PayByGroup

Full Merchant Integration API

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# 1 - Standard API Interaction

The following describes the approach used by PBG in all API calls unless explicitly stated otherwise.

**FORMAT**

- Data is transferred using application/json formatted post requests.

- Responses are also a single JSON encoded object in the post's body.

- Both the post parameters and the response values are each encoded as a single JSON map of values.

- The calling map of all API calls must contain a merchant-specific auth token (a 32 character random identifier)

**ADDRESSING**

- All API calls must originate from one of the PBG\_ADDRESSES below or from the supplied MERCHANT\_API\_URLs

- In production all calls to PBG must be to the 'production' address below.

- Staging/testing of new API interactions will typically be done using the ‘test’ or ‘dev2’ addresses below.

- API calls that originate from PBG to the merchant follow the same format above, and will

provide the same 'merchant\_auth' and 'action' keys.

**DATATYPES**

- DATE FORMAT: "YYYY-MM-DD"

- DATETIME FORMAT: “YYYY-MM-DD HH:MM PST”

(This is the rails default ISO-8601 format, pacific coast time.

For simplicity, midnight PST time is the expiration time for all PayByGroups. That way no group is surprised to have theirs expire before midnight in their local time, and the expiration does not need to be conditioned on the location of one or more users.)

- CURRENCY: "###.## USD"

A string containing a decimal followed by a space and a currency indicator

(e.g. "USD" for US dollars)

**PBG\_ADDRESSES**

- 184.106.133.37 (production)

- 50.57.143.251 (test)

- 50.57.115.142 (dev2)

- 50.57.106.140 (dev1)

**MERCHANT\_API\_URL**

- IP address supplied by the merchant

**MERCHANT\_AUTH**

- 32-character sequence of printable ASCII characters

# 2 - Purchase Create API

**OBJECTIVE**

Gather information about a potential purchase from the merchant using the 'purchase\_id' passed from the merchant to PBG when the user chooses to create a PayByGroup. Any optional variables may be set universally and will apply to all purchases unless overridden in a response parameter here.

**URL**:

http://MERCHANT\_API\_IP\_ADDRESS/purchase\_create.json?merchant\_id=XXX

**SAMPLE VARIABLE**

* **:variable\_name** *datatype* [Source of variable] -- Extended variable explanation

**REQUEST PARAMS:** (both required)

* **:merchant\_auth** *string* [PBG] -- A 32-character merchant authorization cookie
* **:purchase\_id** *string* [merchant] – Unique ID for this single purchase supplied by the merchant. Retained by PBG and merchant for at least one calendar year and required for most APIs

**RESPONSE PARAMS:**

**Required**

* **:purchase\_cost** *currency* [merchant]-- Idealized total cost of the purchase (including deposits, taxes, and fees). This is the amount PBG sends to the merchant when the PayByGroup completes, unless merchant collected an organizer deposit

**OR**

* **:cost\_per\_person** *currency* [merchant]-- Total cost of one spot (including deposits, taxes, and fees). This amount, multiplied by the total number of people in the group, is sent to the merchant when the PayByGroup completes
* **:purchase\_image\_url** *url* [merchant] -- URL of the .png or .jpg image that best represents what is being purchased. It is scaled to be the main image on the dashboard. Image is downloaded from URL at the time of the call and proportionately resized so it is 270 pixels high. If its width is greater than 400 pixels, the left and right edges are proportionately clipped to reduce the height to 270 pixels.

**Optional**

Any variables listed in the Merchant Input Variables list. Typically, merchants will pass at least the following:

* **:purchase\_name**
* **:purchase\_description**
* **:purchase\_link\_url**
* **:merchant\_org\_email**

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# 3 - Inventory Status API

**OBJECTIVE**

Allows PBG to query and update the status of the inventory associated with a particular group purchase. This is used to improve the user experience for a fully automated integration so that the user may be notified the inventory is not available before submitting payment.

