

**Braintree**  
A *PayPal* Service

# Braintree Payments Integration Guide

FOR SALESFORCE COMMERCE CLOUD



 salesforce commerce cloud

---

# Table of Contents

<b>1</b>	<b>Summary.....</b>	<b>1</b>
<b>2</b>	<b>Component Overview .....</b>	<b>1</b>
2.1	Functional Overview .....	1
2.1.1	Credit Card Payment Processing .....	1
2.1.2	PayPal Payment Processing .....	1
2.1.3	Apple Pay Payment Processing .....	1
2.1.4	Braintree Vault .....	1
2.1.5	Braintree Transaction Management.....	2
2.1.6	Braintree Customer and Payment Methods Management .....	2
2.1.7	PayPal Provided Buyer Billing Address and Phone Number .....	2
2.1.8	PayPal Smart Payment Buttons.....	2
2.1.9	Venmo Payment Processing .....	2
2.1.10	Local payment method processing.....	2
2.1.11	Google Pay .....	3
2.2	Use Cases .....	3
2.3	Limitations and Constraints .....	3
2.4	Privacy and Payment .....	3
<b>3</b>	<b>Implementation Guide .....</b>	<b>3</b>
3.1	Setup .....	3
3.1.1	BRAINTREE_CREDIT JavaScript File .....	4
3.1.2	BRAINTREE_PAYPAL JavaScript File.....	4
3.1.3	BRAINTREE_APPLEPAY JavaScript File.....	4
3.1.4	BRAINTREE_VENMO JavaScript File .....	4
3.1.5	BRAINTREE_GOOGLEPAY JavaScript File .....	4
3.1.6	Braintree Controller .....	4
3.2	Configuration.....	5
3.2.1	Adding API Credentials .....	6
3.2.2	Service Limits Configuration .....	7
3.2.3	Local payment methods configuration .....	7
3.2.4	Updating Cartridge Custom Site Preferences .....	8
3.3	Customizing Code .....	12
3.3.1	Custom Fields (Optional) .....	12
3.4	External Interfaces.....	13
3.5	Testing .....	14
3.6	Core templates overlay list.....	14
3.7	Hosted fields styling .....	15
<b>4</b>	<b>Operations and Maintenance .....</b>	<b>15</b>
4.1	Data Storage .....	15
4.2	Logs .....	16
4.3	Availability .....	17
4.4	Support.....	18
4.5	Jobs and the Batch Process.....	18
4.5.1	BraintreeUpdateOrders .....	18
4.5.2	BraintreelImportPaymentMethodTokens.....	19
<b>5</b>	<b>User Guide .....</b>	<b>21</b>
5.1	Roles and Responsibilities .....	21
5.2	Business Manager.....	22
5.2.1	Braintree Transactions .....	22

5.2.2	Braintree Customers.....	28
5.2.3	PayPal Styles Configuration .....	32
5.3	Storefront Functionality.....	33
5.3.1	Local payment methods .....	47
<b>6</b>	<b>Level 2 and 3 processing.....</b>	<b>49</b>
6.1	Overview.....	49
6.2	Configuration.....	49
<b>7</b>	<b>Multi-location addresses support.....</b>	<b>50</b>
7.1	General info.....	50
<b>8</b>	<b>Multi-brand support.....</b>	<b>50</b>
8.1	General info.....	50
<b>9</b>	<b>Version and SFRA Support Info .....</b>	<b>50</b>
9.1	JavaScript Files and Cartridge Version Locations.....	50
9.2	SFRA Versions Support.....	51
9.3	Compatibility Mode .....	51
<b>10</b>	<b>Service Errors Handling .....</b>	<b>51</b>
10.1	Service Timeout Handle.....	51
10.2	Handling Error Service Response .....	52
<b>11</b>	<b>Automated Testing .....</b>	<b>53</b>
<b>12</b>	<b>Known Issues.....</b>	<b>54</b>
12.1	Missing Email Filed in the Credit Card Form.....	54

## **Copyright Information**

© 1999-2020 Braintree, a service of PayPal, Inc. All rights reserved.

Braintree is a service of PayPal, Inc. The Braintree logo is a trademark of PayPal, Inc. Other trademarks and brands are the property of their respective owners. The information in this document belongs to Braintree and PayPal, Inc. It may not be used, reproduced, or disclosed without the written approval of Braintree and PayPal, Inc.

Copyright © Braintree, a service of PayPal, Inc. All rights reserved. PayPal (Europe) S.à r.l. et Cie, S.C.A., Société en Commandite par Actions. Registered office: 22-24 Boulevard Royal, L-2449, Luxembourg, R.C.S. Luxembourg B 118 349

Consumer advisory: The PayPal™ payment service is regarded as a stored value facility under Singapore law. As such, it does not require the approval of the Monetary Authority of Singapore. You are advised to read the terms and conditions carefully.

## **Notice of Non-Liability**

Braintree and PayPal, Inc. are providing the information in this document to you "AS-IS" with all faults. Braintree and PayPal, Inc. make no warranties of any kind (whether express, implied or statutory) with respect to the information contained herein. Braintree and PayPal, Inc. assume no liability for damages (whether direct or indirect), caused by errors or omissions, or resulting from the use of this document or the information contained in this document or resulting from the application or use of the product or service described herein. Braintree and PayPal, Inc. reserve the right to make changes to any information herein without further notice.

---

## 1 Summary

This Implementation Guide describes how to:

- Integrate the Braintree Credit Card, PayPal, and Apple Pay, Venmo, Local Payment Methods payment processors into the Salesforce Commerce Cloud reference application Store Front Reference Architecture (SFRA) v 5.1.0
- Connect `bm_braintree` to Salesforce Commerce Cloud Business Manager.

The `int_braintree` and `bm_braintree` components support the Braintree payment gateway as the new payment processor for Salesforce Commerce Cloud, Business Manager extension, and various stand-alone Braintree Application Programming Interface (API) calls. For additional information, contact your Braintree or PayPal support manager, or visit Braintree support at <https://www.braintreepayments.com/contact>.

Integration of the cartridge into your storefront application does not imply modifications of core cartridge, SFRA approach of files overwriting should be used instead.

---

## 2 Component Overview

### 2.1 Functional Overview

The integration includes the following functionality.

#### 2.1.1 Credit Card Payment Processing

Braintree provides a payment processing gateway. Braintree's payment gateway connects your storefront to any processor or bank that Braintree supports.

#### 2.1.2 PayPal Payment Processing

This Braintree integration supports PayPal payments and PayPal Credit.

#### 2.1.3 Apple Pay Payment Processing

This Braintree integration also supports Apple Pay payments.

#### 2.1.4 Braintree Vault

The Vault securely stores customer information, including payment methods. You can use it for non-recurring transactions, so your customer doesn't need to re-enter their information each time they make a purchase.

When a payment method is stored in the Vault, the Braintree gateway encrypts the information and associates it with a unique payment method token. This token can be used to create transactions without the PCI compliance issues that come with handling unencrypted data.

This integration allows you to save and update a customer's details in your Braintree Vault.

#### **2.1.5 Braintree Transaction Management**

The Braintree Business Manager extension lets you work with payment transactions (both credit card and PayPal) which are linked to Salesforce Commerce Cloud orders.

#### **2.1.6 Braintree Customer and Payment Methods Management**

The Braintree Business Manager extension allows you to manage customers by using the Braintree Vault.

#### **2.1.7 PayPal Provided Buyer Billing Address and Phone Number**

To retrieve a buyer's billing address and phone number from the PayPal Checkout flow, please contact your PayPal / Braintree representative or PayPal support to enable these features.

When "Billing Address Override" is enabled, these are required for Salesforce Commerce Cloud orders and the Braintree cartridges to function correctly.

#### **2.1.8 PayPal Smart Payment Buttons**

PayPal Smart Payments Buttons give your buyers a simplified and secure checkout experience; and gives you as a merchant an easy way to enable other payment methods without requiring additional payment processors.

The PayPal cartridges have two configurations: one for the billing page and one for the cart page. These can be customized to fit your checkout needs. For more details on how to customize, please see the [PayPal Checkout Integration Guide](#).

**NOTE:** The Salesforce Commerce Cloud PayPal cartridges use the checkout.js integration, which still provides access to PayPal Smart Payment Buttons.

#### **2.1.9 Venmo Payment Processing**

This Braintree integration supports Venmo payments only for Android or IOS operation systems.

#### **2.1.10 Local payment method processing**

In addition to PayPal and cards, you can now offer the most relevant Local Payment Methods for your customers with a single Braintree integration. This will allow your cross-border customers to pay in their preferred Local Payment Methods while all payments settle into your PayPal account. [Learn more about Local Payment Methods.](#)

### 2.1.11 Google Pay

Google Pay provides a purchasing experience both in app and on the web for customers with supported Android devices. It allows customers to pay with cards and PayPal accounts stored in their Google account, in addition to those stored in Android Pay. For more details on compatibility and availability please read [Google Pay support article](#).

