Variables for Individual Items

HTML variables for individual items specify information about a product or service for Buy Now and Add to Cart buttons, or they specify information about a contribution for Donate buttons.

#### **HTML Variables for Individual Items**

	Required or		Character
Name	Optional	Description	Length
amount	See description.	The price or amount of the product, service, or contribution, not including shipping, handling, or tax. If this variable is omitted from Buy Now or Donate buttons, buyers enter their own amount at the time of payment.  • Required for Add to Cart buttons  • Optional for Buy Now and Donate buttons  • Not used with Subscribe or Buy Gift Certificate buttons	
discount_amount	Optional	Discount amount associated with an item.  It must be less than the selling price of the item. If you specify discount_amount and discount_amount2 is not defined, then this flat amount is applied regardless of the quantity of items purchased.  Valid only for Buy Now and Add to Cart buttons.	
discount_amount 2	Optional	Discount amount associated with each additional quantity of the item.  It must be equal to or less than the selling price of the item. A discount_amount must also be specified as greater than or equal to 0 for discount_amount2 to take effect.  Valid only for Buy Now and Add to Cart buttons.	
discount_rate	Optional	Discount rate (percentage) associated with an item.  It must be set to a value less than 100. If you do not set discount_rate2, the value in discount_rate applies only to the first item regardless of the quantity of items purchased.  Valid only for Buy Now and Add to Cart buttons.	
discount_rate2	Optional	Discount rate (percentage) associated with each additional quantity of the item.  It must be equal to or less 100. A discount_rate must also be specified as greater than or equal to 0 for discount_rate2 to take effect.  Valid only for Buy Now and Add to Cart buttons.	

HTML Variables for Individual Items

Name	Required or Optional	Description	Character Length
discount_num	Optional	Number of additional quantities of the item to which the discount applies.	
		Applicable when you use discount_amount2 or discount_rate2. Use this variable to specify an upper limit on the number of discounted items.  Valid only for Buy Now and Add to Cart buttons.	
item_name	See description.	<ul> <li>Description of item. If this variable is omitted, buyers enter their own name during checkout.</li> <li>Optional for Buy Now, Donate, Subscribe, Automatic Billing, Installment Plan, and Add to Cart buttons</li> <li>Not used with Buy Gift Certificate buttons</li> </ul>	127
item_number	See description.	Pass-through variable for you to track product or service purchased or the contribution made. The value you specify is passed back to you upon payment completion. This variable is required if you want PayPal to track inventory or track profit and loss for the item the button sells.	127
quantity	Optional	Number of items. If profile-based shipping rates are configured with a basis of quantity, the sum of quantity values is used to calculate the shipping charges for the payment. PayPal appends a sequence number to identify uniquely the item in the PayPal Shopping Cart, for example, quantity1, quantity2, and so on.	
		<b>NOTE:</b> The value for quantity must be a positive integer. Null, zero, or negative numbers are not allowed.	
shipping	Optional	The cost of shipping this item. If you specify shipping and shipping2 is not defined, this flat amount is charged regardless of the quantity of items purchased.	
		This shipping variable is valid only for Buy Now and Add to Cart buttons.	
		Default – If profile-based shipping rates are configured, buyers are charged an amount according to the shipping methods they choose.	
shipping2	Optional	The cost of shipping each additional unit of this item. If this variable is omitted and profile-based shipping rates are configured, buyers are charged an amount according to the shipping methods they choose.	
		This shipping variable is valid only for Buy Now and Add to Cart buttons.	