**URL**

http://MERCHANT\_IP\_ADDRESS?merchant\_id=XXX

**REQUEST PARAMS** (both required)

* **:merchant\_auth** *string* [PBG] -- A 32-character merchant authorization token
* **:purchase\_id** *string* [merchant] – Unique ID for this single purchase supplied by the merchant. Retained by PBG and merchant for at least one calendar year and required for most APIs

**RESPONSE PARAMS**

* **:inventory\_state** *symbol* [merchant]– Specifies the current state of the inventory underlying a purchase. Possible values are:
  + **:1 -- available** – The inventory is still available
  + **:2 -- unavailable**– The inventory is no longer available
  + **:3 -- unknown** – The status of the inventory cannot be instantly determined

Example format:

{"result": “available”}

# 4 - Purchase Feed API

**OBJECTIVE**

Provides a RESTful way for merchants to gather a list of all values for all PayByGroups or any filtered subset of PayByGroups over a given date range at any point.

**URL**

http://PBG\_IP\_ADDRESS/merch/purchases.json

**REQUEST PARAMS**

**Required**

* **:merchant\_auth** *string* [PBG] -- A 32-character merchant authorization token

**Optional Filter Params**

* **:purchase\_id** *string* [merchant] – Unique ID for this single purchase supplied by the merchant. Retained by PBG and merchant for at least one calendar year and required for most APIs
* **:inventory\_id** *string* [merchant] – An ID provided by the merchant that represents a piece of inventory that may be involved in multiple purchases, e.g. a house that is booked for different times in separate PayByGroups
* **:create\_start\_date** *date* [merchant] – Starting date for date range of PayByGroup creation dates to return
* **:create\_end\_date** *date* [merchant] – Ending date (inclusive) for date range of PayByGroup creation dates to return
* **:status** *array of string* [PBG]– Specifies an array of the current state of the purchases that should be returned. See PayByGroup Output Variables: Purchase Status for possible values

**RESPONSE PARAMS**

All input and output parameters for each group purchase will be returned for the set of PayByGroups requested.

Example format:

{“merchant\_auth”: “XXXXXXXXXX”,

"events": [

{"purchase\_id”: "ABC\_12345",

"status": "pending",

“purchase\_name”: “1600 Whitmarsh Avenue”

… …

}

{"purchase\_id”: "ABC\_98765",

"status": "payment\_completed",

... …

}

]

}

# 5 - Merchant Action API

**OBJECTIVE**

Gives the merchant automated control over all actions that can be taken by the merchant on a given PayByGroup.

**URL**

http://MERCHANT\_API\_IP\_ADDRESS/purchase\_action.json?merchant\_id=XXX

**REQUEST PARAMS**

**Required**

* **:merchant\_auth** *string* [PBG] -- A 32-character merchant authorization token
* **:purchase\_id** *string* [merchant] – Unique ID for this single purchase supplied by the merchant. Retained by PBG and merchant for at least one calendar year and required for most APIs
* **:action** *string* [merchant] – The action to be taken on this PayByGroup. Possible actions are:
  + **:collect\_funds** – Confirms that the inventory is available to complete the purchase and triggers transfer of funds to the merchant’s bank account
  + **:set\_unavailable** -- Notifies the organizer and merchant’s agent that the specific inventory is no longer available and prompts them to settle on substitute inventory with the organizer to which to apply this PayByGroup
  + **:refund** – Returns all funds collected for this PayByGroup and cancels any existing authorizations on credit cards tied to this PayByGroup
  + **:cancel** – Permanently cancels this PayByGroup, refunds any transacations, and cancels any credit card authorizations currently in place

**RESPONSE PARAMS**:

Example format:

{“result”: true}

{“result”: false}

# 6 - Change Push API

**OBJECTIVE**

Enable PayByGroup to push all values for a certain PayByGroup to the merchant anytime one or more values on that PayByGroup changes. The important values that, when updated, trigger the Change Push API are:

* **:status**
* **:commit\_deadline**
* **:num\_people**

**URL**

http://MERCHANT\_IP\_ADDRESS?merchant\_id=XXX

**REQUEST PARAMS**

All input and output parameters for each group purchase that has had one of the values specified above changed since the last time the Change Push API was triggered

Example format:

{“merchant\_auth”: “XXXXXXXXXX”,

"events": [

{"purchase\_id: "ABC\_12345",

"status": "collected",

“purchase\_name”: “1600 Whitmarsh Avenue”

… …

}

{"purchase\_id: "ABC\_98765",

"status": "payment\_completed",

... …

}

]