## 2.2 Use Cases

PayPal has developed the following use cases for the Braintree integration:

- Checkout with credit card processing
- Checkout with PayPal payment processing
- Checkout with Apple Pay payment processing
- Checkout with Venmo payment processing
- Checkout with supported Locale specific payment methods
- Braintree customer management
- Braintree payment methods management
- Storefront payment methods customer integration (via credit cards or PayPal).

## 2.3 Limitations and Constraints

The Braintree cartridge doesn't support multi-shipping in Store Front Reference Architecture (SFRA).

## 2.4 Privacy and Payment

This integration requires access to the following customer data elements: Billing Address, Shipping Address, Order Details, Customer Profile, and some custom properties of Customer Payment Instruments.

---

# 3 Implementation Guide

## 3.1 Setup

Two cartridges support this integration:

1. **int\_braintree** - A Salesforce Commerce Cloud storefront extension cartridge that provides payment processor and customer storefront integration functionality.
2. **bm\_braintree** - This Business Manager extension includes **Braintree Transactions** for the merchant ordering menu, **Braintree Customers** in the Customers section and **Braintree Logs**.
3. **bm\_paypal\_configuration** - Business Manager extension that allow to change PayPal Smart Button styles.

The following sub-sections describe the entry points for the integration.

### **3.1.1 BRAINTREE\_CREDIT JavaScript File**

`int_braintree/cartridge/scripts/hooks/payment/processor/braintreeCredit.js` provides the payment processor interface for Braintree credit card processing. Commerce Cloud uses this to connect to the payment processor. This module contains public “Handle” and “Authorize” methods, which are called through the payment flow in the SFRA CheckoutService controller.

### **3.1.2 BRAINTREE\_PAYPAL JavaScript File**

`int_braintree/cartridge/scripts/hooks/payment/processor/braintreePaypal.js` provides the payment processor interface for Braintree PayPal processing. Commerce Cloud uses this to connect with the payment processor. This module contains public “Handle” and “Authorize” methods, which are called through the payment flow in the SFRA CheckoutService controller.

### **3.1.3 BRAINTREE\_APPLEPAY JavaScript File**

`int_braintree/cartridge/scripts/hooks/payment/processor/braintreeApplepay.js` provides the payment processor interface for Braintree ApplePay processing. Commerce Cloud uses this to connect to the payment processor. This module contains public “Handle” and “Authorize” methods, which are called through the payment flow in the SFRA CheckoutService controller.

### **3.1.4 BRAINTREE\_VENMO JavaScript File**

`int_braintree/cartridge/scripts/hooks/payment/processor/braintreeVenmo.js` provides the payment processor interface for Braintree Venmo processing. Commerce Cloud uses this to connect to the payment processor. This module contains public “Handle” and “Authorize” methods, which are called through the payment flow in the SFRA CheckoutService controller.

### **3.1.5 BRAINTREE\_GOOGLEPAY JavaScript File**

`int_braintree/cartridge/scripts/hooks/payment/processor/braintreeGooglepay.js.js` provides the payment processor interface for Google pay processing. Commerce Cloud uses this to connect to the payment processor. This module contains public “Handle” and “Authorize” methods, which are called through the payment flow in the SFRA CheckoutService controller.

### **3.1.6 Braintree Controller**

`int_braintree/cartridge/controllers/Braintree.js` provides all the necessary methods which are needed for working with Storefront (`GetPaymentMethodNonceByUUID`, `CheckoutFromCart`, `AppleCheckoutFromCart`,

AccountAddCreditCard, AccountDeleteCreditCard, AccountAddPaypalAccount, EditDefaultShippinAddress)

### 3.2 Configuration

To integrate PayPal Express Checkout, PayPal Credit, Easy Payments, credit card processing, Apple Pay or Venmo, you must add **int\_braintree** to your target site cartridge path.

To integrate the Braintree Transactions extension with Business Manager, add the **bm\_braintree** cartridges to your Business Manager cartridge path.

Here's how:

1. Upload **int\_braintree**, **bm\_braintree**, **bm\_paypal\_configuration** to your CI or development Sandbox. Apply the standard flow used to upload cartridges to your environment.
2. Upload and import metadata from the metadata folder. To do so, go to **Business Manager > Administration > Site Development > Site Import & Export**. Then apply the standard procedure for uploading metadata into the Commerce Cloud site. You can compress metadata to a .zip archive (as shown in Figure 1) or upload it via XML files and import it separately.

**NOTE:** Default site id for payment methods import is RefArch. To change site id, navigate to metadata/sites and rename RefArch folder to your site id and that compress metadata folder.



Figure 1. Metadata .zip Archive

3. Insert **int\_braintree** 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\_braintree:** before your cartridges record, as shown in (For example, **int\_braintree:app\_storefront\_base.**)
4. Optionally, if you need to integrate Business Manager extensions Braintree Transactions, Braintree Customers, Braintree Logs or PayPal styles configuration, insert **bm\_braintree** and **bm\_paypal\_configuration** into the record of the Business Manager cartridge path. To do so, in Commerce Cloud go to **Business Manager > Administration > Sites > Manage Sites > Manage the Business Manager Site > Settings** and insert **bm\_braintree: bm\_paypal\_configuration** before your cartridges record.

### 3.2.1 Adding API Credentials

After installing the cartridge, you'll need to configure the service and update your Braintree credentials (your public key and private key). Here's how:

1. Go to **Administration > Operations > Services > Credentials** and find the Credentials record for your Braintree integration at **Braintree\_Sandbox\_Credentials**.

**NOTE:** You can create separate credentials records for different needs, such as Production and Test credentials, or you may have a single credentials record for all brands and environments.

2. Update the following:

- o URL - Braintree Sandbox (<https://api.sandbox.braintreegateway.com/>) or Braintree Production (<https://api.braintreegateway.com/>)
- o User - Your Braintree public key
- o Password - Your Braintree private key
- o Braintree Merchant ID

Alternately, if you don't have a Braintree account but instead have a PayPal account only, you can obtain an ECBT Access Token by following the steps below:

1. Go to <https://developer.paypal.com> and click **Log into Dashboard**.
2. Log in with your PayPal credentials.
3. Under **My Apps & Credentials**, scroll down to **Express Checkout via Braintree SDK**.
4. Click **Generate Sandbox Access Token**. The ECBT API URL will be the same as the URL described above.

**NOTE:** Client ID for PayPal always required in both authorization types.

You can also enable the communication log for the service `int_braintree.http.xml.payment.Braintree`. The Communication Log will record every request and response to the log files.

**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.**

Administration > Operations > Services > int\_braintree.http.xml.payment.Braintree.MobileFirst - Details

## int\_braintree.http.xml.payment.Braintree.MobileFirst<sup>?</sup>

Fields with a red asterisk (\*) are mandatory. Click **Apply** to save the details. Click **Reset** to revert to the last saved state.

Name:	<input type="text" value="int_braintree.http.xml.payment.Brain"/>
Type:	<input type="button" value="HTTP"/>
Enabled:	<input checked="" type="checkbox"/>
Service Mode:	<input type="button" value="Live"/>
Log Name Prefix:	<input type="text" value="mfra_braintree"/>
Communication Log Enabled:	<input checked="" type="checkbox"/>
Force PRD behavior in non-PRD environments:	<input checked="" type="checkbox"/>
Profile:	<input type="button" value="Braintree_Default_Profile"/>
Credentials:	<input type="button" value="Braintree_Sandbox_Credentials"/>

**Apply** **Reset**

Figure 2. int\_braintree.http.xml.payment.Braintree

You can optionally grant access to Business Manager extension features (Braintree Transactions, Braintree Customers, and Braintree Logs) to the target roles. Here's how:

1. Go to **Business Manager** > **Administration** > **Organization** > **Roles & Permissions** and select the target role that needs access to the Transactions Management, Customer Management, and Braintree Logs pages.
2. Select the **Business Manager Modules** tab in the drop-down list. You must select your target site as the active context.
3. Find Braintree Customers, Braintree Transactions, PayPal Styles Configuration. Grant access to them by checking the checkboxes in Write column and clicking **Update**.
4. Reload a page and check if new menu items available under Merchant Tools.

### 3.2.2 Service Limits Configuration

By default, int\_braintree cartridge don't have any service limitation. We recommend putting limitation according to the storefront typical traffic to prevent fraud or potential attack. You can read more about configuration values [here](#).

### 3.2.3 Local payment methods configuration

Braintree integration supports different local payment methods. Full list with countries and available methods can be found here: [local payment methods list](#).

By default, all payment methods disabled and preconfigured to certain locale and currency.

To enable payment method set **Yes** in the **Enabled** column (Figure 3). If needed - change locale and currency where method will be available.

**NOTE:** Transaction created with any of available local payment methods don't support vaulting and will be automatically captured once the customer will confirm the payment.

mybank MyBank  
p24 P24  
sofort Klarna Pay Now / SOFORT

Yes	15
No	16
No	14

**mybank Details**

Description:

Image:

Payment Processor: **BRAINTREE\_LOCAL <BRAINTREE\_LOCAL>**

Countries: (1) IT

Currencies: (1) EUR

Customer Groups: All

Min/Max Payment Ranges:

Figure 3. Local Payment method configuration

### 3.2.4 Updating Cartridge Custom Site Preferences

Here's how:

1. Go to Business Manager > Merchant Tools > Site Preferences > Custom Preferences.  
You'll see four new Custom Site Preference Groups (See Figure 4).

