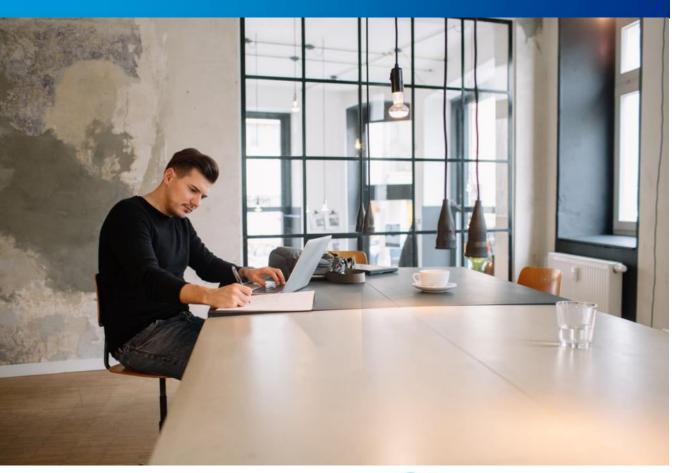


# PayPal Ocapi Integration Guide

FOR SALESFORCE COMMERCE CLOUD





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# 1 Summary

This Implementation Guide describes how to integrate int\_paypal\_ocapi, bm\_paypal and bm\_paypal\_configuration cartridges version 22.2.0 into your site.

Cartridges includes:

- 1 PayPal Checkout from cart and payment pages
- Billing Agreement creation in the checkout process
- Review and post-process PayPal transactions in the Business Manager
- · Dynamic Smart Button styling management from the Business Manager

PayPal integration uses PayPal REST Order API for checkout and Payment API for transaction post processing in Business Manager.

For more information, contact your PayPal support manager.

# 2 Component Overview

# 2.1 Supported Features

### 2.1.1 Smart Payment Button

PayPal Checkout with Smart Payment Buttons gives your buyers a simplified and secure checkout experience. PayPal intelligently presents the most relevant payment types to your shoppers, automatically, making it easier for them to complete their purchase using methods like Pay with Venmo, PayPal Credit, credit card payments.

**Button Demo** 

#### 2.1.2 Billing Agreement and Reference Transactions

The PayPal Billing Agreement (Reference Transactions) feature helps customers to pay more quickly. If a buyer accepts Billing Agreements with your site, they can check out without redirection to PayPal, both from the Cart and Billing page.

To learn more, see Reference transactions overview.

NOTE: Reference transaction needs to be enabled in a merchant account setting.

Please contact your PayPal support manager enable this feature on your account

### 2.1.3 Alternative Payment Methods

Alternative payment methods allow customers across the globe to pay with their bank accounts, wallets, and other local payment methods. Relevant alternative payment methods are automatically presented with Smart Payment Buttons.

To learn more, see Alternative Payment Methods overview.



#### 2.1.4 Transactions post processing

Orders paid with integration can be post-processed from separate Business Manager module. Post-processing includes transaction capture, refund and void. Also, you can create a new transaction using existed billing agreement id.

Check **Business Manager** chapter for more details.

#### 2.1.5 PayPal-provided Billing Address and Phone Number

To retrieve a buyer's billing address and phone number from the PayPal Checkout flow, please contact your PayPal representative or PayPal Support to enable them.

Important: Retrieve billing address and phone number should be enabled in merchant account before PayPal button will be enabled on a cart page.

# 2.1.6 Webhook Support

The purpose of the webhooks is to reflect changes which was done manually or automatically on PayPal console level.

For now only the next hooks are supported: **Payment authorization voided**, **Payment capture refunded** and **Payment capture completed**.

# 2.2 Privacy and Payment

This integration requires access to the following customer data elements: Shipping Address, Order Details, Customer Profile.

# 3 What is OCAPI?

#### 3.1 Overview

The Saleforce Commerce Cloud Open Commerce API (OCAPI) is an API that allows other applications to securely access the platform's resources externally from the platform itself. An API, or Application Programming interface, is the preferred method for two applications to communicate in real-time. Simply stated, an API allows a server to return or accept information that is requested or sent by another application. The calling application can then interpret the received data and present it to the user.

# 3.2 How is OCAPI used?

The OCAPI interface grants other applications access to Salesforce Commerce Cloud resources such as baskets, customers, orders, and products. While these resources are usually consumed through the client site storefront that customers see, the interface provides access to those resources for other applications to read, create, or update through service calls.

The general information about OCAPI you can find here: OCAPI documentation



# 4 Implementation Guide

#### 4.1 Overview

Three cartridges support this integration:

- int\_paypal\_ocapi The cartridge makes possible to connect PayPal solution to your site by using OCAPI.
- 2. bm\_paypal Business Manager extension "PayPal Transactions"
- 3. bm\_paypal\_configuration Business Manager extension "PayPal Styles Configuration"

#### 4.2 Installation

### 4.2.1 Import metadata archive

Upload and import meta.zip from the metadata folder. To do so, go to Business Manager >
 Administration > Site Development > Site Import & Export. Upload archive using Local option in
 the Upload Archive section. After upload choose metadata.zip in the list and click on import
 button.

Administration > Site Import & Export

This page allows you to export the current configuration of your organization including all of its sites. To download an archive, just click its file name.

Import

Upload Archive:

QLocal Remote

Browse... No file selected.

Upload

Location File Size Last Modified

metadata.zip

SiteGenesis Demo Site

Storefront Reference Architecture Demo Sites

Figure 1. metadata.zip archive import

# 4.2.2 Add cartridge to cartridge path

Add int\_paypal\_ocapi into the cartridge path of a target site. To do so, go to Business Manager > Administration > Sites > Manage Sites > Your Target Site > Settings and insert int\_paypal before your cartridges record, as shown in Figure 2.

# RefArch - Settings

Click Apply to save the details. Click Reset to revert to the last saved state.

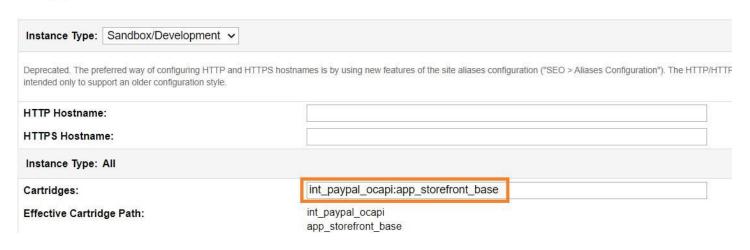


Figure 2. Storefront cartridge path

#### 4.2.3 Adding API Credentials

### Services:

- int\_paypal.http.rest is used for the main plugin logic (Smart Button, manipulations with transactions and etc.).
- int\_paypal.http.token.service is used for Webhooks features.

To access credentials go to Business Manager > Administration > Operations > Services > Credentials.

You need to fill the next credential with the same data:

Paypal\_Sandbox\_Credentials

SB URL: <a href="https://api.sandbox.paypal.com/">https://api.sandbox.paypal.com/</a>

Prod URL: https://api.paypal.com/

User: Client Id Pass: Secret

Paypal\_Sandbox\_Connect\_Credentials

SB URL: https://api-m.sandbox.paypal.com/v1/

Prod URL: <a href="https://api-m.paypal.com/v1/">https://api-m.paypal.com/v1/</a>

User: Client Id Pass: Secret

For both credentials use Client Id as **User** and Secret as **Password**. Client Id and Secret can be obtained

in the app details at the PayPal developer portal.



For more details about REST apps and credentials please visit <u>Get credentials</u> page at the PayPal Developer Portal.

NOTE: Current integration supports only one credentials usage at a time. If you wish to use multiple credentials at one sandbox you should customize cartridge at PaypalRestService.js file

(Optional) For non-production activities we recommend enabling the communication log for the int\_paypal.http.rest service. The communication log will log every request and response to the log files. To do this navigate to the Business Manager > Administration > Operations > Services and click on int\_paypal.http.rest. Check Communication Log Enabled checkbox (Figure 4)

PLEASE NOTE: By enabling the communication log, some details such as customer's personal information including address, phone, and email will be logged in cleartext. This should only be used for debugging purposes. We recommend, if possible, only use this in a sandbox; however, when used in production, ensure you are disabling / unchecking the communication log box immediately after you are done with your debugging. Further, some credentials will also be saved in cleartext.

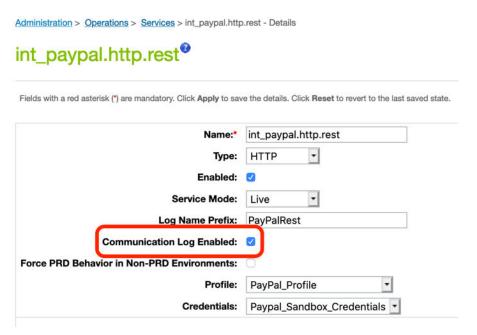


Figure 3. Service Example

# 4.2.4 Papal Transaction and PayPal Styles Configuration Business Manager modules installation

Add bm\_paypal into the record of the Business Manager cartridge path. Go to Business Manager > Administration > Sites > Manage Sites > Manage the Business Manager Site > Settings and add bm\_paypal and bm\_paypal\_configuration to the input as shown in Figure 4.