Name	Required or Optional	Description	Character Length
tax	Optional	Transaction-based tax override variable. Set this variable to a flat tax amount to apply to the payment regardless of the buyer's location. This value overrides any tax settings set in your account profile. Valid only for Buy Now and Add to Cart buttons. Default – Profile tax settings, if any, apply.	
tax_rate	Optional	Transaction-based tax override variable. Set this variable to a percentage that applies to the amount multiplied by the quantity selected during checkout. This value overrides any tax settings set in your account profile. Allowable values are numbers 0.001 through 100. Valid only for Buy Now and Add to Cart buttons. Default – Profile tax settings, if any, apply.	6
undefined_ quantity	Optional	<ul> <li>1 – allows buyers to specify the quantity.</li> <li>Optional for Buy Now buttons</li> <li>Not used with other buttons</li> </ul>	1
weight	Optional	Weight of items. If profile-based shipping rates are configured with a basis of weight, the sum of weight values is used to calculate the shipping charges for the payment. Allowable values are decimals numbers, with 2 significant digits to the right of the decimal point.	
weight_unit	Optional	The unit of measure if weight is specified.  Allowable values are:  • lbs  • kgs  The default is lbs.	
on0	Optional	First option field name and label. The os0 variable contains the corresponding value for this option field. For example, if on0 is size, os0 could be large.  • Optional for Buy Now, Add to Cart, Subscribe, Automatic Billing, and Installment Plan buttons  • Not used with Donate or Buy Gift Certificate buttons	64
on1	Optional	Second option field name and label. The osl variable contains the corresponding value for this option field. For example, if onl is color then osl could be blue.  You can specify a maximum of 7 option field names (6 with Subscribe buttons) by incrementing the option name index (on0 through on6).  Optional for Buy Now, Add to Cart, Subscribe, Automatic Billing, and Installment Plan buttons  Not used with Donate or Buy Gift Certificate buttons	64

HTML Variables for Individual Items

Name	Required or Optional	Description	Character Length
os0	Optional	Option selection of the buyer for the first option field, on0. If the option field is a dropdown menu or a set of radio buttons, each allowable value should be no more than 64 characters. If buyers enter this value in a text field, there is a 200-character limit.	See description.
		NOTE: The option field on0 must also be defined. For example, it could be size.	
		For priced options, include the price and currency symbol in the text of the option selections, as the following sample code shows:	
		<ul> <li><option value="small">small - \$10.00</option></li> <li>Add a corresponding option_select0 and option_amount0 variable for each priced option. Priced options are supported only for Buy Now and Add to Cart buttons. Only one dropdown menu option selection can have priced options.</li> <li>Optional for Buy Now, Add to Cart, Subscribe, Automatic Billing, and Installment Plan buttons</li> <li>Not used with Donate or Buy Gift Certificate buttons</li> </ul>	
os1 Optio	Optional	Option selection of the buyer for the second option field, on 1. If the option field is a dropdown menu or a set of radio buttons, each allowable value should be no more than 64 characters. If buyers enter this value in a text field, there is a 200-character limit.  You can specify a maximum of 7 option selections (6 with Subscribe buttons) by incrementing the option selection index (os0 through os6). You can implement up to 5 option selections as dropdown menus and up to 2 option selections as test boxes.	64 or 200 See description.
		<b>NOTE:</b> A corresponding option field (on0 through on6) must be defined.	
		<ul> <li>Optional for Buy Now, Add to Cart, Subscribe, Automatic Billing, and Installment Plan buttons</li> <li>Not used with Donate or Buy Gift Certificate buttons</li> </ul>	

Name	Required or Optional	Description	Character Length
option_index	See description.	The cardinal number of the option field, on0 through on9, that has product options with different prices for each option. Include option_index if the option field with prices is not on0.  • Optional for Buy Now, Add to Cart, Subscribe, Automatic Billing, and Installment Plan buttons  • Not used with Donate or Buy Gift Certificate buttons	
		Default – 0	
option_select0	Optional	For priced options, the value of the first option selection of the on0 dropdown menu. The values must match exactly, as the following sample code shows:	64
		<pre><option value="small">small - \$10.00</option> <input name="option_select0" type="hidden" value="small"/>      Optional for Buy Now, Add to Cart, Subscribe,     Automatic Billing, and Installment Plan buttons     Not used with Donate or Buy Gift Certificate buttons</pre>	
option_amount0	Optional	For priced options, the amount that you want to charge for the first option selection of the on0 dropdown menu. Use only numeric values; the currency is taken from the currency_code variable. For example:	64
		<pre><option value="small">small - \$10.00 <input <="" name="option_amount0" option="" type="hidden"/> value="10.00"&gt;     Optional for Buy Now, Add to Cart, Subscribe,     Automatic Billing, and Installment Plan buttons     Not used with Donate or Buy Gift Certificate buttons</option></pre>	