Merchant Tools / Site Preferences /

**Custom Site Preference Groups**

ID	Name	Description	Preferences	View Across Sites
Storefront Configs	Storefront Configurations		14	<input type="button" value="View"/>
BRAINTREE_COMMON	Braintree Common		5	<input type="button" value="View"/>
BRAINTREE_CREDIT	Braintree Credit		9	<input type="button" value="View"/>
BRAINTREE_PAYPAL	Braintree PayPal		15	<input type="button" value="View"/>
BRAINTREE_APPLEPAY	Braintree Apple Pay		5	<input type="button" value="View"/>
BRAINTREE_VENMO	Braintree Venmo		5	<input type="button" value="View"/>
BRAINTREE_GOOGLEPAY	Braintree Google Pay		5	<input type="button" value="View"/>

Figure 4. Braintree Custom Site Preferences

2. Click View for Braintree Common configuration. Then select your preferred settings for the preferences shown in Figure 5:

- [Merchant Account IDs](#)  
To offer support for different currencies on the same site, the value CurrencyCode:MerchantAccountID must be added.
- [Tokenization Key](#)
- [Store Payment Method in Vault](#)
- [Settle transaction immediately](#)
- Level 2 and 3 Processing
- Default Custom Fields

Name	Value	Default Value
<b>Merchant Account IDs</b>	<input type="text"/> <input type="button" value="Add"/>	
(BRAINTREE_Merchant_Account_IDS)	USD-6v2okaixk5x2bd16	
Example: "EUR:MERCHANACID". You can use it to have multiple merchant accounts within the same Braintree gateway. Currency is also determined by Merchant Account ID. If no Merchant Account ID...	Example: "EUR:MERCHANACID". You can use it to have multiple merchant accounts within the same Braintree gateway. Currency is a...	
<b>Store Payment Method in Vault</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Yes
(BRAINTREE_Vault_Mode)	This allows you the ability to store many details in your Braintree vault, including a customer's Payment Method.	
<b>Settle transaction immediately</b>	<input type="checkbox"/> No	<input checked="" type="checkbox"/> No
(BRAINTREE_SETTLE)	This determines whether the transaction is settled immediately (Sale) or later (Authorization)	
<b>Level 2 and 3 Processing</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
(BRAINTREE_L2_L3)	Level 2 and 3 processing can help you qualify for lower interchange rates on transactions made with certain Visa and Mastercard corporate and purchasing cards. In order to qualify for Level 2, you ne...	
<b>Default Custom Fields</b>	<input type="text"/> <input type="button" value="Add"/>	
(BRAINTREE_Custom_Fields)	You must set up each custom field in the Braintree Control Panel prior to entering it here and passing it with a request. Example: "field_name:value". A field name cannot exceed 255 characters.	

Figure 5. Braintree Common Preferences

- Click View for Braintree Credit configuration. Then select your preferred settings for the preferences shown in Figure 6:

- 3DSecure
- Skip 3DSecure result

Name	Value	Default Value
<b>3DSecure</b>	<input type="text" value="Disabled (disabled)"/>	Disabled
(BRAINTREE_3DSecure_Enabled)	3DSecure provides an extra level of protection for card holders. For countries outside of the U.S., many card holders' credit cards are enrolled in 3DSecure. If disabled, the card holder will be prompted...	
<b>Skip 3DSecure result</b>	<input type="text" value="Disabled (disabled)"/>	Disabled
(BRAINTREE_3DSecure_Skip_Client...)	If enabled, the 3D Secure result will be ignored and transaction will be processed.	

Figure 6. Braintree Credit Preferences

- Click View for Braintree PayPal configuration. Then select your preferred settings for the preferences shown in Figure 7:

- Merchant Name
- Use Intent Type Order
- Billing Agreement Description
- Descriptor Name
- Locale
- PayPal Button Location

Name	Value	Default Value
Merchant Name		
(BRAINTREE_PAYPAL_Display_Name) (String)	Test	
This is your merchant name that will be displayed inside of the PayPal lightbox. If empty, the company name from your Braintree account will be displayed.	This is your merchant name that will be displayed inside of the PayPal lightbox. If empty, the company na...	
Use Intent Type Order		
(BRAINTREE_PAYPAL_Is_Order_Inte... The Payment Model Intent Type 'order' - Allows a merchant to validate a buyers' ability to pay for the goods without an authorization. If true is selected, vault mode is not available.	None	No
The Payment Model Intent Type 'order' - Allows a merchant to validate a buyers' ability to pay for the goo...		
Billing Agreement Description		
(BRAINTREE_PAYPAL_Billing_Agree... (String)	Test Test DDescription	
Use this option to set the description of the preapproved payment agreement visible to customers in the...		
PayPal Button Location		
(BRAINTREE_PAYPAL_Button_Locati...	Cart, MiniCart, PDP, and Billing Page (CartMinicartPdp)	Billing Page Only

Figure 7. Braintree PayPal Preferences

- Click View for Braintree Apple Pay configuration. Then select your preferred settings for the preferences shown in Figure 8:
  - Visibility of Apple Pay Button on the Cart page
  - Merchant Name

Braintree Apple Pay 		
Name	Value	Default Value
Instance Type	Sandbox	
Search by IDs...	<input type="button" value="🔍"/>	
Merchant Name		
(BRAINTREE_APPLEPAY_Display_Na... (String)		Saleforce Shop
Provide a business name for total's label field. Use the same business name people will see when they lo...		
Provide a business name for total's label field. Use the same business name people will see when they lo...		
Visibility of Apple Pay Button on the Cart page	None	Yes
(BRAINTREE_APPLEPAY_Visibility_Bu...		

Figure 8. Braintree Apple Pay Preferences

- Click View for Braintree Venmo configuration. Then select your preferred settings for the preferences shown in Figure 9.
  - Merchant Name

**Braintree Venmo**

Instance Type	Sandbox	
Search by IDs... <input type="button" value="🔍"/> <input type="button" value="▼"/>		
Name	Value	Default Value
Merchant Name	(BRAINTREE_VENMO_Display_Name) (String) Provide a business name for the total's label field. Use the same business name people will see when they look for the charge on their bank or credit card statement. For example, "COMPANY IN..."	<input type="text"/> Salesforce Shop Provide a business name for the total's label field. Use the same business name people will see when the...

Figure 9. Braintree Venmo Preferences

7. Click View for Braintree Google Pay configuration. Then select your preferred settings for the preferences shown in Figure 10
  - o Visibility of Google Pay Button on the Cart page
  - o Merchant Name

**Braintree Google Pay**

Instance Type	Sandbox	
Search by IDs... <input type="button" value="🔍"/> <input type="button" value="▼"/>		
Name	Value	Default Value
Merchant Name	(BRAINTREE_GOOGLEPAY_Display_Name) (String) Provide a business name for total's label field. Use the same business name people will see when they look for the charge on their bank or credit card statement. For example, "COMPANY INC.&...	<input type="text"/> Salesforce Shop Provide a business name for total's label field. Use the same business name people will see when they lo...
Visibility of Google Pay Button on the Cart page	<input type="text" value="None"/>	<input type="checkbox"/> Yes
(BRAINTREE_GOOGLEPAY_Visibility_...		

Figure 10. Google Pay Preferences

Also, few values that was in the custom preferences in the previous versions of the cartridge were moved to file int\_braintree/cartridge/config/braintreePreferences.js:

- 1) btLoggingMode - define what logs should be created by cartridge. Possible values: 'error', 'none'. Default value - 'all'
- 2) btFraudToolsEnabled - enables BT fraud for credit card payment. Default value true.
- 3) btPaypalFraudToolsEnabled - - enables BT fraud for PayPal payment. Default value true.
- 4) Descriptors: btCreditCardDescriptorPhone, btCreditCardDescriptorName, btCreditCardDescriptorUrl, btPaypalDescriptor - dynamic descriptors. Not

included in transaction by default. For more information, please read [Dynamic descriptors](#).

### 3.3 Customizing Code

After configuring your custom site preferences for Braintree, you may need to implement custom code modifications in the LINK cartridge to enable additional features, or to update the files that overwrite the ones from core cartridge.

#### 3.3.1 Custom Fields (Optional)

[Braintree Custom fields](#) provide an easy way to collect additional information about your customers or their purchase, like the name of the product they purchased. These [custom fields](#) can also be used to pass through information to Kount if you have a direct Kount integration

You can set custom fields in three ways (processed in the order shown):

1. Configuration by Business Manager
2. Custom code (hook file)

The custom field descriptions in the hook file override the custom field descriptions in Business Manager.

The following example illustrates how custom field values are inherited or overridden.