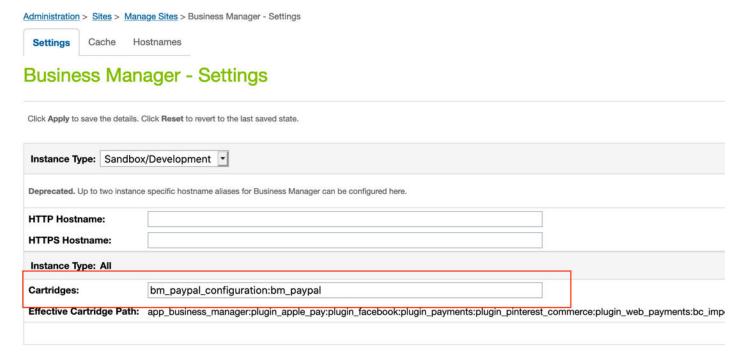


Figure 4. Business Manager Cartridge Path

Grant access to Business Manager modules:

- a. Go to Business Manager > Administration > Organization > Roles & Permissions and select the target role that needs to have access to PayPal Transaction management.
- b. Select the **Business Manager Modules** tab in the drop-down list on top. You must select your target site as the active context.
- c. Scroll to the **PayPal Transactions** module. Grant access to it by selecting the checkbox and clicking **Update**. Repeat same action for **PayPal Styles Configuration**.

Once you do this, every Business Manager user with that role can manage PayPal Transactions by selecting Business Manager > Merchant Tools> Ordering > PayPal Transactions and change Smart Button styling under Business Manager > Merchant Tools> Site Preferences > PayPal Styles Configuration.

#### 4.2.5 Custom cache configuration

Custom cache required for fast and stable work on the integration. Navigate to **Business**Manager > Administration > Operations > Custom Caches and check checkbox Enable

Caching.

There are 2 custom cache objects used by the integration

- paypalOcapiPreferences custom site preferences cached. Out of the box, the
  integration supports single site usage and custom preferences are cached. For
  multiple sites we recommend removing cache definition from caches.json file in the
  cartridge.
- 2. paypalRestOauthToken OAUTH token for communication with PayPal REST API. Out of the box, the integration supports single site usage and token retrieved from

PayPal is cached. For multiple credentials usage we recommend removing cache definition from caches. json file in the cartridge.

NOTE: Custom Cache could be disabled for developing or testing purposes. But we don't recommend disabling it on production and staging to avoid performance issue and http calls quota violation.

# 4.3 Configuration

### 4.3.1 Updating Cartridge Custom Site Preferences

Go to Business Manager > Merchant Tools > Site Preferences > Custom Site Preferences. You'll see new Custom Site Preference Group called PayPal Configuration (Figure 7)



Figure 5. PayPal Custom Site Preferences

Click **View** for PayPal Configuration. Detailed description about each option is available under preference name on the page.

NOTE: Show PayPal button on the cart page requires customer shipping address. Review <u>PayPal-provided Billing Address and Phone Number</u> before enabling this preference.

NOTE: Review section <u>Billing Agreement and Reference Transactions</u> section before enable Billing Agreement feature.

#### 4.3.2 Job configuration for removal outdated transaction

To record transaction created from Business Manager cartridge use custom object feature. After the year transaction became outdated and to remove it job with recurring interval was imported with metadata.

Job has site context and default site id is RefArch. If you have different site id, navigate to Business Manager > Administration > Operations > Jobs > RemoveOutdatedPayPalTransaction > Job Steps and click on RefArch mark near Scope and select new site to run.

By default, job will run every 2 months. If you don't create transaction from Business Manager or you want to change a job interval, navigate to Business Manager > Administration > Operations > Jobs > RemoveOutdatedPayPalTransaction > Schedule and History. Uncheck Enable checkbox if you want to disable the job or change an internal in the menu below.



#### 4.3.3 Static values configuration

All configuration option available in <code>cartridge/config/sdkConfig.js</code> file. You could change

- 1. Allowed currencies. By default, all currencies are allowed. Currency list available under allowedCurrencies variable. More details <u>Currency</u>
- 2. Disable funds. By default, only alternative payment methods are disabled. More details Disable funding and Alternative Payment Methods
- Static image for PayPal button. Will be rendered on a page in use cases where quick checkout is available, and load of the Smart Payment Button is not required. List of images for usage - Available images

#### 4.3.4 Alternative Payment Methods Configuration

By default, all payment methods are disabled for Smart Button. To enable payment method, navigate to Business Manager > Merchant Tools > Site Preferences > Custom Site Preferences -> PayPal Configuration. Add payment method id to the list and click Add (Figure 6).

List of IDs can be found here.

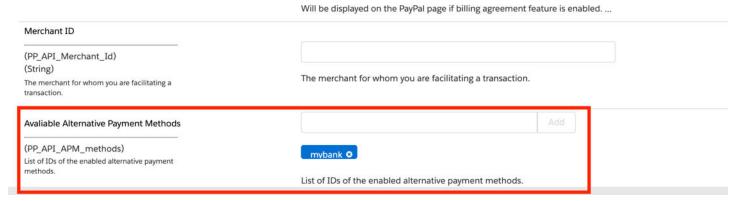


Figure 6. Alternative Payment Methods configuration

NOTE: Alternative Payment Methods are available only on the billing page and will appears only if *Capture funds immediately* preference set to *Yes*. For registered user also required to disable *Billing Agreement Enabled* preference.

#### 4.3.5 Service Profile Configuration

By default, integration doesn't have any service profile configuration. We recommend putting limitation and timeout values according to a storefront traffic to prevent fraud or potential attack. You can read more about configuration values here.

#### 4.4 Webhook support

The purpose of the webhooks is to reflect changes which was done manually or automatically on PayPal console level.

To configure webhook support, follow this PayPal guide.



After covering configurations mentioned in PayPal guide - get Webhook ID from PayPal dev console (from SANDBOX WEBHOOKS section). And enter in to the Custom Site Preference with ID: *PP\_WH\_Authorization\_And\_Capture\_Id* (which located inside *Paypal Configuration* Custom Site Pref Group).

NOTE: you may subscribe only on events listed below.

# 4.4.1 Payment authorization voided

Triggers when payment has been voided.

#### 4.4.2 Payment capture refunded

Triggers when a merchant refunds a payment capture.

### 4.4.3 Payment capture completed

Triggers when a payment capture completes.

# 4.5 Open commerce API Settings

Here's how:

Go to Business Manager > Administration > Open Commerce API Settings

# **Open Commerce API Settings**

This page allows you to make client application-specific configurations of Open Commerce API resources, i.e. manage resource access privileges, at (organization-wide). Please note that due to caching, changes may take up to three minutes to become effective.

You can browse the Open Commerce API here API Explorer.



Then choose: Select Type - Shop, Select Content - your site id.

And paste the following JSON:

```
{
   "_v": "22.4",
   "clients": [{
        "client_id": "aaaaaaaaaaaaaaaaaaaaaaaaaaaa",
        "allowed_origins:[]
        "resources": [
```



```
{
                                  "resource_id": "/customers",
                                  "methods": ["post"],
                                  "read_attributes": "(**)",
                                  "write_attributes": "(**)"
                          },
                          {
                                  "resource_id": "/customers/auth",
                                  "methods": ["post"],
                                  "read_attributes": "(**)",
                                  "write_attributes": "(**)"
                          },
                          {
                                  "resource_id": "/customers/{customer_id}",
                                  "methods": ["get"],
                                  "read_attributes": "(**)",
                                  "write_attributes": "(**)"
                          },
                          {
                                  resource_id":
"/customers/{customer_id}/payment_instruments/{payment_instrument_id}",
                                  "methods": ["get","delete"],
                                  "read_attributes": "(**)",
                                  "write_attributes": "(**)"
                          },
                                  "resource_id":
"/customers/{customer_id}/payment_instruments",
                                  "methods": ["post", "get"],
                                  "read_attributes": "(**)",
                                  "write_attributes": "(**)"
                          },
                          {
                                   "resource_id":"/baskets",
                                   "methods":["post"],
                                   "read_attributes":"(**)",
                                   "write_attributes":"(**)"
```

```
},
                           {
                                 "resource_id":"/baskets/{basket_id}/items",
                                 "methods":["post"],
                                 "read_attributes":"(**)",
                                 "write_attributes":"(**)"
                           },
                           {
                                 "resource_id":"/baskets/{basket_id}/shipments",
                                 "methods":["post"],
                                 "read_attributes":"(**)",
                                 "write_attributes":"(**)"
                           },
                           {
                                  "resource_id":"/baskets/{basket_id}/
billing_address",
                                 "methods":["put"],
                                 "read_attributes":"(**)",
                                 "write_attributes":"(**)"
                           },
                           {
                                  "resource_id":"/baskets/{basket_id}/
payment_instruments",
                                 "methods":["post"],
                                 "read_attributes":"(**)",
                                 "write_attributes":"(**)"
                           },
                            {
                                 "resource_id":"//baskets/{basket_id}/
shipments/{shipment_id}",
                                  "methods":["patch"],
```



```
"read_attributes":"(**)",
                                  "write_attributes":"(**)"
                           },
                           {
                                  "resource_id":"//customers/{customer_id}/
payment_instruments/{payment_instrument_id}",
                                   "methods":["get"],
                                   "read_attributes":"(**)",
                                   "write_attributes":"(**)"
                          },
                           {
                                  "resource_id":"//baskets/{basket_id}/customer,
                                  "methods":["put"],
                                  "read_attributes":"(**)",
                                  "write_attributes":"(**)"
                           },
                           {
                                 "resource_id":"/orders",
                                 "methods":["post"],
                                 "read_attributes":"(**)",
                                 "write_attributes":"(**)"
                          }
                  ]
           }
   ]
```

}

# 5 Operations and Maintenance

# 5.1 Data Storage

The int\_paypal\_ocapi integration requires System Objects Extension to store payment-related information.

### OrderPaymentInstrument custom properties:

- paypalOrderId Result of a payment action (Auth, Order, Sale).
- currentPaypalEmail The reference ID for PayPal API calls.
- PP\_API\_ActiveBillingAgreement The PayPal Payer ID in the PayPal service.