HTML Variables for Payment Transactions

Name	Required or Optional	Description	Character Length
option_select1	Optional	For priced options, the value of the second option selection of the on0 dropdown menu. For example:	64
		<option value="medium">small - \$10.00</option> <input name="option_select" type="hidden" value="medium"/>	
		You can specify a maximum of 10 option selections by incrementing the option selection index (option_select0 through option_select9).	
		NOTE: A corresponding option selection in os0 must also be set.	
		<ul> <li>Optional for Buy Now, Add to Cart, Subscribe, Automatic Billing, and Installment Plan buttons</li> <li>Not used with Donate or Buy Gift Certificate buttons</li> </ul>	
option_amount1	Optional	For priced options, the amount that you want to charge for the second option selection of the on0 dropdown menu. For example:	64
		<pre>conting value="small"&gt;medium - \$15.00</pre> <pre>conting value="small"&gt;medium - \$15.00</pre> <pre>conting value="hidden" name="option_amount1"</pre> <pre>value="15.00"&gt;</pre>	
		You can specify a maximum of 10 option amounts by incrementing the option amount index (option_amount0 through option_amount9).	
		NOTE: A corresponding option selection in os0 must also be set.	
		<ul> <li>Optional for Buy Now, Add to Cart, Subscribe, Automatic Billing, and Installment Plan buttons</li> <li>Not used with Donate or Buy Gift Certificate buttons</li> </ul>	

# **HTML Variables for Payment Transactions**

HTML variables for payment transactions provide information about entire payments, regardless of the individual items involved with the payment. You can use these variables with Add to Cart buttons and the Cart Upload command.

#### **HTML Variables for Payment Transactions**

Name	Required or Optional	Description	Character Length
address_ override	Optional	1 – The address specified with automatic fill-in variables overrides the PayPal member's stored address. Buyers see the addresses that you pass in, but they cannot edit them. PayPal does not show addresses if they are invalid or omitted.	1
currency_code	Optional	The currency of the payment. The default is USD.	3
custom	Optional	Pass-through variable for your own tracking purposes, which buyers do not see.  Default – No variable is passed back to you.	256
handling	Optional	Handling charges. This variable is not quantity-specific. The same handling cost applies, regardless of the number of items on the order.  Default – No handling charges are included.	
invoice	Optional	Pass-through variable you can use to identify your invoice number for this purchase.  Default – No variable is passed back to you.	127
tax_cart	Optional	Cart-wide tax, overriding any individual item tax_x value	
weight_cart	Optional	If profile-based shipping rates are configured with a basis of weight, PayPal uses this value to calculate the shipping charges for the payment. This value overrides the weight values of individual items.  Allowable values are decimals numbers, with 2 significant digits to the right of the decimal point.	
weight_unit	Optional	The unit of measure if weight_cart is specified. Allowable values are:  • lbs • kgs The default value is lbs.	

# **HTML Variables for Shopping Carts**

HTML variables for shopping carts can be used with Add to Cart buttons, as well as with third-party shopping carts or custom carts that initiate payment processing with the Cart Upload command.

HTML Variables for Shopping Carts

#### **HTML Variables for Shopping Carts**

Name	Required or Optional	Description	Character Length
add	See description.	Add an item to the PayPal Shopping Cart.  This variable must be set as follows:  add="1"  The alternative is the display="1" variable, which	1
		displays the contents of the PayPal Shopping Cart to the buyer.  If both add and display are specified, display takes precedence.	
amount_X	Required	The amount associated with item <i>x</i> . To pass an aggregate amount for the entire cart, use amount_1.  Applies only to the Cart Upload command.	
business	Required	Your PayPal ID or an email address associated with your PayPal account. Email addresses must be confirmed.	
discount_amount _cart	Optional	Single discount amount charged cart-wide.  It must be less than the selling price of all items combined in the cart. This variable overrides any individual item discount_amount_x values, if present.  Applies only to the Cart Upload command.	
discount_amount _X	Optional	The discount amount associated with item <i>x</i> .  It must be less than the selling price of the associated item.  This amount is added to any other item discounts in the cart.  Applies only to the Cart Upload command.	
discount_rate_c art	Optional	Single discount rate (percentage) to be charged cart-wide. It must be set to a value less than 100. The variable overrides any individual item discount_rate_x values, if present. Applies only to the Cart Upload command.	
discount_rate_x	Optional	The discount rate associated with item <i>x</i> . It must be set to a value less than 100. The variable takes into account all quantities of item <i>x</i> . Applies only to the Cart Upload command.	
display	See description.	Display the contents of the PayPal Shopping Cart to the buyer. This variable must be set as follows:  display="1" The alternative is the add="1" variable, which adds an item to the PayPal Shopping Cart.  If both add and display are specified, display takes precedence.	1