1. In Business Manager, you configure:
  - o Field\_1, set to val1
  - o Field\_2, set to val2
2. Using custom code in a hook file, you set these fields:
  - o Field1. The value of this field changes from val1 to the value you specify in the code.
  - o Field\_3, set to val3
3. The Braintree server receives the following fields:
  - o Field\_1, which has the value set in the hook file.
  - o Field\_2, which remains set to val2 (as defined in Business Manager)
  - o Field\_3, which remains set to val3 (as defined in the custom code)
  - o Field\_4, which remains set to val4 (as defined on the client side).

Braintree ignores the setting for field\_2 defined on the client side (val3\_overridden\_by\_client), because this field was declared in the Business Manager configuration or the hook script.

If you need to generate custom fields during your checkout flow:

1. Add a new hook for the storefront cartridge file,  
`./cartridge/scripts/hook.json.`

```
{  
  "hooks": [  
    {  
      "name": "myhook",  
      "script": "hook.js"  
    }  
  ]  
}
```

```

        },
        "name": "dw.ocapi.shop.basket.calculate",
        "script": "./cart/calculate.js"
    },
    {
        "name": "braintree.customFields",
        "script": "./hook.braintree.customFields.js"
    }
]
}

```

2. Add a new file to the storefront cartridge,  
`./cartridge/scripts/hook.braintree.customFields.js`.

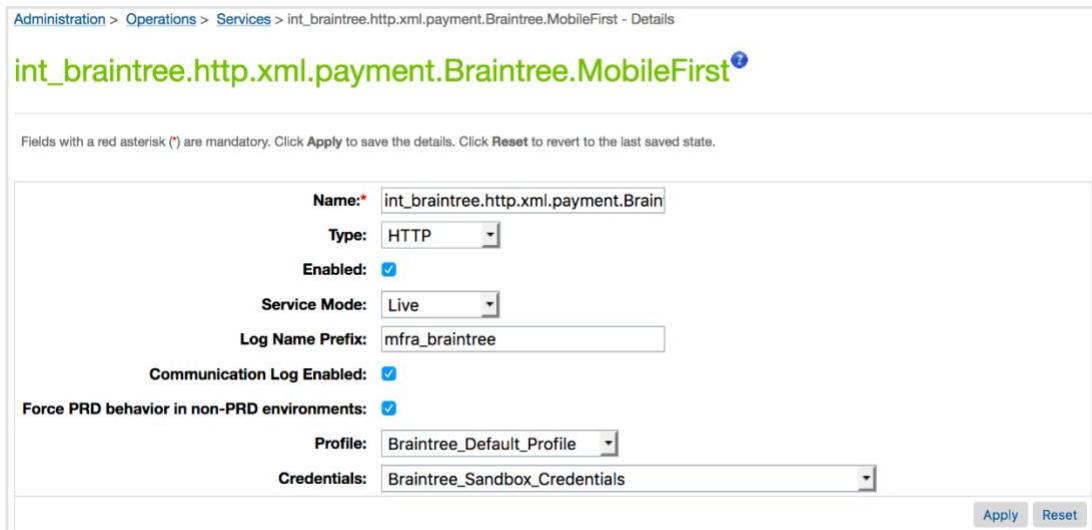
```

exports.credit = function(data) {
    var customFields = {
        //field_2: 'value2_overided',
        //field_3: 'value3'
    };
    return customFields;
};

```

### 3.4 External Interfaces

The main configuration of the Braintree services integration is the `int_braintree.http.xml.payment.Braintree` service, which you'll find under **Administration > Operations > Services**. (See Figure 11.)



The screenshot shows the 'Details' page for the 'int\_braintree.http.xml.payment.Braintree.MobileFirst' service. The page header indicates the path: Administration > Operations > Services > int\_braintree.http.xml.payment.Braintree.MobileFirst - Details.

**int\_braintree.http.xml.payment.Braintree.MobileFirst**

Fields with a red asterisk (\*) are mandatory. Click **Apply** to save the details. Click **Reset** to revert to the last saved state.

Name:	<input type="text" value="int_braintree.http.xml.payment.Braint"/>
Type:	<input type="text" value="HTTP"/>
Enabled:	<input checked="" type="checkbox"/>
Service Mode:	<input type="text" value="Live"/>
Log Name Prefix:	<input type="text" value="mfra_braintree"/>
Communication Log Enabled:	<input checked="" type="checkbox"/>
Force PRD behavior in non-PRD environments:	<input checked="" type="checkbox"/>
Profile:	<input type="text" value="Braintree_Default_Profile"/>
Credentials:	<input type="text" value="Braintree_Sandbox_Credentials"/>

**Apply**   **Reset**

Figure 11. Braintree Service Definition

You can edit the log name prefix, enable communication logs, and change the credentials record for this service. The Braintree integration cartridge ships with one credential record, which should be updated by your credentials.

The Braintree integration uses the Braintree APIs. All requests are formatted in XML, which is used to communicate between Commerce Cloud and Braintree. Client calls use the Braintree JavaScript Client SDK.

You'll find Braintree client side and server side API documentation at <https://developers.braintreepayments.com/reference/overview>.

This Braintree Integration cartridge supports the following Braintree API calls:

Customers	Payment Methods	Transactions	Addresses
Create	Create	Find	Create
Delete	Delete	Refund	Update
Find	Find	Sale	Delete
Search	Update	Submit for Settlement	
Update		Submit for Partial Settlement	
		Void	
		Clone	
		Search	

Each of these API calls is implemented as a stand-alone method (module Braintree.js) and can be invoked from external code without integration to Store Front Reference Architecture (SFRA). However, you still need to configure custom preferences.

For a detailed description of the parameters involved, see the [Braintree Developer documentation](#).

This integration uses the Braintree APIs to work with:

- Transactions (make authorizations, submit for settlements, voids, and refunds)
- Customers (create, delete, find, search, and update)
- Payment methods in the Vault (create, delete, find, and update)
- Customer addresses (create, update, and delete).

### 3.5 Testing

You must obtain your own test account on the [Braintree Sandbox](#). If you can't create your own Braintree Sandbox account, contact [Braintree support](#).

### 3.6 Core templates overlay list

The following templates from app\_storefront\_base cartridges been overlay by int\_braintree

account/paymentCard.isml

cart/cart.isml

checkout/billing/paymentOptions/paymentOptionsContent.isml  
checkout/billing/paymentOptions/paymentOptionsSummary.isml  
checkout/billing/paymentOptions/paymentOptionsTabs.isml  
checkout/billing/billingSummary.isml  
checkout/cart/miniCart.isml  
common/scripts.isml  
product/components/addToCartGlobal.isml  
product/components/addToCartProduct.isml  
product/components/descriptionAndDetails.isml  
product/productTile.isml  
product/setDetails.isml  
search/searchResults.isml  
Templates are up to date with SFRA 5.1.0

### 3.7 Hosted fields styling

Hosted fields and PayPal button look on a page could be customize with options

listed here: [Hosted fields styling](#), [Hosted fields advance options](#)

To apply styles edit files in  
cartridges/int\_braintree/cartridge/scripts/braintree/paypalButtonConfigs.js

BRAINTREE\_Hosted\_Fields\_Advanced\_Options - [Hosted fields advance options](#)

BRAINTREE\_Hosted\_Fields\_Styling - [Hosted fields styling](#)

---

## 4 Operations and Maintenance

### 4.1 Data Storage

Braintree integration requires the System Objects Extension to store payment-related information.

OrderPaymentInstrument custom properties:

- **braintreePaymentMethodNonce** - Braintree Payment Method Nonce. This property is used to save the nonce, in case of a failed transaction, for future reference.
- **braintreeFraudRiskData** - Braintree Payment Device Data/Risk. This stores the Fraud service response.
- **braintreePaymentMethodToken** - Braintree Payment Method token.
- **braintreeFailReason** - Transaction fail reason.
- **braintree3dSecureStatus** - Used to set the 3DSecure result.

- **braintreeIs3dSecureRequired** - Braintree 3dSecure is a required flag.
- **braintreeSaveCreditCard** - A temporary property that will be removed after the checkout process. Introduced as an integration point between Braintree and SFRA.
- **braintreeCreditCardMakeDefault** - A temporary property that will be removed after the checkout process. Introduced as an integration point between Braintree and SFRA.
- **braintreeCustomFields** - A temporary property that will be removed after the checkout process. Introduced as an integration point between Braintree and SFRA.
- **braintreeVenmoUserId** - Id of the logged Venmo customer

**CustomerPaymentInstrument custom properties:**

- **braintreeDefaultCard** - Indicates the default card
- **braintreePaypalAccountEmail** - Braintree PayPal account email address
- **braintreePaypalAccountAddresses** - Braintree PayPal account addresses
- **braintreePaymentMethodToken** - Braintree Payment Method token.
- **braintreeVenmoUserId** - User login used for vaulting
- **braintreeVenmoUsername** - User login used for vaulting

**Profile custom properties:**

- **isBraintree** - Indicates that the customer was stored to the Vault during checkout, or to the Braintree customer's Business Manager extension

**Order custom properties:**

- **isBraintree** - Property to differentiate Braintree and non-Braintree orders
- **isBraintreeIntentOrder** - A marker use if an Order was placed through PayPal Express Checkout with intent=order flow.
- **braintreePaymentStatus** - The status returned by Braintree
- **partialTransactions** - Contains the transaction IDs of partial transactions
- **braintreeFraudRiskData** - A store's fraud risk decision.