## Profile custom properties:

• **PP\_API\_billingAgreement** - Array of saved billing agreements. Each billing agreement is an object with balD, email, default keys

### Order custom properties:

• paypalPaymentMethod - Property to differentiate PayPal related orders.

### **Customer Payment Instrument custom properties:**

- paypalBillingAgreementEmail Property to differentiate PayPal related payment instruments (Billing Agreement Account Email).
- paypalBillingAgreementID Property to differentiate PayPal related payment instruments (Billing Agreement ID).
- paypalBillingAgreementToken Property to differentiate PayPal related payment instruments (Billing Agreement Token).

# 5.2 Logs

This integration introduces three new custom logs:

- 1. PayPal Storefront Custom logs starts with prefix custom-PayPal-blade2-2-appserver-20150722.log. This Log file contains all errors related information in the int\_paypal\_ocapi cartridge.
- 2. PayPal Business manager custom logs starts with prefix custom- PayPal-BM-blade. This Log file contains all errors related information in the bm\_paypal cartridge.
- Service communication logs starts with service-PayPalRest. These logs contain every request and response to the PayPal endpoint. To enable these logs, check <u>Adding API Credentials</u>
   Optional section.

#### 5.3 HTTP Service Availability

You can track availability and downtime by service status in the Commerce Cloud Business Manager. Go to Administration > Operations > Service Status > int\_paypal.http.rest.



You can configure options for HTTP calls to REST API related to this PayPal integration via the Commerce Cloud Service Profile Interface. To do this, go to Administration > Operations > Services > Service Profiles -> PayPal\_Default\_Profile. You can set a timeout for all requests, enable the Circuit Breaker mechanism, and adjust the Rate Limit.

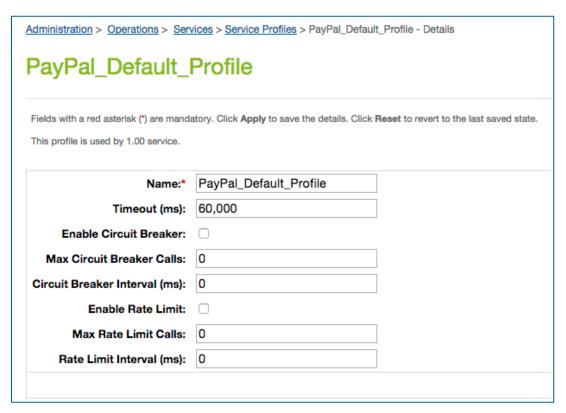


Figure 7. PayPal Service Profile Settings

#### 5.4 Testing

You must obtain your own test account on the <u>PayPal Developer Portal</u>. If you can't create your own PayPal Sandbox account, contact PayPal support.

## 5.5 Support

To get help and support from PayPal:

- PayPal Business support Go to PayPal's Contact Us and log in to your PayPal account.
- Technical Support Go to the Merchant Technical Support Help Center.

# 6 User Guide

# 6.1 Business Manager modules

#### 6.1.1 PayPal Transactions

This integration introduces a new Business Manager function, PayPal Transactions. See <u>Papal Transaction Business Manager module configuration</u> for a detailed description of how to grant access to the PayPal Transactions page.

The PayPal Transactions extension allows you to manage PayPal transactions assigned to Commerce Cloud Orders by the Commerce Cloud Business manager. PayPal Transactions module supports reauthorization (after 3 days), capture and partial capture, void, refund.

The main PayPal Transactions page displays all orders in a site that were paid or partially paid by PayPal. You can access this page in the Ordering menu by selecting Business Manager > Merchant Tools > Ordering > PayPal Transactions.

This page displays various information from the order record:

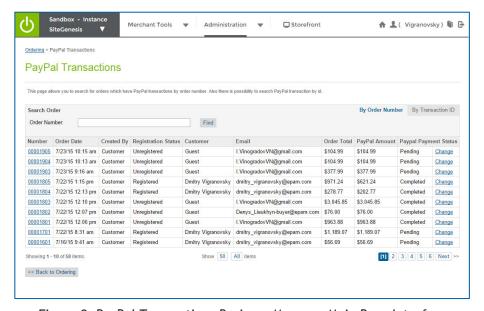


Figure 8. PayPal Transactions Business Manager Main Page Interface

You can search Orders placed within PayPal order number (as shown in Figure 9) or by PayPal Transaction ID (as shown in Figure 10).

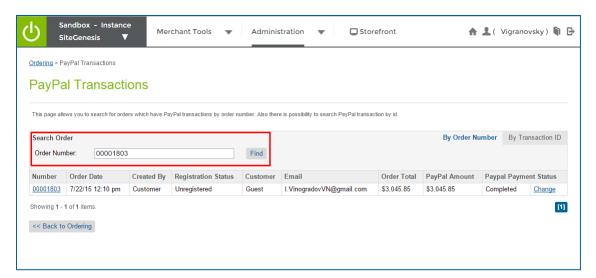


Figure 9. Search Orders with PayPal Transaction by Commerce Cloud Order Number

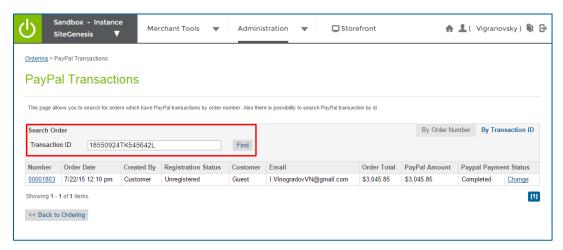


Figure 10. Search Orders with PayPal Transaction by Transaction ID

You can see Transaction Details from the PayPal Payment Transaction of the actual order by clicking **Order Number** or the **Change** link on the right. If an order has more than one related transaction, you'll see a selection box with all the transactions that are related to the current order (as shown in Figure 11).

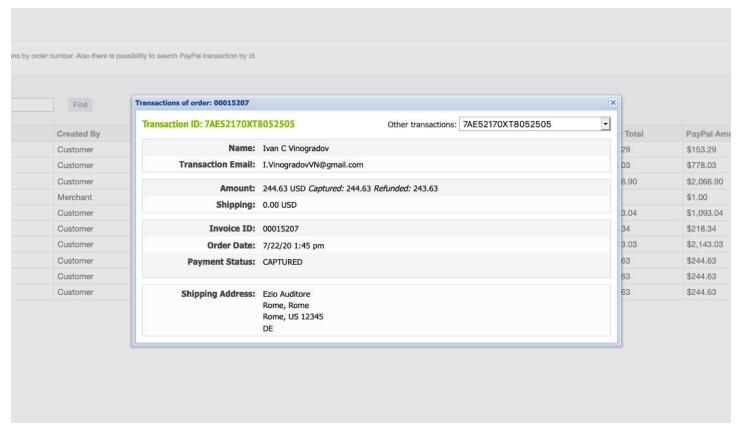


Figure 11. Transaction Details Popup

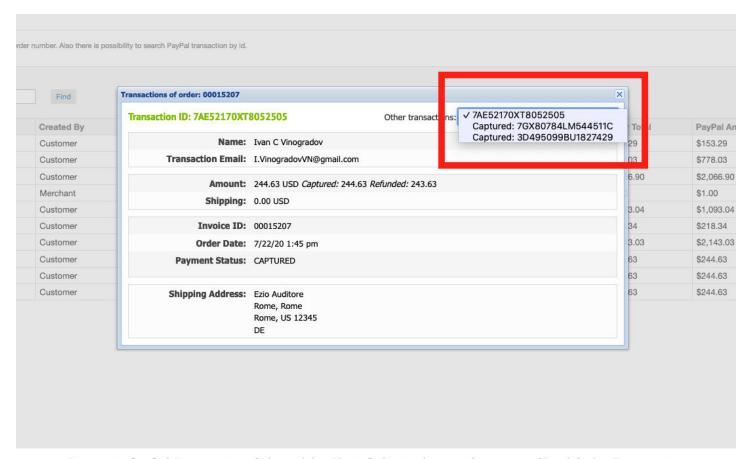


Figure 12. PayPal Transactions Selected for Their Relationships to Commerce Cloud Order Transactions



Depending on the transaction type and status, the order may have the following action buttons

- Capture (Figure 13)
- Void (Figure 13 and Figure 14)
- Issue Refund (Figure 15)
- Reauthorize (Figure 14)

After click on a button pop-up with details will appear

- Capture Form (Figure 17)
- Void Form (Figure 16)
- Issue Refund From (Figure 18)
- Reauthorize From (Figure 18)

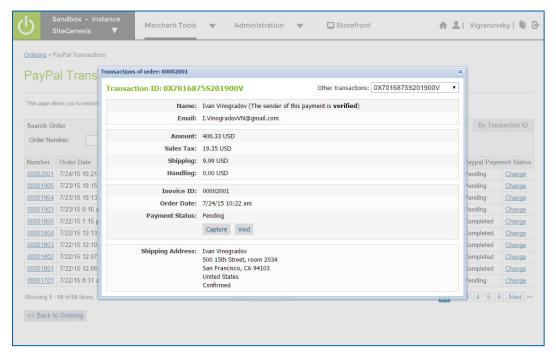


Figure 13. Authorized transaction payment actions

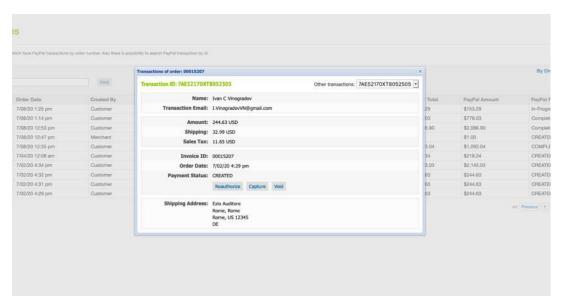


Figure 14. Authorized transaction payment actions (after 3 days)