Name	Required or Optional	Description	Character Length
handling_ cart	Optional	Single handling fee charged cart-wide. If handling_cart is used in multiple <b>Add to Cart</b> buttons, the handling_cart value of the first item is used.	
item_name_ <i>x</i>	Required	The name associated with item x. To pass an aggregate name for the entire cart, use item_name_1.  Applies only to the Cart Upload command.	
paymentaction Optional		Indicates whether the payment is a final sale or an authorization for a final sale, to be captured later.  Allowable values are:  • sale  • authorization  • order	
		The default value is sale. Set the value to authorization to place a hold on the PayPal account for the authorized amount. Set the value to order to authorize the payment without placing a hold on the PayPal account.	
		IMPORTANT: If you set paymentaction to order, use the Authorization & Capture API to authorize and capture the payment payments. The Merchant Services on the PayPal website let you capture payments only for authorizations, not for orders.	
shopping_url	Optional	The URL of the page on the merchant website that buyers go to when they click the <b>Continue Shopping</b> button on the PayPal Shopping Cart page.	
upload	See description	Upload the contents of a third-party shopping cart or a custom shopping cart.  This variable must be set as follows:	1
		upload="1"  The alternatives are the add="1" variable and the display="1" variables, which are used with the PayPal Shopping Cart.	

# **HTML Variables for Recurring Payments Buttons**

Recurring Payments buttons are:

- Subscribe buttons
- Automatic Billing buttons

HTML Variables for Recurring Payments Buttons

#### • Installment Plan buttons

HTML variables for recurring payments buttons set terms for different kinds of PayPal automatic payment plans.

#### **Subscribe Button HTML Variables**

Name	Required or Name Optional Description		Character Length
business	Required	Your PayPal ID or an email address associated with your PayPal account. Email addresses must be confirmed.	
item_name	Optional	Description of item being sold. If you are collecting aggregate payments, the value can be a summary of all items purchased, a tracking number, or a generic term such as "subscription." If this variable is omitted, buyers see a field in which they can enter the item name.	127
currency_code	Optional	The currency of prices for trial periods and the subscription. The default is USD.	3
al	Optional	Trial period 1 price. For a free trial period, specify 0.	
p1	See description.	Trial period 1 duration. Required if you specify a1. Specify an integer value in the allowable range for the units of duration that you specify with t1.	2
t1	See description.	Trial period 1 units of duration. Required if you specify a1.  Allowable values are:  D – for days; allowable range for p2 is 1 to 90  W – for weeks; allowable range for p2 is 1 to 52  M – for months; allowable range for p2 is 1 to 24  Y – for years; allowable range for p2 is 1 to 5	1
a2	Optional	Trial period 2 price. Can be specified only if you also specify a1.	
p2	See description.	Trial period 2 duration. Required if you specify a2. Specify an integer value in the allowable range for the units of duration that you specify with t2.	2
t2	See description.	Trial period 2 units of duration.  Allowable values are:  D – for days; allowable range for p2 is 1 to 90  W – for weeks; allowable range for p2 is 1 to 52  M – for months; allowable range for p2 is 1 to 24  Y – for years; allowable range for p2 is 1 to 5	1
a3	Required	Regular subscription price.	
р3	Required	Subscription duration. Specify an integer value in the allowable range for the units of duration that you specify with t3.	2