## 4.2 Logs

This integration introduces a few new custom logs:

1. **Braintree Custom logs** - Such as the Custom-Braintree-blade2-2-appserver-20151122.log. This Log file contains all errors exposed by the int\_braintree and bm\_braintree cartridges.
2. **Service communication logs** - These logs contain every request and response to the Braintree endpoint. To enable these logs, go to **Administration > Operations > Services > int\_braintree.http.xml.payment.Braintree** and check the **Communication Log Enabled** preference. For example, service-Braintree\_service-blade2-3-appserver-20151224.log, shown in Figure 12, is one of the service communications logs.

<a href="#"><u>service-Braintree_service-blade2-3-appserver-20151221.log</u></a>
<a href="#"><u>service-Braintree_service-blade2-3-appserver-20151222.log</u></a>
<a href="#"><u>service-Braintree_service-blade2-3-appserver-20151223.log</u></a>
<a href="#"><u>service-Braintree_service-blade2-3-appserver-20151224.log</u></a>
<a href="#"><u>service-Braintree_service-blade2-3-appserver-20151225.log</u></a>
<a href="#"><u>service-Braintree_service-blade2-3-appserver-20151228.log</u></a>

Figure 12. Braintree Communication Log Example

All log files are located in the Logs folder (under Administration > Site Development > Development Setup > Logs). For example: <https://paypal01-tech-prtnr-na01-dw.demandware.net/on/demandware.servlet/webdav/Sites/Logs>.

The service communication log is also available in the custom Business Manager extension for Braintree. To access it, go to Administration > Site Development > Braintree Logs.

<a href="#">Site Development</a> > Braintree Logs			
<b>Braintree Logs</b>			
This page allows you to look at log files of Braintree service.			
Name	Size	Last Modified	
<a href="#">service-Braintree_service-blade1-3.mon.demandware.net-appserver-20170424.log</a>	6.6 kb	Mon, 24 Apr 2017 23:16:58 GMT	
<a href="#">service-Braintree_service-blade1-3.mon.demandware.net-appserver-20170426.log</a>	51.3 kb	Wed, 26 Apr 2017 14:27:30 GMT	
<a href="#">service-Braintree_service-blade1-3.mon.demandware.net-appserver-20170427.log</a>	1027.0 kb	Thu, 27 Apr 2017 15:58:11 GMT	
<a href="#">service-Braintree_service-blade1-3.mon.demandware.net-appserver-20170428.log</a>	15.2 kb	Fri, 28 Apr 2017 15:23:44 GMT	

Figure 13. Braintree Logs Viewed in Business Manager

#### 4.3 Availability

You can track availability by service status in the Commerce Cloud Business Manager. (Go to Administration > Operations > Service Status > int\_braintree.http.xml.payment.Braintree.) See Figure 14.

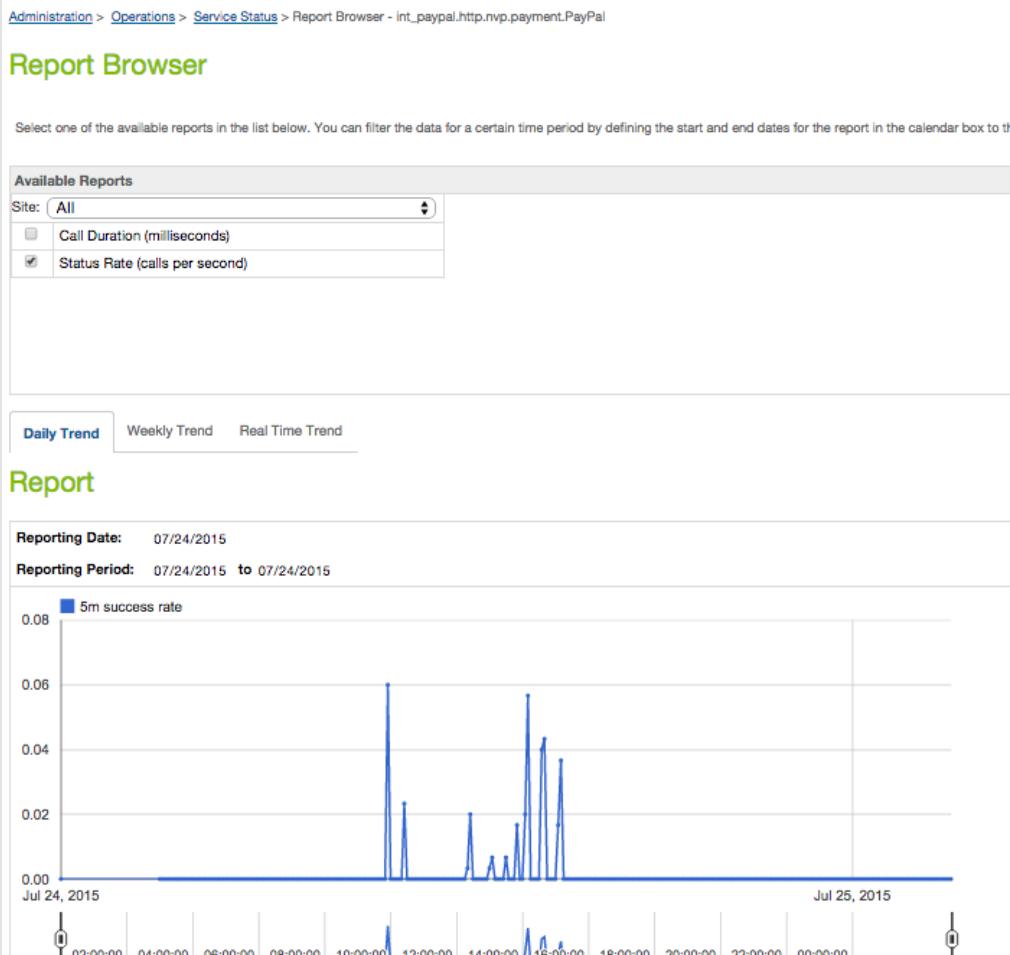


Figure 14. Braintree Service Availability Chart

#### 4.4 Support

Here's how to get Braintree help and support:

- [Contact Braintree support via email](#).
- Go to the [Braintree Support home page](#).

#### 4.5 Jobs and the Batch Process

The Braintree cartridge introduces two scheduled jobs:

1. BraintreeUpdateOrders
2. BraintreelImportPaymentMethodTokens

##### 4.5.1 BraintreeUpdateOrders

The BraintreeUpdateOrders job synchronizes payment statuses from the Braintree Vault with all Commerce Cloud order transactions related to Braintree for the assigned site (See Figure 15.) You must ensure that the needed site is assigned to the job schedule. To do so, go to Administration > Operations > Job Schedules > BraintreeUpdateOrders in Business Manager.

This job is scheduled to run once per hour.

**NOTE:** Recurring schedules don't apply on the SIG instances. A schedule will be valid only for the primary instance group (Development, Staging, or Production). Therefore, if you want to synchronize payment statuses on the developer's Sandbox, you should invoke the job manually each time.

The only parameter that the BraintreeUpdateOrders job modifies is Order.custom.braintreePaymentStatus.

The screenshot shows the 'BraintreeUpdateOrders' job configuration page. At the top, there are tabs for General, Schedule and History (which is selected), Resources, Step Configurator, Notification, and Failure Handling. A 'Run Now' button is located in the top right corner. Under the 'Schedule and History' tab, the 'Enabled' checkbox is checked. The 'Trigger' section shows 'Recurring Interval' selected. The 'From\*' field is set to '6/2/2017 1:46 pm' and the 'To' field is empty. The 'Run Time' section shows 'Every' selected, with 'Amount\*' set to '1' and 'Interval\*' set to 'Hours'. Below this, under 'Run only on these days:', all days of the week are checked. The 'History' section at the bottom lists one entry: 'BraintreeUpdateOrders' with status 'OK', start time '6/2/2017 1:55 pm', end time '6/2/2017 1:55 pm', duration '00:00:13', and a log file link.

Figure 15. Braintree BraintreeUpdateOrders Job

#### 4.5.2 BraintreeImportPaymentMethodTokens

The BraintreeImportPaymentMethodTokens job reads an input .csv file from the Commerce Cloud IMPEX directory and updates customers' wallets with Braintree payment method tokens. For each customer, the job creates a customer payment instrument with a payment method type CREDIT\_CARD record. This record has dummy values, except for the custom.braintreePaymentMethodToken custom property. This property indicates that the actual Customer Payment Instrument is tokenized to the Braintree side. After importing tokens, customers will be able to check out (make a payment) using imported payment methods.

The BraintreeImportPaymentMethodTokens job modifies the property CustomerPaymentInstrument.PaymentInstrument.custom.braintreePaymentMethodToken.