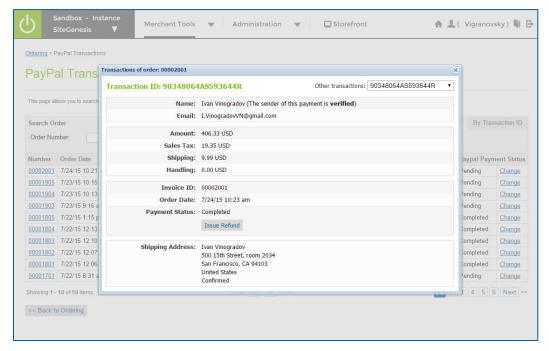


Figure 15. Captured transaction payment actions

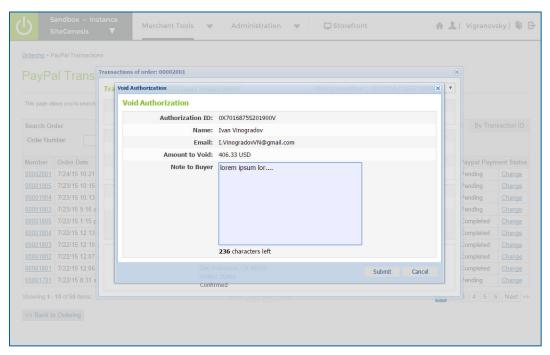


Figure 16. Void Authorization Form

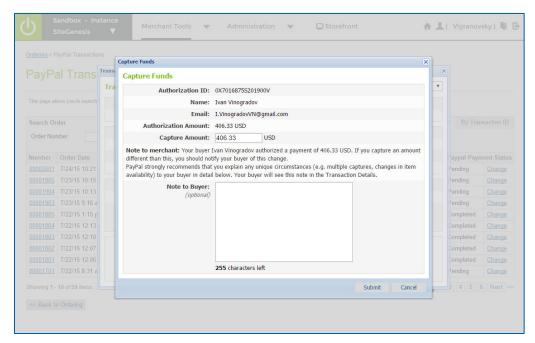


Figure 17. Capture Form

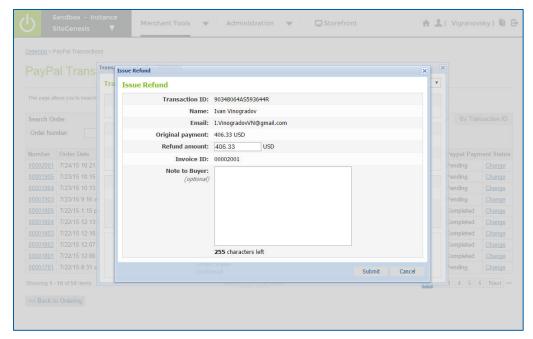


Figure 18. Issue Refund Form

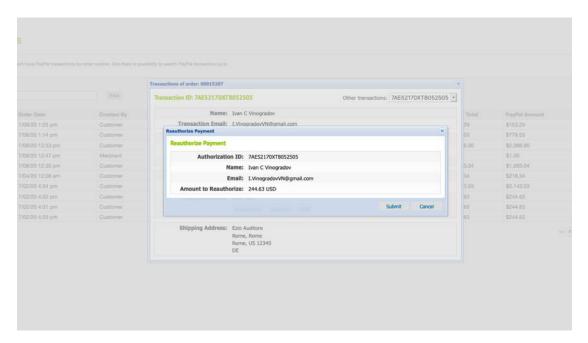


Figure 19 Reauthorize form

# 6.1.2 PayPal Styles Configuration

PayPal Styles Configuration allow to choose styling of the Smart Button from the Business Manager. After installation new menu item will appear in under Site Preferences in the Business Manager (Figure 20).

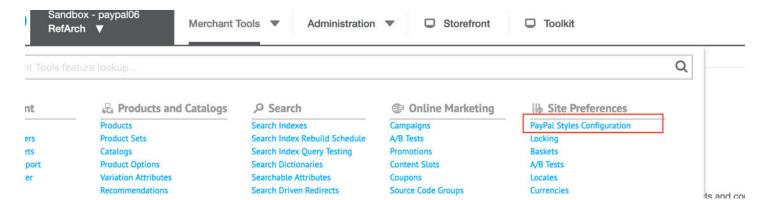


Figure 20 PayPal Styles Configuration in the Business Manager

If **int\_paypal** cartridge was installed properly you should see styling options for the PayPal Smart Button. Depends on buttons locations will be for Billing page or for Cart page. To read more about styling options visit <u>Customize the PayPal Buttons</u>. After configuration done click **Save Smart Button Configuration** to update styling.



Figure 21. Smart Button styling options

# 6.2 Storefront Functionality

Integration has 3 types of checkout with PayPal. All of them are available from payment page or cart page.

NOTE: Checkout from cart requires customer data from PayPal. Review <a href="PayPal-approvided Billing Address and Phone Number">PayPal Billing Address and Phone Number</a> before enable PayPal button on a cart page.

- 1. One-time checkout. Available for both guest and registered user types if billing agreement is disabled in Custom Preferences.
- 2. Checkout with billing agreement creation. Available for both guest and registered user types if billing agreement is enabled in Custom Preferences.
- 3. Checkout using saved billing agreement. Available for registered user who already path checkout once with billing agreement and saved it.

NOTE: Reference transaction feature must be enabled at the merchant account setting to activate flow 2 and 3. Review <u>Billing Agreement and Reference Transactions</u> for more details.

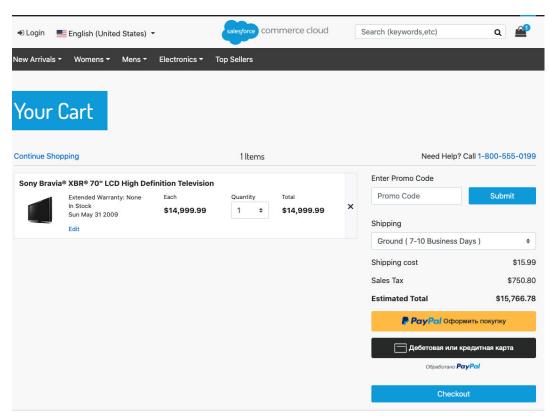


Figure 22 Checkout from the cart page using Smart Button (Example)

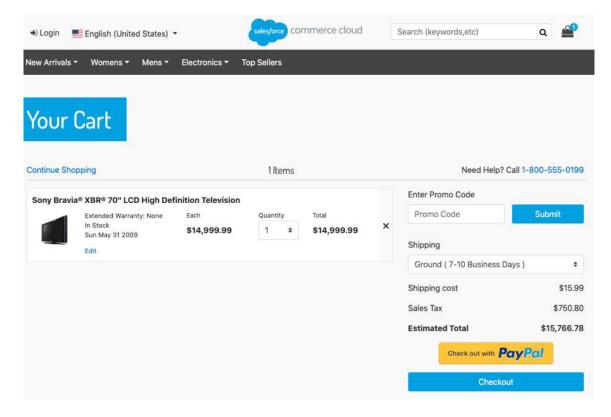


Figure 23. Checkout from the cart page using static image (Example)

# 7 Multi-site and multi-credential support

### 7.1 General info

PayPal cartridges doesn't come with multi-site or multi-credential support out of the box.

On service level build in logic will use only int\_paypal.http.rest service and credential attached to the service to communicate PayPal REST API.

# 8 Open commerce API Hooks

# 8.1 Ocapi Functionality (Ocapi Hooks)

# 8.1.1 Basic Variable's description.

This section describes the basic variables used when working with OCAPI requests.

The base URL looks like this example:

{{host}}/s/Sites-{{site}}-Site/dw/shop/{{ocapi\_version}}/customers/auth

Where:



- {{host}} the part of the URL address that is responsible for the host address.
   Example: https://zzp-013.sandbox.us01.dx.commercecloud.salesforce.com
- {{site}} the part of the URL address that is responsible for the site name. Example: RefArch
- {{ocapi\_version}} the part of the URL address that is responsible for version of OCAPI you are using. Example: v21\_10 (to get this value you should go to Administration > Site Development > Open Commerce API Settings choose your site and find "\_v" in your settings)

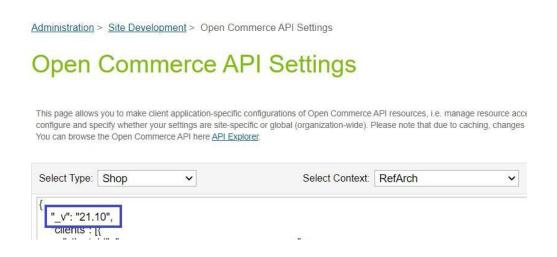


Figure 24. Ocapi version location

#### 8.1.2 A Registered and an unregistered user authentication.

To get the necessary information to work with registered and unregistered user (Bearer Token, customer\_id), first you need to provide a next request:

- Method: POST
- URL: {{host}}/s/Sites-{{site}}-Site/dw/shop/{{ocapi\_version}}/customers/auth (The variables used in URL are described in paragraph 5.2.1. Basic variable's description)
- Authorization: you should use authorization type Basic Auth (using Username and Password of your customer) for registered user auth.
- Headers:
  - 1. x-dw-client-Id

To get this value you should go to Administration > Site Development > Open Commerce API Settings choose your site and find "client\_id" in your settings



# (for example in this case we have test value -

# 

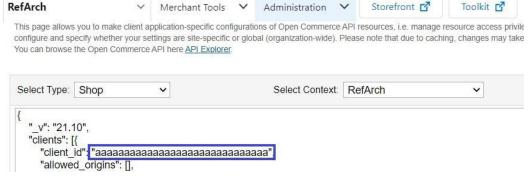


Figure 23. Ocapi client\_id location

- 2. Content-Type (value application/json)
- Body:

for registered user request body should contain next parameter:

```
{
    "type": "credentials"
}
```