Name	Required or Optional	Description	Character Length
t3	Required	Regular subscription units of duration.  Allowable values are:  • D – for days; allowable range for p3 is 1 to 90  • W – for weeks; allowable range for p3 is 1 to 52  • M – for months; allowable range for p3 is 1 to 24  • Y – for years; allowable range for p3 is 1 to 5	1
src	Optional	Recurring payments. Subscription payments reoccur unless subscribers cancel their subscriptions before the end of the current billing cycle or you limit the number of times that payments recur with the value that you specify for srt.  Allowable values are:  • 0 – subscription payments do not recur  • 1 – subscription payments recur  The default is 0.	1
srt	Optional	Recurring times. Number of times that subscription payments recur. Specify an integer above 1. Valid only if you specify src="1".	
sra	Optional	Reattempt on failure. If a recurring payment for a legacy subscription fails, in which the subscription ID starts with S-, PayPal attempts to collect the payment two more times before canceling the subscription; otherwise (when the subscription ID starts with I-), the profile is suspended after the attempt instead of cancelled.  Allowable values are:  • 0 – do not reattempt failed recurring payments  • 1 – reattempt failed recurring payments before canceling or suspending  The default is 1.	1
no_note	Required	Do not prompt buyers to include a note with their payments.  Allowable values for Subscribe buttons:  • 1 – hide the text box and the prompt  For Subscribe buttons, always include no_note set to 1.)	1
custom	Optional	User-defined field which PayPal passes through the system and returns to you in your merchant payment notification email. Subscribers do not see this field.	255
invoice	Optional	User-defined field which must be unique with each subscription. The invoice number is shown to subscribers with the other details of their payments	

HTML Variables for Recurring Payments Buttons

Name	Required or Optional	Description	Character Length
modify	Optional	<ul> <li>Modification behavior.</li> <li>Allowable values are:</li> <li>0 - allows subscribers only to sign up for new subscriptions</li> <li>1 - allows subscribers to sign up for new subscriptions and modify their current subscriptions</li> <li>2 - allows subscribers to modify only their current subscriptions</li> <li>The default value is 0.</li> </ul>	1
usr_manage	Optional	Set to 1 to have PayPal generate usernames and initial passwords for subscribers.	1

# **Automatic Billing Button HTML Variables**

Name	Required or Optional	Description	Character Length
max_text	Optional	A description of the automatic billing plan. The button creation tool uses the same value that you enter in the <b>Description</b> field. Your button passes the description to PayPal to augment the item name in authorization notices and transaction details. If you write the HTML code for your button manually, the value of max_text and the text above the button can differ.	
set_customer_li	Required	Specify whether to let buyers enter maximum billing limits in a text box or choose from a list of maximum billing limits that you specify.  Allowable values are:  • max_limit_own - your button displays a text box for buyers to enter their own maximums above a minimum billing limit that you set with the min_amount variable.  • max_limit_defined - your button displays a dropdown menu of product options with prices to let buyers choose their maximum billing limits.	
min_amount	Optional	The minimum monthly billing limit, if you have one. Valid only if set_customer_limit = max_limit_own.	

#### **Installment Plan Buttons HTML Variables**

Name	Required or Optional	Description	Character Length
disp_tot	Optional	Display the total payment amount to buyers during checkout Allowable values are:  • Y – display the total  • N – do <i>not</i> display the total  The default is N.	
option_index	Required	<ul> <li>If the button offers a single plan, use 0, or use a number not used for option fields without prices, such as size and color.</li> <li>If the button offers plan options, the cardinal number of the option field, on0 through on9, with plan payment options.</li> <li>Include option_index if the number for the single plan or options field is not 0.</li> </ul>	
option_selectn	Required	• If the button offers a single plan, the value attribute of a hidden input field named os n. The value attributes of both elements must match, as the following sample code shows	8
		<pre><input name="osn" type="hidden" value="pay-in-4"/> <input name="option_selectn" type="hidden" value="pay-in-4"/>  • If the button offers plan options, the value attribute of the radio button for plan option n. The value attributes of both elements must match, as the following sample code shows:</pre>	
		<pre><input name="osn" type="radio" value="pay-in-4"/>Pay in 4 installments <input name="option_selectn" type="hidden" value="pay-in-4"/></pre>	
option_select <i>n</i> _ name	Required	<ul> <li>If the button offers plan options, text next to the radio button for plan option n</li> <li>If the button offers a single plan, text that describes the plan features</li> </ul>	
		For example, you might use the text "Pay in 4 installments."	