This job can accept the following job parameters:

- **file\_name** - An input file short name without a path (impex/src/Braintree will be prepended automatically). If no parameter is provided, "braintree\_payment\_tokens.csv" will be used as the file name.

- **ignore\_exist\_tokens** - A Boolean flag that indicates whether the check for existing tokens should be skipped. If the check is skipped, this may cause duplicated payment methods (if a method with token already exists).
- **remove\_file** - A Boolean flag that indicates whether the import file should be removed after processing.
- **clean\_wallet** - A Boolean flag that indicates whether all customers' saved methods should be removed before import. If this parameter is set to True, all customers' saved payment methods will be removed before importing. This parameter is useful for replacing existing saved methods.

Boolean flags can accept two states: “True” is true, and everything else will be interpreted as false.

**NOTE:** Parameter settings aren't shipped with the job. You must fill them manually using the Business Manager interface (as shown in Figure 16).

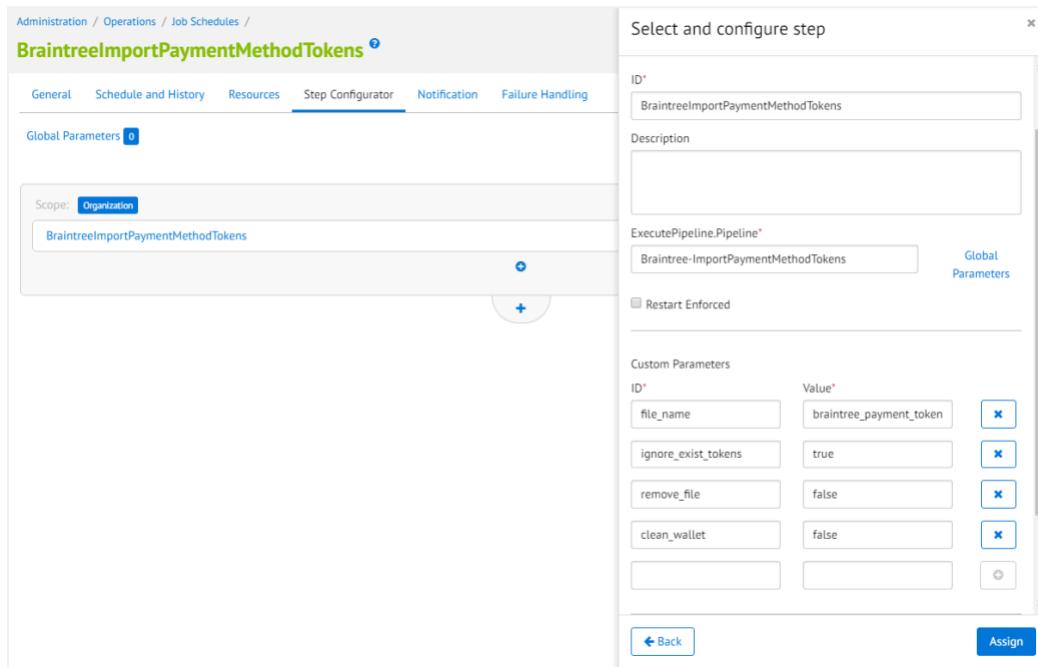


Figure 16. Braintree BraintreeImportPaymentMethodTokens Job Parameters

This job supports four credit card types:

- Visa
- MasterCard
- American Express
- Discover

To ensure that the buyer can check out with those credit card types, make sure that:

- All of them are listed in the Credit Card Payment Method settings, and
- BRAINTREE\_CREDIT is selected as the payment processor, as shown in Figure 17.

Payment methods are managed here. To create a new payment method, click the New button. To remove a payment method click the remove icon in the payment method row. The default payment methods cannot be removed, and their IDs cannot be changed. When you select the CREDIT\_CARD payment method, credit/debit cards can be reordered through drag and drop.

ID	Name	Enabled	Sort Order
BANK_TRANSFER	Bank Transfer	No	1
BML	PayPal Credit	Yes	5
CREDIT_CARD	Credit Card	Yes	3
GIFT_CERTIFICATE	Gift Certificate	Yes	2
PayPal	PayPal	Yes	4

**CREDIT\_CARD Details**

Description:

Image:

Payment Processor: BRAINTREE\_CREDIT <BRAINTREE\_CREDIT>

Countries: All

Currencies: All

Customer Groups: All

Min/Max Payment Ranges:   to

Figure 17. Braintree Processor Selected for CREDIT\_CARD Method

**NOTE:** Use only the credit card type IDs shown in Figure 18 (for example, “Amex” rather than “AMEX” or “AmericanExpress”). Otherwise, buyers won’t be able to check out due to Commerce Cloud internal credit card validations.

**CREDIT\_CARD Details**

¥  to   
  
\$  to

**Credit/Debit Cards:**

	Type	Name
1	MasterCard	MasterCard
2	JCB	JCB
3	Maestro	Maestro
4	Master	Master Card
5	Visa	Visa
6	Amex	American Express
7	Master Card	MasterCard
8	Discover	Discover
9	DinersClub	Diners Club International

Figure 18. Credit Card Type IDs

## 5 User Guide

### 5.1 Roles and Responsibilities

PayPal and Braintree introduced no new roles with this integration. You’ll need to update existing roles or create and update new ones if you want to use the

Business Manager extensions, including Braintree Transactions and Braintree Customers.

## 5.2 Business Manager

This integration introduces a new Business Manager function, Braintree Transactions and PayPal style configuration. See the section “Configuration” in this document for a detailed description of how to grant access to the Braintree Transactions, Braintree Customers pages and PayPal styles configuration.

Braintree Transactions extension provides an interface for Braintree transactions management assigned to Commerce Cloud Orders.

Braintree Customers extension provides an interface managing vaulted customers.

PayPal styles configuration extension provide ability to change styling for PayPal buttons enabled on a storefront.

### 5.2.1 Braintree Transactions

The main Braintree Transactions page displays all orders from the Commerce Cloud Site which are authorized by Braintree (See Figure 19). To access this page, select **Merchant Tools > Ordering > Braintree Transactions**.

This page displays various information from the order record:

- Number
- Order Date
- Created By
- Registration Status
- Customer
- Email of Buyer
- Order Total
- PayPal Amount
- PayPal Payment Status

## Braintree Transactions

This page allows you to search for orders which have Braintree transactions by order number. Also there is possibility to search Braintree transaction by id.

### Search Order

*Payment Status and Amounts may take up to an hour to update.  
Please click on an 'Change' button to get actual order details.*

Order Number:

Number	Order Date	Created By	Registration Status	Customer	Email	Order Total	Amount	Risk Status	Payment Status
00004101	4/28/17 3:23 pm	Customer	Unregistered	Buyer PayPalman	dmitry_vigranovsky@epam.com	\$56.69	\$56.69	Approve	Authorized <input type="button" value="Change"/>
00004025	4/27/17 2:38 pm	Customer	Registered	Lys qq	Mary34@gmail.com	\$56.69	\$56.69		<input type="button" value="Create Transaction"/>
00004022	4/27/17 2:17 pm	Customer	Registered	Dmitry Vigranovsky	dmitry_vigranovsky@epam.com	\$56.69	\$56.69		<input type="button" value="Create Transaction"/>
00004021	4/27/17 2:06 pm	Customer	Registered	Lys qq	Mary34@gmail.com	\$218.38	\$218.38		<input type="button" value="Create Transaction"/>
00004020	4/27/17 2:05 pm	Customer	Registered	Lys qq	Mary34@gmail.com	\$207.88	\$207.88		<input type="button" value="Create Transaction"/>
00004019	4/27/17 2:02 pm	Customer	Registered	Lys qq	Mary34@gmail.com	\$94.48	\$94.48		<input type="button" value="Create Transaction"/>
00004018	4/27/17 2:00 pm	Customer	Registered	Lys qq	Mary34@gmail.com	\$218.38	\$218.38		<input type="button" value="Create Transaction"/>
00004017	4/27/17 1:59 pm	Customer	Registered	Lys qq	Mary34@gmail.com	\$269.83	\$269.83		<input type="button" value="Create Transaction"/>
00004016	4/27/17 1:57 pm	Customer	Registered	Lys qq	Mary34@gmail.com	\$155.35	\$155.35	Approve	Authorized <input type="button" value="Change"/>
00004015	4/27/17 1:51 pm	Customer	Registered	Lys qq	Mary34@gmail.com	\$197.38	\$197.38	Approve	Authorized <input type="button" value="Change"/>

Showing 1 - 10 of 161 items.

Show    items

...   >>

[<< Back to Ordering](#)

[New Transaction from Vault](#) [New Transaction](#)

Figure 19. Braintree Transactions Page Interface

You can perform a search for Orders authorized by Braintree, either by Commerce Cloud Order Number or by Braintree Transaction ID, as shown in Figure 20 and Figure 21

## Braintree Transactions

This page allows you to search for orders which have Braintree transactions by order number. Also there is possibility to search Braintree transaction by id.