For unregistered user request body should contain next parameter:

```
{
    "type": "guest"
}
```

In a case of success, you will get response with information about your customer, list with current billing agreements, SDK links for PayPal button rendering, and pdpPayPalConfigs object (depends

```
"_type": "customer",
 "auth_type": "registered",
 "creation_date": "2022-07-20T15:28:05.000Z",
"customer_id": "acq2CIzgKBHwS1aHzHv5qpiTt5",
"customer_no": "00018503",
"email": "mishapapash@gmail.com",
"enabled": true,
"first_name": "Mykhailo",
 "hashed_login": "c3c6d62ff2e1b8760b501c0d3633fa42dfa046dc40283a1463e1c3dd18422010",
"last_login_time": "2022-07-21T13:52:41.459Z",
"last_modified": "2022-07-21T13:52:41.459Z",
"last_name": "Papash",
"last_visit_time": "2022-07-21T13:52:41.459Z",
"login": "mishapapash@gmail.com",
"phone home": "9234567890",
"visit_id": "ce20a7c91a77b7b355d30563cc"
"c_PP_API_billingAgreement": "[{\"baID\":\"B-4DK448552V8546235\",\"email\":\"p.lorenstest@hotline.com\",\"default\":true}]",
           "billingAgreementEnabled": true,
           "isBaLimitReached": false,
          "sdkUrl": "https://www.paypal.com/sdk/js?client-id=AdYw0mYpZkz6qk3RNTmDTDAnNhWwUpL_zawBcv7wjinBmcm9b-10rKlRDwmRUzjcOwScbT9xDsiodvAu&
                   commit=false&vault=true&disable-funding=card,credit",
           "paypalUrls": "{\"billingSdkUrl\":\"https://www.paypal.com/sdk/js?
                   \verb|client-id=AdYw0mYpZkz6qk3RNTmDTDAnNhWwUpL_zawBcv7wjinBmcm9b-10rKlRDwmRUzjc0wScbT9xDsiodvAu&commit=false&vault=true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&currency=USD&true&c
                     disable-funding=sepa,bancontact,eps,giropay,ideal,mybank,p24,sofort\",\"cartSdkUrl\":\"https://www.paypal.com/sdk/js
```



on Custom Preferences configurations) for registered user:

Figure 25. Ocapi auth response for registered user

pdpPayPalConfigs - an object contains all necessary data for rendering PayPal smart button on the Product (Pdp) page.

```
"pdpPayPalConfigs": {
                 "partnerAttributionId": "SFCC_EC_B2C_2022_1_0",
30
                 "paypalButtonSdkUrl": "https://www.paypal.com/sdk/js?client-id=AdYw0mYpZkz6qk3RNTmDTDAnNhWwUpL_zawBcv7wjinBmcm9b-10
31
                 "paypalEmail": null,
32
33
                "showStaticImage": true,
                "defaultBAemail": "ptest4@paypal.com",
34
35
                 "paypalStaticImageLink": "https://www.paypalobjects.com/webstatic/en_US/i/buttons/checkout-logo-large.png",
                 "billingAgreementEnabled": true,
36
                "buttonConfig": {
37
                     "style": {
38
                         "color": "black",
39
                        "shape": "rect",
40
                        "label": "checkout",
41
42
                         "size": "medium",
                         "layout": "horizontal",
43
                        "tagline": true,
                         "height": 40
45
```

Figure 26. pdpPayPalConfigs object example

In a case of success, you will get response with information about your customer for unregistered user:

```
"_v": "22.4",
"_type": "customer",
"auth_type": "guest",
"customer_id": "bc4xaBPFZSUGJww0C1nl3jDeve",
"preferred_locale": "en_GB",
"visit_id": "c4d7fa89e2aa86cf3f03cd47d8"
```

Figure 27. Ocapi auth response for unregistered user

#### Create billing agreement token. 8.1.3

Please note: More information on how to render the PayPal button can be read in the documentation at this link. The best way to create a billing agreement token is using PayPal button 'onClick' event.

To create billing agreement token, you need to provide a next request:

- Method: GET
- URL: {{host}}/s/Sites-{{site}}-Site/dw/shop/{{ocapi\_version}}/customers/



{{customer\_id}}?stage=createBillingAgreementToken

(The basic variables used in URL are described in paragraph 5.2.1. Basic variable's description, how to get {{customer\_id}} look in paragraph 5.2.2. A Registered and an unregistered user authentication)

- Headers:
  - 1. x-dw-client-Id (More details look at paragraph 5.2.2)
  - 2. Content-Type (value application/json)
  - 3. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in paragraph 5.2.2. A Registered and an unregistered user authentication)

In a case of success, you will get response with information about your which includes billing agreement token (c\_billingAgreementToken):

```
"_v": "22.4",
"_type": "customer",
"_resource_state": "9e5445e82943e4a0d0b5006508b0154215d1bed3d1e9af1d3e288c5a9cdfa120",
"auth_type": "registered",
"creation_date": "2022-07-20T15:28:05.000Z",
"customer_id": "acq2CIzgKBHwS1aHzHv5qpiTt5",
"customer no": "00018503",
"email": "mishapapash@gmail.com",
"enabled": true,
"first_name": "Mykhailo",
"last_login_time": "2022-07-21T17:57:30.247Z",
"last_modified": "2022-07-21T17:57:30.247Z",
"last_name": "Papash",
"last_visit_time": "2022-07-21T17:57:30.247Z",
"login": "mishapapash@gmail.com",
"phone_home": "9234567890",
"previous_login_time": "2022-07-21T17:57:30.247Z",
"previous_visit_time": "2022-07-21T17:57:30.247Z",
"c_PP_API_billingAgreement": "[{\"baID\":\"B-4DK448552V8546235\",\"email\":\"p.lorenstest@hotline.com\",\"default\":true}]",
"c_billingAgreementToken": "BA-1HG23334RA496921T"
```

Figure 28. Get billing agreement token response example



#### 8.1.4 Add billing agreement.

**Please note:** More information on how to render the PayPal button can be read in the documentation at this <u>link</u>. The best way to process add a billing agreement is using PayPal button 'onApprove' event.

To add billing agreement, you need to provide a next request:

- Method: POST
- URL: {{host}}/s/Sites-{{site}}-Site/dw/shop/{{ocapi\_version}}/customers/ {{customer\_id}}/payment\_instruments
   (The basic variables used in URL are described in paragraph 5.2.1. Basic variable's description, how to get {{customer\_id}} look in paragraph 5.2.2. A Registered and an unregistered user authentication)
- Headers:
  - 1. x-dw-client-Id (More details look at paragraph 5.2.2)
  - 2. Content-Type (value application/json)
  - 3. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in paragraph 5.2.2. A Registered and an unregistered user authentication)
- Body: {

In a case of success, you will get response with information about your which includes billing agreement token (c\_billingAgreementToken):

```
_v: 22.4
_type: customer_payment_instrument
creation_date: 2022-07-21T18:26:49.521Z
last_modified: 2022-07-21T18:26:51.180Z
payment_bank_account: {"_type":"payment_bank_account"}
payment_card: {"_type":"payment_card","credit_card_expired":false}
payment_instrument_id: 76c2f8029b8eac0665713ea3d3
payment_method_id: PayPal
c_paypalBillingAgreementEmail: ptest4@paypal.com
c_paypalBillingAgreementID: B-3BV69582WY240494R
```

angezeigt w c paypalBillingAgreementToken: BA-1XY962054E9159844



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#### 8.1.5 Display a registered user's payment instruments (billing agreements).

To display the payment instruments of the registered user, you need to provide a next request:

- Method: GET
- URL: {{host}}/s/Sites-{{site}}-Site/dw/shop/{{ocapi\_version}}/customers/ {{customer\_id}}/payment\_instruments
   (The basic variables used in URL are described in paragraph 5.2.1. Basic variable's description, how to get {{customer\_id}} look in paragraph 5.2.2. A Registered and an unregistered user authentication)
- Headers:

angezei

"total": 1

- 1. x-dw-client-Id (More details look at paragraph 5.2.2)
- 2. Content-Type (value application/json)
- 3. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in paragraph 5.2.2. A Registered and an unregistered user authentication)

In a case of success, you will get response with information about your customer' payment

```
" v": "22.4",
               "_type": "customer_payment_instrument_result",
               "count": 1,
               "data": [
                       "_type": "customer_payment_instrument",
                       "creation_date": "2022-07-21T08:03:40.716Z",
                       "last_modified": "2022-07-21T08:03:41.849Z",
                       "payment_bank_account": {
                           "_type": "payment_bank_account"
                       3,
                       "payment_card": {
                           "_type": "payment_card",
                           "credit card expired": false
                       3,
                       "payment instrument id": "9e3596bfa77b443567f3ab5be2",
                       "payment_method_id": "PayPal",
                       "c_paypalBillingAgreementEmail": "p.lorenstest@hotline.com",
                       "c_paypalBillingAgreementID": "B-4DK448552V8546235",
                       "c_paypalBillingAgreementToken": "BA-38N04150UW0168832"
PayPa Copyrigh ],
                                                                                      uweisen, der hier
```

instruments which includes billing agreement information:

Figure 30. Get a registered user's payment instrument response example

#### 8.1.6 Delete a registered user's payment instrument (billing agreement)

To delete the payment instrument you need to provide a next request:

- Method: DELETE
- URL: {{host}}/s/Sites-{{site}}-Site/dw/shop/{{ocapi\_version}}/customers/
  {{customer\_id}}/payment\_instruments/{{payment\_instrument\_id}}}
  (The basic variables used in URL are described in paragraph 5.2.1. Basic variable's description, how to get {{customer\_id}} look in paragraph 5.2.2. A Registered and an unregistered user authentication, {{payment\_instrument\_id}}) you can find in "Figure 28. Get a registered user's payment instrument response example"

## Headers:

- 1. x-dw-client-Id (More details look at paragraph 5.2.2)
- 2. Content-Type (value application/json)
- 3. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in paragraph **5.2.2.** A Registered and an unregistered user authentication)

In a case of success, you will get 204 "NO CONTENT" response.