}

**RESPONSE PARAMS**

Example format:

{“result”: true}

{“result”: false}

# 7 - Merchant Input Variables

**SAMPLE VARIABLE**

* **:variable\_name** *datatype* [Source of variable] -- Extended variable explanation

**MERCHANT CONFIGURATION**

* **:merchant\_auth** *string* [merchant or PBG] -- A 32-character CONSTANT authorization token used for authorization on all calls between merchant and PBG
* **:merchant\_api\_url** *url* [merchant] – Used to display on credit card statements and cannot be greater than 11 characters
* **:merchant\_agent\_email** *string* [merchant] – Email address(es) where email notifications are sent with updates on the purchase and requests for actions, such as confirming a purchase when it completes

**SKINNING** (typically set globally per merchant and occasionally overridden on an individual purchase)

* **:merchant\_display\_name** *string* [merchant] – Phrase used to refer to the merchant in all user-facing
* **:merchant\_short\_name** *string* [merchant] – Used to display on credit card statements and cannot be greater than 11 characters
* **:merchant\_phone** *string* [merchant] – Support contact number for the merchant displayed in notifications to users
* **:merchant\_terms\_of\_service\_title** *string* [merchant] – Text used to reference the merchant’s terms of service or equivalent on the credit card submission page for all members of the PayByGroup
* **:merchant\_terms\_of\_service\_link** *url* [merchant] – URL hyperlinked from the merchant\_terms\_of\_service\_title to the full copy of the terms of service or its equivalent on the merchant’s site
* **:merchant\_terms\_of\_service\_copy** *text* [merchant] – HTML markup of the actual text of the terms of service document that will be displayed on PayByGroup’s site and linked from the merchant\_terms\_of\_service\_title (typically used if it is not possible to provide a merchant\_terms\_of\_service\_link)

**INVENTORY** (some or all are set when the PayByGroup is created via the Purchase Create API, and certain ones are editable later via the Purchase Update API)

* **:purchase\_id** *string* [merchant] – Unique ID for this purchase supplied by the merchant. Retained by PBG and merchant for at least one calendar year and required for most APIs
* **:purchase\_image\_url** *url* [merchant] -- URL of the .png or .jpg image that best represents what is being purchased. It is scaled to be the main image on the dashboard. Image is downloaded from URL at the time of the call and proportionately resized so it is 270 pixels high. If its width is greater than 400 pixels, the left and right edges are proportionately clipped to reduce the height to 270 pixels.
* **:purchase\_name** *text* [merchant] – Name of what is being purchased as provided by the merchant
* **:purchase\_description** *text* [merchant] *--* Dashboard summary text supplied by the merchant and describing the details of what is being purchased. Basic HTML elements are allowed for formatting
* **:purchase\_link\_url** *url* [merchant] *--* URL linking back to the merchant’s site for the item being purchased or a shopping cart listing all the items being purchased part of this PayByGroup
* **:inventory\_id** *string* [merchant] – An ID provided by the merchant that represents a piece of inventory that may be involved in multiple purchases, e.g. a house that is booked for different times in separate PayByGroups
* **:hold\_type** *string* [merchant]-- Must be one of:
  + **“no\_hold”** -- Purchase is subject to inventory availability at time of completion
  + **“free\_hold”** -- The inventory is reserved for a specified period of time without any initial payment or deposit, usually 24-72 hours, after which it is subject to availability
  + **“deposit\_hold”** -- An initial payment or deposit is made by the organizer, either on the merchant’s site or as part of their creating a PayByGroup
* **:hold\_deadline** *date* [merchant]– If **hold\_type** is either **“free\_hold”** or **“deposit\_hold”**, this is the date on which the hold expires and the inventory becomes subject to availability. This date is displayed on the organizer’s dashboard
* **:purchase\_deadline** *date* [merchant]– Date at which this PayByGroup becomes invalid at 11:59 PM PST. It is frozen and cannot be updated or completed after this date, and the inventory should be released.
* **:inventory\_state** *string* [merchant]– Specifies the current state of the inventory underlying a purchase. Possible values are:
  + **“available”** – The inventory is still available
  + **“unavailable”**– The inventory is no longer available
  + **“unknown”** – The status of the inventory cannot be instantly determined
* **:merchant\_org\_email** *string* [merchant]-- Default email for the organizer used to reference the organizer in the merchant’s system and to streamline creation of their account
* **:merchant\_org\_first\_name** *string* [merchant]-- Default first name for the organizer
* **:merchant\_org\_last\_name** *string* [merchant]-- Default last name for the organizer