### Search Order

*Payment Status and Amounts may take up to an hour to update.  
Please click on an 'Change' button to get actual order details.*

Order Number:

Number	Order Date	Created By	Registration Status	Customer	Email	Order Total	Amount	Payment Status
00004606	1/28/16 10:05 am	Customer	Registered	Test5 Testerovich5	t5@test.com	\$229.95	\$229.95	Settled <input type="button" value="Change"/>

Showing 1 - 1 of 1 items.

[<< Back to Ordering](#)

[New Transaction from Vault](#) [New Transaction](#)

Figure 20. Search Orders with Braintree Transaction Associated by Commerce Cloud Order Number

This page allows you to search for orders which have Braintree transactions by order number. Also there is possibility to se

### Search Order

Payment Status and Amounts may take up to an hour to update.

Please click on an 'Change' button to get actual order details.

Transaction ID:

Number	Order Date	Created By	Registration Status
<a href="#">00004606</a>	1/28/16 10:05 am	Customer	Registered

Showing 1 - 1 of 1 items.

[\*\*<< Back to Ordering\*\*](#)

Figure 21. Search Orders with Braintree Transaction by PayPal Transaction ID

To view transaction details from the Braintree Payment Transaction of the actual order, a merchant can click the **Order Number** or **Change** link on the right (see Figure 19). If an order has more than one related transaction, a Transaction Details pop-up window displays all transactions (including refunds) related to the current order (as shown in Figure 22).

**Transactions of order: 00004606**

**Order Number: 00004606**

<b>Customer Name:</b> Test5 Testerovich5
<b>Customer Email:</b> t5@test.com
<b>Shipping Address:</b> Willie L. Perez 3954 Summit Park Avenue, Southfield, MI 48076 United States of America

**Transaction ID: 27658c**

**History** ✓ Transaction 27658c  
Refund jfj64x

<b>Amount:</b> 229.95 USD
<b>Transaction Type:</b> Sale
<b>Order Date:</b> 1/28/16 10:05 am
<b>Payment Status:</b> Settled

**New Transaction** **Clone**

**Transaction History**

Timestamp	Status	Amount
1/28/16 10:05 am	Authorized	229.95
1/28/16 10:05 am	Submitted for settlement	229.95
1/28/16 2:44 pm	Settled	229.95

Figure 22. Transaction Details Pop-up

You can void authorized transactions or submit them for settlement (see Figure 23). Braintree supports multiple settlements. A merchant can perform partial settlements until authorization is fulfilled. To perform multiple partial settlements, the merchant must submit a transaction for settlement (as shown in Figure 24), then use the Transaction Details pop-up to create a new transaction for any further settlements. (See Figure 25.)

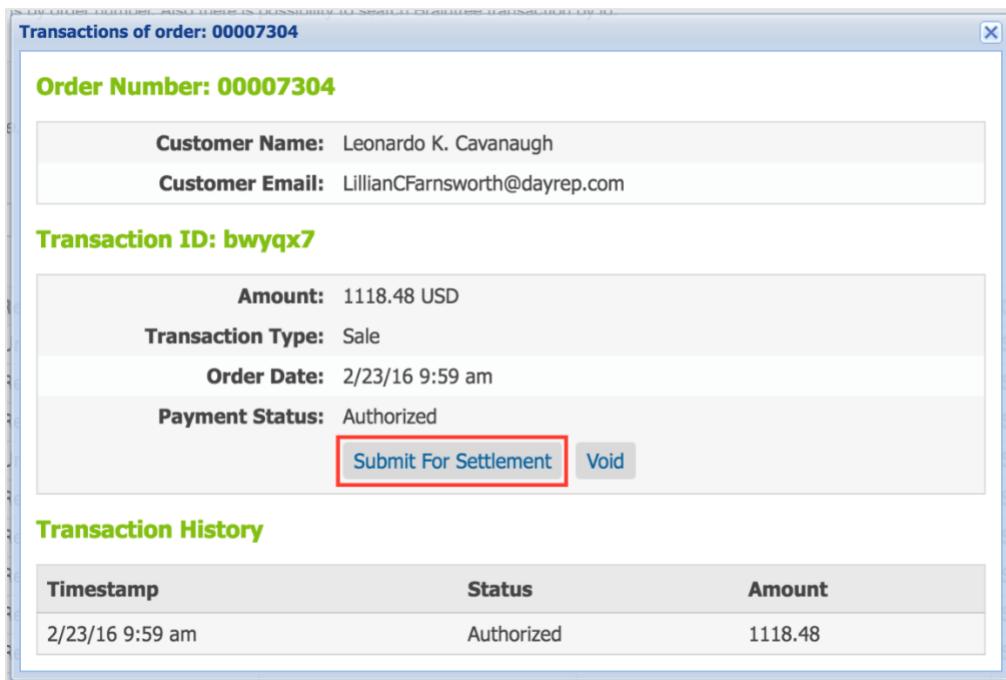


Figure 23. Submit for Settlement Button on Transaction Details Pop-up

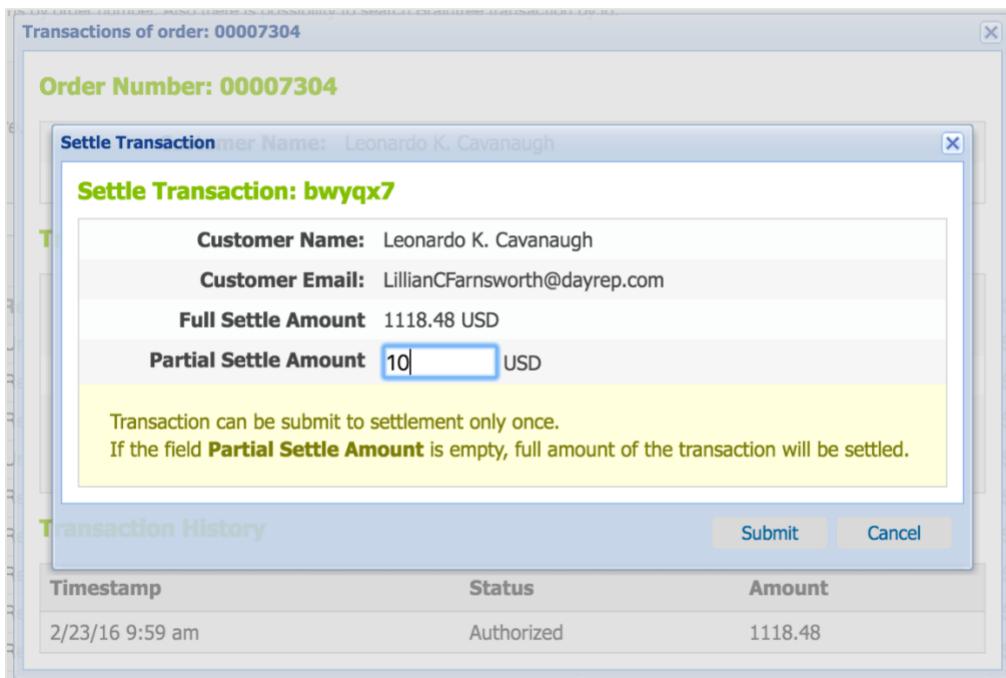


Figure 24. Settle Transaction Option on Transaction Details Pop-up

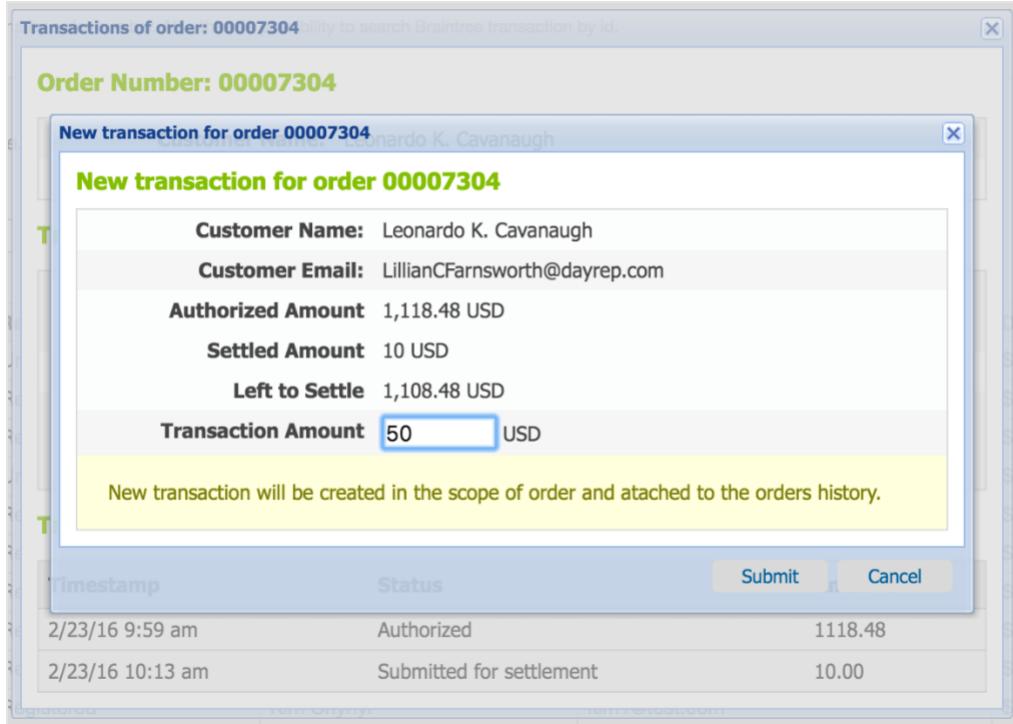


Figure 25. New Transaction (Partial Settlements) Option on Transaction Details Pop-up

All additional transactions will be coupled with the order and listed on the Transaction Details Pop-Up under the History drop-down menu, shown in Figure 26).