To get more information about 'Customers resource Shop API' that uses on the Account page, follow the link:

https://documentation.b2c.commercecloud.salesforce.com/DOC1/index.jsp?topic=%2Fcom.demandware.dochelp%2FOCAPI%2Fcurrent%2Fshop%2FResources%2FCustomers.html&cp=0\_16\_3 4



# 9 An order placing due a PayPal payment method by using OCAPI

#### 9.1.1 Create a basket

To create a basket you need to provide a next request:

- Method: POST
- URL: {{host}}/s/Sites-{{site}}-Site/dw/shop/{{ocapi\_version}}/baskets
   (The basic variables used in URL are described in paragraph 8.1.1 Basic variable's description.
- Headers:
  - 1. Content-Type (value application/json)
  - 2. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in
  - 8.1.2 Registered and an unregistered user authentication)
  - 3. Content-length: 0
- Body: A basket must contain a valid currency code that is related to the payment method you will use in this basket. Some payment methods support all currencies of site, but in case a local payment method you need to provide an appropriate currency.

For example: 'LPM' (Local payment method) 'mybank', supports only a 'EUR' currency, in this case to set a valid basket currency you need to provide the following body:

Figure 31. A create basket body example

Important: If you have not provided a currency code for a basket, the default currency of site will set to the basket, and this can lead an error during the placing order due LPM.



# Request example:

```
REQUEST:

POST /dw/shop/v22_4/baskets HTTP/1.1

Host: example.com

Authorization:Bearer eyJfdi16IjXXXXXXX.eyJfdi16IjEiLCJleHAXXXXXXX.-d5wQW4c4O4wt-Zkl7_fiEiALWlXXXX

Content-Type: application/json

Content-Length: 0
```

Figure 32. A create basket request example

In a case of success, you will get response 200 OK, with information about a new created basket with its ID and resource state:



```
RESPONSE:
HTTP/1.1 200 OK
Content-Length: 124
Content-Type:application/json;charset=UTF-8
  " v" : "22.4",
  " resource state": "860cde3040519cce439cd99e209f8a87c3ad0b7e2813edbf6f5501f763b73bd5",
   __
"_type" : "basket",
   " flash" :
  1
  "basket_id" : "bczFTaOjgEqUkaaadkvHwbgrP5",
  "currency" : "USD",
  "customer_info" :
     "_type" : "customer_info",
     "customer_id" : "adNJrbxJovaT5DPxUSfOywk6Et",
      "email" : ""
  },
   "order_total" : 0.00,
   "product_sub_total" : 0.00,
   "product total" : 0.00,
   "shipments" :
   [
        "_type" : "shipment",
        "id" : "me",
        "shipment_id" : "bc5OTaOjgEqUoaaadkvHwbgrP5"
   1.
   "shipping_items" :
   ]
        "shipment_id" : "me",
        "item_id" : "bcwsba0jgEqUsaaadkvHwbgrP5"
   "shipping total" : 0.00,
   "shipping_total_tax" : 0.00,
   "taxation" : "net",
  "tax total" : 0.00
```

Figure 33. A create basket response example

#### 9.1.2 The basket's flashes

To find the detail information about basket flashes follow the link: OCAPI flash

```
"_type": "basket",
"_resource_state": "797908ba3779070eab18aa40f737d39bae1958489627b77a2aeec9e16c67b593",
"_flash": [
        "_type": "flash",
        "type": "ProductItemsRequired",
        "message": "Product items are required.",
        "path": "$.product_items"
        "_type": "flash",
        "type": "PaymentMethodRequired",
        "message": "No payment method ID was specified. Please provide a valid payment method ID.",
        "path": "$.payment_instruments[0].payment_method_id"
        "_type": "flash",
        "type": "BillingAddressRequired",
        "message": "No billing address was specified. Please provide a valid billing address.",
        "path": "$.billing_address"
        "_type": "flash",
        "type": "ShippingAddressRequired",
        "message": "No shipping address was specified. Please provide a valid shipping address.",
        "path": "$.shipments[0].shipping_address",
        "details": {
            "shipmentId": "me"
    3.
        "_type": "flash",
        "type": "CustomerEmailRequired",
        "message": "Customer Email is required",
        "path": "$.customer_info.email"
```

!Important. To place an order, all the basket flashes must be resolved.

Figure 34. The Basket's flashes example

# 9.2 Add an item (product) to the basket

To add an item (product) to the basket you need to provide a next request:

- Method: POST
- URL: {{host}}/s/Sites-{{site}} Site/dw/shop/{{ocapi\_version}}/baskets/{basket\_id}/items (The basic variables used in URL are described in paragraph 8.1.1 Basic variable's description
- Headers:
  - 1. Content-Type (value application/json)
  - 2. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in
  - 8.1.2 Registered and an unregistered user authentication)
  - 3. Content-length: 0



■ Body (example):

```
"product_id" : "008884303989M",
"quantity" : 1.00
```

Figure 35. 'Add an item (product) to a basket body example

# Request example:



Figure 36. 'Add an item (product) to a basket request example

There are no custom properties for 'Add an item(product) to a basket' request.

In case of success:

```
"product_items": [
        "_type": "product_item",
        "adjusted_tax": 5.00,
        "base_price": 99.99,
        "bonus_product_line_item": false,
        "gift": false,
        "item_id": "9912b66558da7300d228ade082",
        "item_text": "Platinum Blue Stripes Easy Care Fitted Shirt ",
        "price": 99.99,
        "price_after_item_discount": 99.99,
        "price_after_order_discount": 99.99,
        "product_id": "008884304009M",
        "product_name": "Platinum Blue Stripes Easy Care Fitted Shirt ",
        "quantity": 1,
        "shipment_id": "me",
        "tax": 5.00,
        "tax_basis": 99.99,
        "tax_class_id": "standard",
        "tax_rate": 0.05
],
```

Figure 37. 'A snippet of 'Add an item (product) to a basket' response

# 9.3 Sets the billing address of a basket

To set the billing address to a basket you need to provide a next request:

- Method: PUT
- **URL:** {{host}}/s/Sites-{{site}}}-Site/dw/shop/{{ocapi\_version}}/baskets/{basket\_id}/billing\_address (The basic variables used in URL are described in paragraph 8.1.1 Basic variable's description
- **Headers:** 
  - 1. Content-Type (value application/json)
  - 2. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in
  - 8.1.1 Registered and an unregistered user authentication)
  - 3. Content-length: 0
- Body (example):



```
"first_name":"Jon",
"last_name":"Smith",
"city":"Boston",
"country_code":"US",
"address1": "1 Main St",
"phone": "4088161358",
"postal_code": "95131",
"state_code": "CA"
}
```

Figure 38 'Sets the billing address to a basket' body example

In case when you use a LPM (Local payment method), make sure that you have provided an appropriate 'country\_code'.

For example: LPM (Local payment method) 'mybank', is connected only with Italia, in this case a 'country\_code' must be set to 'IT'. In case you have not provided an appropriate 'country\_code' this can lead an error during the placing order due LPM.

If one of the required fields will not provide into 'Ocapi' request, the Hook will return an error.

### Request example:

```
REQUEST:
PUT /dw/shop/v22_4/baskets/cdTwMiWbOhGJgaaadkIKbj5op9/billing_address HTTP/1.1
Host: example.com
Authorization: Bearer af7f5c90-ffc1-4ea4-9613-f5b375b7dc19
Content-Type: application/json
{
    "first_name":"John",
    "last_name":"Smith",
    "city":"Boston",
    "country_code":"US",
    "c_strValue":"cTest"
}
```

Figure 39 'Sets the billing address to a basket' request example

There are no custom properties for 'Sets the billing address to a basket' request.

In case of success:



```
RESPONSE:
HTTP/1.1 200 OK

Content-Type: application/json; charset=UTF-8
{
    "_v" : "22.4",
    "resource_state" : "860cde3040519cce439cd99e209f8a87c3ad0b7e2813edbf6f5501f763b73bd5",
    ...
    "billing_address" :
    {
        "_type" : "order_address",
        "city" : "Boston",
        "country_code" : "US",
        "first_name" : "John",
        "full_name" : "John Smith",
        "last_name" : "Smith",
        "c_strValue" : "cTest"
    },
    ...
}
```

Figure 40. 'Sets the billing address to a basket' response example

# 9.4 Update a shipment of basket

A shipment will be already created by 'Create a basket' request with the default values. To fill it with all necessary data you need to provide a next request:

- Method: PATCH
- URL: {{host}}/s/Sites-{{site}} Site/dw/shop/{{ocapi\_version}}/baskets/{basket\_id}/shipments/{shipping\_id} (The basic variables used in URL are described in paragraph 8.1.1 Basic variable's description.

A shipping\_id value will be included inside 'Create a basket' response: response.shipments[0].shipping\_items.shipment\_id; A default value is 'me'.