**PAYMENTS AND SPLITTING**

* **:purchase\_cost** *currency* [merchant]-- Idealized total cost of the purchase (including deposits, taxes, and fees). This is the amount PBG sends to the merchant when the PayByGroup completes, unless merchant collected an organizer deposit
* **:cost\_per\_person** *currency* [merchant]-- Total cost of one spot (including deposits, taxes, and fees). This amount, multiplied by the total number of people in the group, is sent to the merchant when the PayByGroup completes
* **:organizer\_deposit** *currency* [merchant]-- Amount of the deposit required from the organizer in order to allow for a **“deposit\_hold”**. This amount is paid by the organizer at the time the purchase is created.
* **:pbg\_collects\_org\_deposit** *object* [merchant]-- Specifies whether PayByGroup collects the deposit when the organizer creates their PayByGroup. If not specified and **organizer\_deposit** is greater than zero, it is assumed the deposit has been collected directly by the merchant.
* **:allow\_even\_split** *object* [merchant]-- Allow organizer to select the even splitting method, which will automatically divide the total cost by the number of people that commit. **purchase\_cost** must be specified
* **:allow\_fixed\_per\_person** *object* [merchant]-- Allow organizer to select the fixed per person splitting method, which sets the cost of each spot as a fixed amount. **cost\_per\_person** must be specified.
* **:allow\_specified\_per\_person** *object* [merchant]-- Allow organizer to select the specified per person splitting method, which means each member of the group will specify the amount they are contributing. The tipping point is reached once the total dollar amount needed is committed.

# 8 - PayByGroup Output Variables

**PURCHASE STATUS**

* **:status** *string* [PBG]– Specifies the current state of the purchase. Possible values are:
  + **“incomplete”** – The PayByGroup was initiated by the merchant but never completed by the organizer
  + **“active”** -- The PayByGroup was successfully created but has not yet tipped. The organizer can send payment to the merchant at any point prior to the tipping point being reached by making up the shortfall on their own
  + **“tipped”** -- PayByGroup has reached its tipping point, and the organizer is able to send payment to the merchant
  + **“pending”** -- Organizer has submitted payment to merchant and is awaiting confirmation
  + **“collected”** -- Full payment for the PayByGroup has been collected and is in the process of being paid out to the merchant
  + **“payment\_completed”** -- The PayByGroup tipped, organizer authorized payment, and funds were deposited to the merchant’s bank account
  + **“expired”** -- The purchase\_deadline passed without payment being submitted
  + **“canceled”** – The organizer or merchant canceled the PayByGroup
  + **“failed”** -- Payment was submitted, but full funds could not be collected and paid to the merchant

**PURCHASE DETAILS**

* **:name** string [organizer]-- Name for this particular Group Purchase assigned by the organizer when it was created
* **:details\_text** text [organizer] – Extra explanation provided by the organizer and displayed on the dashboard for this PayByGroup
* **:min\_people** integer [organizer] -- Minimum number of people required by the organizer for the PayByGroup to tip
* **:max\_people** integer [organizer] -- Maximum number of people allowed by the organizer to join the PayByGroup
* **:commit\_deadline** date [organizer]-- Date set by organizer by which invitees must respond. It cannot be set later than the purchase\_deadline as set by the merchant
* **:invite\_subject** string [organizer]– Text of the email subject line used by the organizer when sending invitations
* **:invite\_message** string [organizer] -- Message sent by the organizer to the invitees to invite them to participate in the PayByGroup
* **:created\_at *date* [PBG] – The date/timestamp of when a PayByGroup was created**
* **:updated\_at *date* [PBG] – The date/timestamp of when a PayByGroup last had any values change**
* **:num\_people** integer [PBG] – Number of people currently committed to a given PayByGroup
* **:pp\_cost *currency* [PBG] – The current cost per person based on the number of people committed**