HTML Variables for Recurring Payments Buttons

Name	Required or Name Optional Description		Character Length
option_select <i>n</i> _ type	Required	<ul> <li>Whether the single plan or plan option n offered by the button is paid in full, in equal periods, or in variable periods</li> <li>Allowable values are:</li> <li>F - pay in full, at checkout</li> <li>E - pay in equal periods, beginning at checkout or sometime later</li> <li>V - pay in variable periods, beginning at checkout</li> </ul>	1
option_select <i>n</i> _ a <i>m</i>	Required	Amount of payment $m$ .  If the value of option_select $n$ _type is E, the value of this variable applies to all payments in the plan.	
option_select <i>n</i> _p <i>m</i>	Required	Duration of payment period <i>m</i> . Specify the number of time units with option_select <i>n</i> _t <i>m</i> .  If the value of option_select <i>n</i> _type is E, the value of this variable applies to all payments in the plan.	
option_select <i>n</i> _ t <i>m</i>	Required	Units of time for payment period <i>m</i> .  Allowable values are:  • D – for days; allowable range for p3 is 1 to 90  • W – for weeks; allowable range for p3 is 1 to 52  • M – for months; allowable range for p3 is 1 to 24  • Y – for years; allowable range for p3 is 1 to 5	1
option_select <i>n</i> _ n <i>m</i>	Required.	<ul> <li>Number of payments that are the same, in amount and duration, as this one.</li> <li>If the value of option_selectn_type is F, set the value to 1.</li> <li>If the value of option_selectn_type is E, set the value to the number of payments in the plan.</li> <li>If the value of option_selectn_type is F and no subsequent payments are the same as this one, set the value to 1.</li> </ul>	1

# **HTML Variables for Displaying PayPal Checkout Pages**

HTML variables for displaying PayPal checkout pages control how the pages appear and function.

## **HTML Variables for Displaying PayPal Checkout Pages**

Name	Required or Optional	Description	Character Length
page_style	Optional	The custom payment page style for checkout pages.  Allowable values are:  • paypal – use the PayPal page style  • primary – use the page style that you marked as primary in your account profile  • page_style_name – use the custom payment page style from your account profile that has the specified name	30
		The default is primary if you added a custom payment page style to your account profile. Otherwise, the default is paypal.	
image_url	Optional	The URL of the 150x50-pixel image displayed as your logo in the upper left corner of the PayPal checkout pages.  Default – Your business name, if you have a PayPal Business account, or your email address, if you have PayPal Premier or Personal account.	1,024
cpp_cart_border _color	Optional	<ul> <li>The HTML hex code for your principal identifying color.</li> <li>PayPal blends your color to white in a gradient fill that borders the cart review area of the PayPal checkout user interface.</li> <li>Valid value is 6 single-byte hexadecimal characters that represent an HTML hex code for a color.</li> <li>Valid only for Buy Now and Add to Cart buttons and the Cart Upload command.</li> <li>Not used with Subscribe, Donate, or Buy Gift Certificate buttons.</li> </ul>	
cpp_header_ image	Optional	The image at the top left of the checkout page. The image's maximum size is 750 pixels wide by 90 pixels high. PayPal recommends that you provide an image that is stored only on a secure (https) server.  Deprecated for Buy Now and Add to Cart buttons and the Cart Upload command.	No limit

HTML Variables for Displaying PayPal Checkout Pages

Required or Optional Desc		Description	Character Length	
cpp_ headerback_ color	Optional	The background color for the header of the checkout page. Valid value is case-insensitive six-character, HTML hexadecimal color code in ASCII. Deprecated for Buy Now and Add to Cart buttons and the Cart Upload command.	6	
cpp_ headerborder_co lor	Optional	The border color around the header of the checkout page. The border is a 2-pixel perimeter around the header space, which has a maximum size of 750 pixels wide by 90 pixels high. Valid value is case-insensitive six-character, HTML hexadecimal color code in ASCII. Deprecated for Buy Now and Add to Cart buttons and the Cart Upload command.	6	
cpp_logo_image	Optional	A URL to your logo image. Use a valid graphics format, such as .gif, .jpg, or .png. Limit the image to 190 pixels wide by 60 pixels high. PayPal crops images that are larger. PayPal places your logo image at the top of the cart review area.	127	
		NOTE: PayPal recommends that you store the image on a secure (https) server. Otherwise, web browsers display a message that checkout pages contain non-secure items.		
		<ul> <li>Valid value is 127 single-byte alphanumeric characters</li> <li>Valid only for Buy Now and Add to Cart buttons and the Cart Upload command.</li> <li>Not used with Subscribe, Donate, or Buy Gift Certificate buttons.</li> </ul>		
cpp_payflow_ color	Optional	Optional The background color for the checkout page below the header. Valid value is case-insensitive six-character, HTML hexadecimal color code in ASCII.		
		NOTE: Background colors that conflict with PayPal's error messages are not allowed; in these cases, the default color is white.		
		Deprecated for Buy Now and Add to Cart buttons and the Cart Upload command.		
lc	Optional	The language of the login or sign-up page that subscribers see when they click the Subscribe button. If unspecified, PayPal determines the language by using a cookie in the subscriber's browser. If there is no PayPal cookie, the default language is U.S. English.	2	