- Headers:
  - 1. Content-Type (value application/json)
  - 2. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in
  - 8.1.2 A Registered and an unregistered user authentication)
  - 3. Content-length: 0
- Body (example):



```
"shipping_method":
····|···"id":"002"
. . . . },
"shipping_address":
. . . . 5
"address1": "1 Main St",
"phone": "408-972-7588",
state_code": "CA",
"postal_code": "95131",
"first_name":"John",
"last_name": "Smith",
city": "Boston",
.... "country_code":"US"
- - - }
. . . . }
```

Figure 41 'Update a shipment of basket' body example

Shipping\_method.id - the shipping method id from your shop - required.

If one of the required fields will not provide into OCAPI request, the Hook will return an error.



# 9.5 Sets a customer email for an existing basket

To set an email address to a basket you need to provide a next request:

- Method: PUT
- URL: {{host}}/s/Sites-{{site}} Site/dw/shop/{{ocapi\_version}}/baskets/{basket\_id}/customer (The basic variables used in URL are described in paragraph 8.1.1 Basic variable's description
- Headers:
  - 1. Content-Type (value application/json)
  - 2. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in
  - 8.1.2 Registered and an unregistered user authentication)
  - 3. Content-length: 0
- Body (example):

```
"email":"valid@email.com"
"email":"valid@email.com"
```

Figure 42 'Sets a customer email for an existing basket' a body example An email address from checkout process - required.

If one of the required fields will not provide into OCAPI request, the Hook will return an error.

# Request example:

```
REQUEST:
PUT /dw/shop/v22_4/baskets/cdCxIiWbPdiKAaaadhKTtczLvk/customer HTTP/1.1
Host: example.com
Authorization: Bearer af7f5c90-ffc1-4ea4-9613-f5b375b7dc19
Content-Type: application/json
{
    "customer_no":"customer0012",
    "email":"valid@email.com"
}
```

Figure 43 'Sets a customer email for an existing basket 'a request example



#### In case of success:

```
HTTP/1.1 200 OK
Content-Type: application/json; charset=UTF-8
{
    "_v" : "22.4",
    "_resource_state" : "860cde3040519cce439cd99e209f8a87c3ad0b7e2813edbf6f5501f763b73bd5",
    ...
    "customer_info" :
    {
        "_type" : "customer_info",
        "customer_id" : "bc42Gjva2LWAZVEvE6MvlbX6GD",
        "customer_no" : "customer0012",
        "email" : "valid@email.com"
    },
    ...
}
```

Figure 44. Sets a customer email for an existing basket 'a response example

# 9.6 Add a payment instrument to the basket

To add a payment instrument to the basket you need to provide a next request:

- Method: POST
- URL: {{host}}/s/Sites-{{site}} Site/dw/shop/{{ocapi\_version}}/baskets/{basket\_id}/payment\_instruments
   (The basic variables used in URL are described in paragraph 8.1.1 Basic variable's description.

## **Headers:**

- 1. Content-Type (value application/json)
- 2. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in
- 8.1.2 Registered and an unregistered user authentication)
- 3. Content-length: 0

#### 9.6.1 A body of request

 Flow with a saved PayPal billing agreement body creation (Woks only in case if 'PP\_API\_BA\_ENABLED' site preference is enabled):

To add a Saved payment instrument to the basket, you need to transfer the following properties:

- amount the order total amount. This is required parameter. Type -Number.
- payment\_method\_id the payment method ID. Always use 'PayPal' for adding PayPal payment method. This is required parameter. Type - String.



- c\_PP\_API\_ActiveBillingAgreement JSON string value, that contains: baID, email and default (indicated whether a current billing agreement is default) values of current billing agreement. This is required parameter. Type -String.
  - You can get a list of the saved billing agreements of customer by using the following request: 8.1.2 Registered and an unregistered user authentication.
- c\_paymentId you can configurate PayPal JavaScript SDK to see additional payment methods on your site by using the site preferences from 'Paypal\_Checkout' site preferences group. The following paymentId' are supported: 'Venmo', 'PayPal Debit/Credit Card', and all local payment method provided into the site preference PP\_API\_APM\_methods (Available Alternative Payment Methods). To enable 'Venmo' payment method use the following site preference: PP\_API\_Venmo\_Enabled. In case of using one of that payment methods, please provide it into the c\_paymentId custom attribute.

This is required parameter. Type - String.

More information about JavaScript SDK script configuration here: <u>JavaScript</u> SDK script configuration

```
{
.... "amount": {forder_total}},
... "payment_method_id": "PayPal",
... "c_PP_API_ActiveBillingAgreement": "{\"baID\":\"B-68Y08988NL6028922\",\"email\":\"ptest4@paypal.com\",\"default\":true}",
... "c_paymentId": "PayPal"
}
```

Figure 45. The saved PayPal billing agreement body example (PayPal payment method used)

In case of success your basket payment instrument will created with new billing agreement:

Figure 46. A basket payment instrument with the saved active billing agreement



Flow with new PayPal billing agreement body creation (billing agreement is enabled in site preferences):

To add a new PayPal billing agreement to the basket, you need to transfer the following properties:

- o amount the order total amount. This is required parameter. Type -Number.
- o payment\_method\_id the payment method ID. Use 'PayPal' for adding PayPal payment method This is required parameter. Type - String.
- o **c\_paypalToken** billing agreement token. Use for a billing agreement creating. This is required parameter. Type - String. Look at 9.7 'Get basket' of how to get c\_paypalToken.
- o c\_paymentId you can configurate PayPal JavaScript SDK to see additional payment methods on your site by using the site preferences from 'Paypal\_Checkout' site preferences group. The following paymentId' are supported: 'Venmo', 'PayPal Debit/Credit Card', and all local payment method provided into the site preference - PP\_API\_APM\_methods (Available Alternative Payment Methods). To enable 'Venmo' payment method use the following site preference: PP\_API\_Venmo\_Enabled. In case of using one of that payment methods, please provide it into the c\_paymentId custom attribute.

This is required parameter. Type - String.

```
---- "amount": {{order_total}},
"payment method id": "PayPal",
"c_paypalToken": "BA-0N637818NF139164N",
"c_paymentId": "PayPal"
```

Figure 47. The new billing agreement body example



In case of success your basket payment instrument will created with new billing agreement:

Figure 48. A basket payment instrument with a new active billing agreement

- Order id flow (billing agreement is disabled in site preferences):
   To use 'Order id' flow, you need to transfer the following properties to the basket:
  - amount the order total amount. This is required parameter. Type -Number.
  - o payment\_method\_id the payment method ID. Use 'PayPal' for adding PayPal payment method This is required parameter. Type String.
  - c\_paypalOrderID paypal order id. Use when billing agreement flow is disabled. This is required parameter. Type String.
     Look at 9.7 'Get basket' of how to get c\_paypalOrderID.
  - c\_paymentId payment id. Generally we have one payment method -PayPal. But PayPal payment method supports a few additional payment methods as additional functionality. In order to indicates which payment method was used we save c\_paymentId into payment instrument custom attribute. PayPal also supports the following paymentId: 'Venmo', 'PayPal Debit/Credit Card', and all local payment method provided into the site preference - PP\_API\_APM\_methods (Available Alternative Payment Methods). This is required parameter. Type - String.

```
{
    "amount": {{order_total}},
    "payment_method_id": "PayPal",
    "c_paypalOrderID": "ON637818NF139164N",
    "c_paymentId": "PayPal"
}
```

Figure 49. The Order id flow body example

In case of success your basket payment instrument will created with new order id:

Figure 50. A basket payment instrument with PayPal order id

#### 9.7 Get basket

An Additional request to get some helpful data to place an order due PayPal. To get a basket you need to provide a next request:

- Method: POST
- URL: {{host}}/s/Sites-{{site}} Site/dw/shop/{{ocapi\_version}}/baskets/{basket\_id}?pageId={pageid} (The basic variables used in URL are described in paragraph 8.1.1 Basic variable's description
- Headers:
  - 1. Content-Type (value application/json)
  - 2. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in
  - 8.1.2 Registered and an unregistered user authentication)



### 3. Content-length: 0

Body (example): there is no body for current request.

## 9.7.1 Url's query parameters

Depend on the page you need to provide the 'pageld' query parameters to the 'get Basket' url:

pageId - the current page id. Required for all pages. Possible pages id: pdp(product), cart, minicart, billing; For example: If you process the 'Mini cart' page, pageId=minicart must be provided.

# 9.7.2 PayPal buttons config objects creation

To have a possibility to render the PayPal payment methods on the 'Billing' or 'Cart', 'PDP' (pdpButtonConfigs can also be obtained by using 8.1.2 Registered and an unregistered user authentication request) or 'Mini Cart' pages, a 'paypalButtonConfigSdkUrl' and the additional button configs will include into 'c\_paypalButtonConfigs' object in the 'get Basket' response. If buyer has a saved billing agreement, the config object will contain the static image link, that you can use for the flow with the saved billing agreement. The response depends on 'pageId' query parameter you provided.

Example of the smart as well as the static button you can find here: **6.2** Storefront Functionality

# 9.7.2.1 A billing agreement token(c\_paypalToken) and a purchase unit creation

To get a billing agreement token or purchase unit parameter, this call must be occurred before a basket payment instrument will be create.

In depends on flow you use (Billing agreement - billing agreement is enabled in site preferences or order id - billing agreement is disabled in site preferences) the 'get Basket' response will contain whether a billing agreement token or purchase unit. Use a billing agreement token for creating a basket payment instrument with new billing agreement flow.

Use a purchase unit for getting order id (will use for creating a basket payment instrument with order id flow) in PayPal 'createOrder' (as example) event during Paypal button configuration.