Name	Required or Optional	Description	Character Length
no_note	Optional	Do not prompt buyers to include a note with their payments.  Allowable values are:  • 0 – provide a text box and prompt for the note  • 1 – hide the text box and the prompt	1
		The default is 0.	
cn	Optional	Label that appears above the note field. This value is not saved and does not appear in any of your notifications. If this variable is omitted, the default label above the note field is "Add special instructions to merchant." The cn variable is not valid with Subscribe buttons or if you include no_note="1".	40
no_shipping	Optional	Do not prompt buyers for a shipping address.  Allowable values are:  • 0 – prompt for an address, but do not require one  • 1 – do not prompt for an address  • 2 – prompt for an address, and require one  The default is 0.	1
return	Optional	The URL to which PayPal redirects buyers' browser after they complete their payments. For example, specify a URL on your site that displays a "Thank you for your payment" page.  Default – PayPal redirects the browser to a PayPal webpage.	1,024
rm	Optional	Return method. The FORM METHOD used to send data to the URL specified by the return variable.  Allowable values are:  • 0 – all shopping cart payments use the GET method  • 1 – the buyer's browser is redirected to the return URL	1
		<ul> <li>by using the GET method, but no payment variables are included</li> <li>2 – the buyer's browser is redirected to the return URL by using the POST method, and all payment variables are included</li> </ul>	
		The default is 0.	
		NOTE: The rm variable takes effect only if the return variable is set.	

HTML Variables for Filling Out PayPal Checkout Pages Automatically

Name	Required or Optional	Description	Character Length
cbt	Optional	Sets the text for the <b>Return to Merchant</b> button on the PayPal Payment Complete page. For Business accounts, the return button displays your business name in place of the word "Merchant" by default. For Donate buttons, the text reads "Return to donations coordinator" by default.  NOTE: The cbt variable takes effect only if the return variable is set.	60
cancel_return	Optional	nal A URL to which PayPal redirects the buyers' browsers if they cancel checkout before completing their payments. F example, specify a URL on your website that displays a "Payment Canceled" page.  Default – PayPal redirects the browser to a PayPal webpa	

# HTML Variables for Filling Out PayPal Checkout Pages Automatically

HTML variables for filling out PayPal checkout pages automatically let you specify information about buyers. PayPal recommends that you include automatic fill-out variables with all of your payment buttons for consistent address handling in the checkout experience of your buyers.

NOTE: When you pass in address\_override=1 or tax or shipping variables, PayPal displays the values in the payment widget. Also, PayPal hides the calculation widget, regardless of setting up shipping and tax rates in your Account Profile.

#### HTML Variables for Filling Out PayPal Checkout Pages Automatically for Buyers

Name	Required or Optional	Description	Character Length
address1	Optional	Street (1 of 2 fields)	100
address2	Optional	Street (2 of 2 fields)	100
city	Optional	City	40
country	Optional	Sets shipping and billing country.	2
email	Optional	Email address	127
first_name	Optional	First name	32
last_name	Optional	Last name	64

Name	Required or Optional	Description	Character Length
lc	Optional	Sets the language for the billing information/log-in page only. The default is US.	2
charset	Optional	Sets the character set and character encoding for the billing information/log-in page on the PayPal website. In addition, this variable sets the same values for information that you send to PayPal in your HTML button code. The default is based on the language encoding settings in your Account Profile.	
night_ phone_a	Optional	The area code for U.S. phone numbers, or the country code for phone numbers outside the U.S. PayPal fills in the buyer's home phone number automatically.	See description.
night_ phone_b	Optional	The three-digit prefix for U.S. phone numbers, or the entire phone number for phone numbers outside the U.S., excluding country code. PayPal fills in the buyer's home phone number automatically.	See description.
night_ phone_c	Optional	The four-digit phone number for U.S. phone numbers. PayPal fills in the buyer's home phone number automatically.	See description.
state	Optional	State code	2
zip	Optional	Postal code	32

# **HTML** Variables for the Instant Update API

HTML variables for the Instant Update API set up the Cart Upload command for the Instant Update API callback. Establish your own Instant Update callback server before you use these variables.

**Instant Update Variables to Set Up a Payment for the Instant Update API:** Some Instant Update variables set up the Cart Upload to use your callback server. Include the following required variables in the Cart Upload command to have PayPal send Instant Update requests to your callback server. Include the following optional variables when appropriate.

HTML Variables for the Instant Update API

## **HTML Variables to Set Up an Instant Update Payment**

Name	Required or Optional	Description	Characte Length
callback_url	Required	The URL of your Instant Update callback server	1024
callback_timeou t	Required	The timeout in seconds for callback responses from your Instant Update callback server. After exceeding the timeout, PayPal uses the fallback values on the Review Your Payment page for tax, shipping, and insurance.  Allowable values are 1-6. PayPal recommends the value 3.  IMPORTANT: Use values other than 3 only when instructed to do so by your PayPal representative	1
callback_versio	Optional	The version of the Instant Update API that your callback server uses. The default is the current version.	
fallback_tax_am	Optional	Tax amount to use as a fallback, if the callback response times out	
fallback_shippi ng_option_name_ x	Required	Name and label of shipping option $x$ to use as a fallback, if the callback response times out. For example, "Express 2 days". You can include a maximum of 10 shipping options as fallbacks. Substitute $x$ with ordinal numbers, starting with 0.  Iinclude 1 instance of this variable, with its index $(x)$ set to 0. If you include just 1 instance, include fallback_shipping_option_is_default_x with its index $(x)$ set to 0 and its value set to 1.  Allowable values for $x$ are 0-9.	50
fallback_shipping_option_amount_X	Required	Shipping amount for option <i>x</i> to use as a fallback, if the response times out.  Allowable values for <i>x</i> are 0-9.	
fallback_shippi ng_option_is_de fault_x	Required	Indicates that shipping option <i>x</i> is the default and should be selected in the dropdown menu as a fallback, if the response times out.  Only one shipping option can be the default for buyers. Check that you set 1 instance only of fallback_shipping_option_is_default_x to the value 1.  Allowable values are:  • 1 – shipping option <i>x</i> is the default shipping option  • 0 – shipping option <i>x</i> is not the default shipping option  Allowable values for <i>x</i> are 0-9.	1

Name	Required or Optional	Description	Character Length
fallback_insura nce_option_offe red	Optional	Indicates that insurance is offered. PayPal ignores this HTML variable if fallback_insurance_amount is omitted or the value is 0 or less.  Allowable values are:  • 1 – insurance is offered • 0 – insurance is not offered	1
fallback_insura nce_amount	Optional	Insurance amount to use as a fallback, if the callback response times out. Include the fallback_insurance_option_offered HTML variable if you specify an insurance amount. The fallback insurance amount applies to all shipping options that you specify.	

**Instant Update Variables for Dimensions of Individual Items:** Shipping charges are calculated sometimes by using the dimensions of individual items in the shopping cart. Include the following optional dimensional variables below in the Cart Upload command to provide the information to your callback server.

#### HTML Variables to Set Up an Instant Update Payment for Dimension-Based Shipping Charges

Name	Required or Optional	Description	Character Length
height_x	Optional	Height of item <i>x</i> in the shopping cart. Allowable values are positive integers.	
height_unit	Optional	Unit of measure for the values specified by the height_x values.  Allowable values are any values that you choose to provide. PayPal passes the value to your callback server in callback requests.	
width_x	Optional	Width of item <i>x</i> in the shopping cart. Allowable values are positive integers.	
width_unit	Optional	Unit of measure for the value specified by width_x Allowable values are any values that you choose to provide. PayPal passes the value to your callback server in callback requests.	
length_x	Optional	Length of item $x$ in the shopping cart. Allowable values are positive integers.	



HTML Variables for the Instant Update API

Name	Required or Optional	Description	Character Length
length_unit	Optional	Unit of measure for the value specified by length_x Allowable values are any values that you choose to provide. PayPal passes the value to your callback server in callback requests.	