More information about PayPal button configuration here: JavaScript SDK reference

```
Lax_Dasis . 3.77,
        "tax_class_id": "standard",
        "tax rate": 0.05
],
"shipping_total": 5.99,
"shipping_total_tax": 0.30,
"taxation": "net",
"tax_total": 5.30,
"c_paypalButtonConfigs": {
    "partnerAttributionId": "SFCC_EC_B2C_2022_1_0",
    "paypalButtonSdkUrl": "https://www.paypal.com/sdk
    "paypalEmail": null,
    "showStaticImage": true,
    "defaultBAemail": "ptest4@paypal.com",
    "paypalStaticImageLink": "https://www.paypalobjec
    "billingAgreementEnabled": true,
    "buttonConfig": {
        "style": {
            "color": "black",
            "shape": "rect",
            "label": "checkout",
            "size": "medium",
            "layout": "horizontal",
            "tagline": true,
            "height": 40
"c_billingAgreementToken": "BA-86N662777V9111637"
```

Figure 51. A basket with response with billing agreement token example

#### 9.7.2.2 A billing agreement and order details object creating

To get a billing agreement or order details object, this call must be occurred after a basket payment instrument will be create.

In depends on flow you use (Billing agreement - billing agreement is enabled in site preferences or order id - billing agreement is disabled in site preferences) the 'get Basket' response will contain whether a billing agreement or order details object. You can use the data from this object, for example: for updating basket billing or shipping address with address from PayPal.



```
"c_billingAgreementDetails": {
    "id": "B-68Y08988NL6028922",
    "billing_info": {
        "email": "ptest4@paypal.com",
        "first_name": "Monalisa",
        "last_name": "Patel",
        "payer_id": "B58N7CWR656DQ",
        "phone": "408-972-7588",
        "billing_address": {
            "line1": "1 Main St",
            "city": "San Jose",
            "state": "CA",
            "country_code": "US",
            "postal_code": "95131"
        "tenant": "PAYPAL"
    3,
    "shipping_address": {
        "recipient_name": "Monalisa Patel",
        "line1": "1 Main St",
        "city": "San Jose",
        "state": "CA",
        "country_code": "US",
        "postal_code": "95131"
    "active": true
```

Figure 52. A billing agreement details object example

## 9.8 Place order

To place an order the to the basket you need to provide a next request:

- Method: POST
- URL: {{host}}/s/Sites-{{site}}-Site/dw/shop/{{ocapi\_version}}/orders
   (The basic variables used in URL are described in paragraph 8.1.1 Basic variable's description
- Headers:
  - 1. Content-Type (value application/json)
  - 2. Authorization (value {{bearer\_token}}, how to get {{bearer\_token}} look in
  - 8.1.2 Registered and an unregistered user authentication)
  - 3. Content-length: 0



Body (example):

```
"basket_id":: "{{basket_id}}
```

Figure 52. 'Place order' body example

basket\_id - current basket id.

## In case of success:

```
"_v": "22.4",
"_type": "order",
"_resource_state": "60ccac8822215f4607b50bf6cb92e7b095e5570d26ceb249148af789b9817cbd",
"adjusted_merchandize_total_tax": 5.00,
"adjusted_shipping_total_tax": 0.30,
"billing_address": {
    "_type": "order_address",
    "address1": "1 Main St",
    "city": "Boston",
    "country_code": "US",
   "first_name": "Jon",
   "full_name": "Jon Don",
    "id": "81d5be51518d5a61e5d229bb27",
   "last_name": "Don",
   "phone": "4088161358",
    "postal_code": "95131",
    "state_code": "CA"
"channel_type": "storefront",
"confirmation_status": "confirmed",
"created_by": "Customer",
"creation_date": "2022-08-20T09:50:26.686Z",
"currency": "USD",
"customer_info": {
    "_type": "customer_info",
    "customer_id": "adR0XJDMjU7aLSIzdxa90Yb41w",
    "customer_name": "Ocapi Postman",
    "customer_no": "00036502",
    "email": "valid@email.com"
```



```
"customer_name": "Ocapi Postman".
"export_status": "ready",
"guest": false,
"last_modified": "2022-08-20T09:50:29.393Z",
"merchandize_total_tax": 5.00,
    "_type": "simple_link",
   "link": "https://zzod-008.sandbox.us03.dx.commercecloud.salesforce.com/s/RefArch/dw/shop/v22_4/orders/00028002/notes"
"order_no": "00028002",
"order_token": "hh7y3oJPACuoxYVLOintCl2gNnm5_eAw8ci6ktQ6FD4",
"order_total": 111.28,
"payment_instruments": [
        "_type": "order_payment_instrument",
        "amount": 111.28,
        "payment_instrument_id": "ebbf1415bebaab9bf0d6048708",
        "payment_method_id": "PayPal",
        "c_PP_API_ActiveBillingAgreement": "{\"baID\":\"B-68Y08988NL6028922\",\"email\":\"ptest4@paypal.com\",\"default\":tr
"c_paymentId": "PayPal",
        "c_paypalOrderID": "80X61337G0329781X",
        "c_paypalPaymentStatus": "COMPLETED"
"payment_status": "not_paid",
"product_items": [
        "_type": "product_item",
        "adjusted_tax": 5.00,
```

```
"base_price": 99.99,
    "bonus_product_line_item": false,
    "gift": false,
    "item_id": "b64433cae3e37fb2448d1da9f3",
    "item_text": "Platinum Blue Stripes Easy Care Fitted Shirt ",
    "price": 99.99,
    "price_after_item_discount": 99.99,
    "product_id": "00888a3a40009M",
    "product_id": "00888a3a40009M",
    "product_name": "Platinum Blue Stripes Easy Care Fitted Shirt ",
    "quantity": 1,
    "shipment_id": "me",
    "tax': 5.00,
    "tax_basis": 99.99,
    "tax_class_id": "standard",
    "tax_rate": 0.05
}

// "product_sub_total": 99.99,
    "shipments": [

// "_type": "shipment",
    "adjusted_merchandize_total_tax": 5.00,
    "gift": false,
    "merchandize_total_tax": 5.00,
    "gift": sub_total": 99.99,
    "product_sub_total": 99.99,
    "product_total": 99.99,
    "product_total": 99.99,
    "product_total": 99.99,
    "product_total": 99.99,
    "product_total": 99.99,
    "product_total": 99.99,
    "shipment_id": "me",
    "shipment_id": "me",
    "shipment_ion": "00127501",
    "shipment_ion": 10127501",
    "shipment_ion": 10127501",
```

```
"shipment_total": 111.28,
          "shipping_address": {
    "_type": "order_address",
    "address1": "1 Main St",
                "city": "Boston",
               "country_code": "US",
"first_name": "John",
"full_name": "John Smith",
                "id": "6f62bd2d26601a47712d2d3761",
               "last_name": "Smith",
               "phone": "408-972-7588",
               "postal_code": "95131",
"state_code": "CA"
            shipping_method": {
               "_type": "shipping_method",
"description": "Order received within 7-10 business days",
               "id": "001",
"name": "Ground",
               "price": 5.99,
                "c_estimatedArrivalTime": "7-10 Business Days"
          "shipping_status": "not_shipped", "shipping_total": 5.99,
          "shipping_total_tax": 0.30,
          "tax_total": 5.30
"shipping_items": [
          "_type": "shipping_item",
```



```
"shipping_items": [
        "_type": "shipping_item",
        "adjusted_tax": 0.30,
        "base_price": 5.99,
"item_id": "4960b0625da5b7301679eb3e77",
        "item_text": "Shipping",
         "price": 5.99.
        "price_after_item_discount": 5.99,
         "shipment_id": "me",
        "tax": 0.30,
        "tax_basis": 5.99,
        "tax_class_id": "standard",
        "tax_rate": 0.05
 "shipping_status": "not_shipped",
"shipping_total": 5.99,
"shipping_total_tax": 0.30,
"site_id": "RefArch",
"status": "new",
"taxation": "net",
"tax_total": 5.30,
"c_PP_API_TransactionID": "5P338097XT592843G",
"c_paypalPaymentMethod": "express"
```

Figure 53. Successfully placed order due PayPal payment method

#### Additional Ocapi resources 9.9

Follow Okapi documentation by the link: OCAPI documentation

By follow the documentation above you can use any other Ocapi Hook from the list of Shop API resources index. It gives opportunity to do more actions with Ocapi resources.

How to use:

- 1. Click link above.
- 2. In the opened page click Shop API resource index.
- 3. Choose the needed index (in this example we choose 'Basket' index).
- 4. Choose the needed Basket resource from list (in this example'/basket/{basketid}' resource with 'DELETE' http method was chosen). And click on the resource.
- 5. In the opened page, will be all necessary information on how to create request on this resource.
- 6. Go to: Business manager > Administration > Open Commerce API Settings. Set 'Select Type' - Shop, Select Context - your site id.
- 7. Paste your resource into resource list. For more information of how to make Ocapi settings follow the link: **OCAPI** setting



```
Select Type: Shop 

Select Context: RefArch

"resource_id":"/customers/{customer_id}/payment_instruments/{payment_instrument_id}",

"methods":["get"],

"read_attributes":"(")",

"methods":["put"],

"read_attributes":"(")",

"write_attributes":"(")",

"resource_id":"/baskets/{basket_id}/customer",

"methods":["get"],

"read_attributes":"(")",

"write_attributes":"(")",

"methods":["patch", "delete"],

"read_attributes":"(")",

"write_attributes":"(")",

"write_attributes":"(")",

"write_attributes":"(")",

"write_attributes":"(")",

"write_attributes":"(")",

"resource_id":"/customers',

"methods":["post"],

"read_attributes":"(")",

"write_attributes":"(")",

"resource_id":'/customers/{customer_id}/payment_instruments",

"methods":["post"],

"resource_id":'/customer_id}/payment_instruments",

"methods":["post"],

"resource_id":'/customer_id}/payment_instrum
```

Figure 54. Adding a new resource to the Ocapi settings