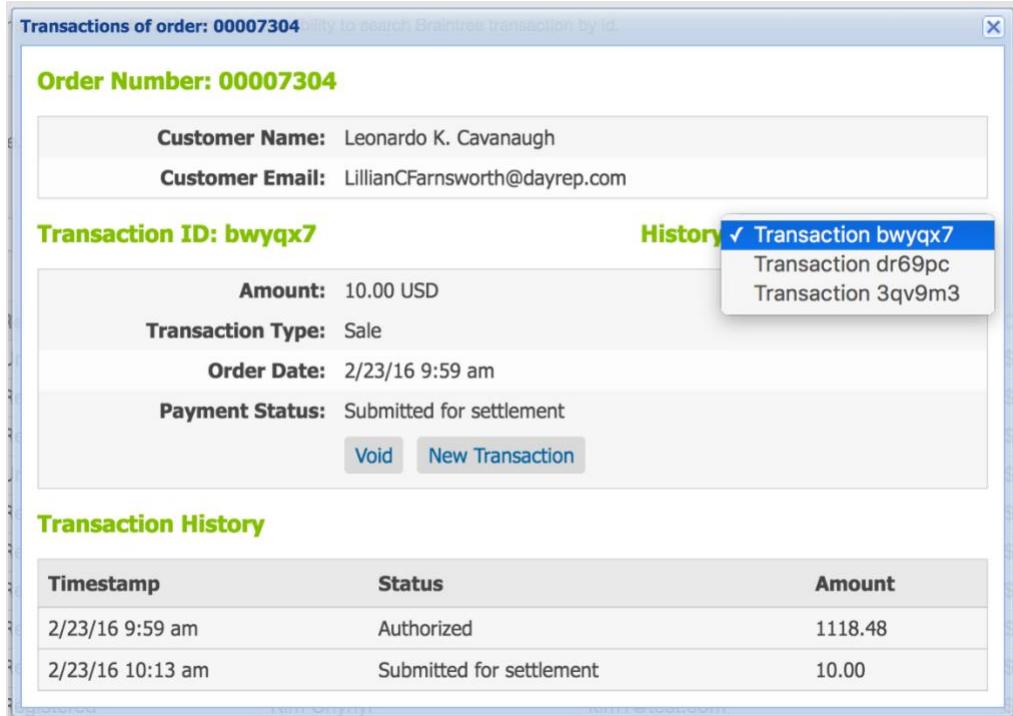


Figure 26. New Transactions History Menu on the Transaction Details Pop-up

A merchant can create a custom transaction that isn't linked with any of the orders from the Transaction List page (shown in Figure 27). If you need to

create a new transaction using the Payment Method token, use the New Transaction from Vault pop-up. (See Figure 29.)

Search Order										<a href="#">By Order Number</a>	<a href="#">By Transaction ID</a>
Payment Status and Amounts may take up to an hour to update. Please click on an 'Change' button to get actual order details.											
Number	Order Date	Created By	Registration Status	Customer	Email	Order Total	Amount	Payment Status	Action		
00007304	2/23/16 9:59 am	Customer	Unregistered	Leonardo K. Cavanaugh	LillianCFarnsworth@dayrep.com	\$1,123.48	\$1,118.48	Authorized	<a href="#">Change</a>		
00007302	2/23/16 8:41 am	Customer	Registered	Kim Chymyr	kim1@test.com	\$59.59	\$59.59	Authorized	<a href="#">Change</a>		
00007301	2/23/16 8:34 am	Customer	Registered	Kim Chymyr	kim1@test.com	\$10.00	\$10.00	Authorized	<a href="#">Change</a>		
00007201	2/22/16 4:03 pm	Customer	Unregistered	Kim Mersen	HermanDDaniel@armyspy.com	\$152.25	\$152.25	Authorized	<a href="#">Change</a>		
00007110	2/22/16 1:04 pm	Customer	Registered	Adam E. Polk	AdamEPolk@inbound.plus	\$48.28	\$48.28	Authorized	<a href="#">Change</a>		
00007105	2/22/16 12:38 pm	Customer	Registered	Adam E. Polk	AdamEPolk@inbound.plus	\$104.98	\$104.98	Authorized	<a href="#">Change</a>		
00007012	2/22/16 10:34 am	Customer	Registered	Peter Llorens	p.lorenstest@gmail.com	\$178.48	\$173.48	Authorized	<a href="#">Change</a>		
00007011	2/22/16 10:33 am	Customer	Registered	Peter Llorens	p.lorenstest@gmail.com	\$156.45	\$156.45	Authorized	<a href="#">Change</a>		
00007010	2/22/16 10:15 am	Customer	Registered	Kim Chymyr	kim1@test.com	\$238.34	\$218.34	Authorized	<a href="#">Change</a>		
00007009	2/22/16 9:55 am	Customer	Registered	Kim Chymyr	kim1@test.com	\$1,511.98	\$1,496.98	Authorized	<a href="#">Change</a>		

Showing 1 - 10 of 318 items.

Show: [50](#) [100](#) [All](#) [Items](#)

[1] [2](#) [3](#) [4](#) [5](#) [6](#) ... [32](#) [Next >>](#)

[New Transaction from Vault](#) [New Transaction](#)

Figure 27. Transaction List with New Custom Transaction Buttons

### New Transaction

**Customer Details:**

First Name:

Last Name:

Billing Postal Code:

Billing Street Address:

Shipping Postal Code:

Shipping Street Address:

**Payment Details:**

Amount:

Tax:

Custom Fields:

Example:customfieldone:value,  
customfieldtwo:value

Card Number:   
Example: 4111111111111111

CVV:

Expiration Date:   
Example: MM/YY

[Submit](#) [Cancel](#)

Figure 28. New Transaction Pop-up

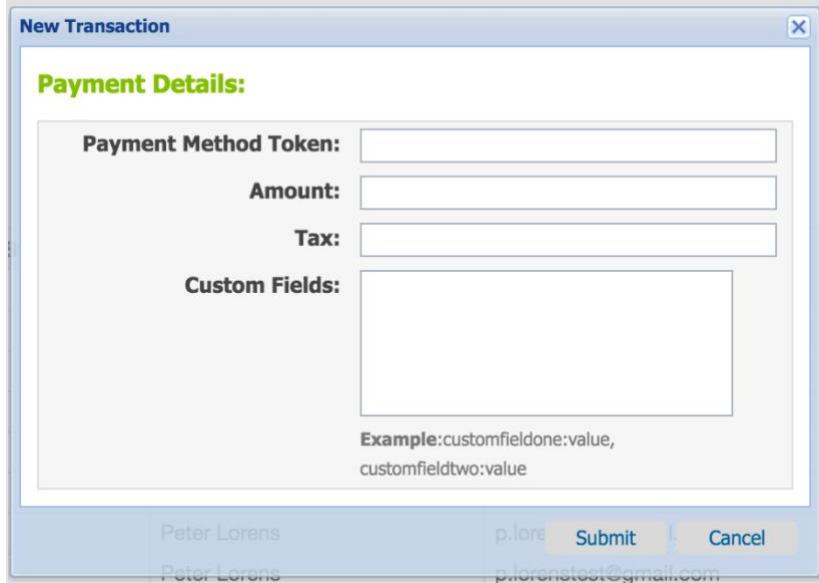


Figure 29. New Transaction from Vault Pop-up

### 5.2.2 Braintree Customers

The Braintree Customers page is part of the `bm_braintree` cartridge, which allows you to manage vaulted Braintree customers linked to Commerce Cloud. The main page (shown in Figure 30) provides a list of customers.

The IDs of all customers vaulted from Commerce Cloud to Braintree will follow the pattern `{SITE_NAME}_{DW_CUSTOMER_ID}`. For example, if your Commerce Cloud customer has ID 00015504 and your site name is SiteGenesis, then the vaulted customer will have the ID `sitegenesis_00015504` in the Braintree Vault.

Customers > Braintree Customers					
Braintree Customers					
This page allows you to look through customers, which used Braintree as a payment method. Also there is possibility to search by customer id or customer's number.					
<b>Search Customer</b>					
Customer Number:	<input type="text"/>	<input type="button" value="Find"/>			
Customer ID	Customer Number	Customer	Email	Vault Details	
sitegenesis_00000001	D00000001	Test1 User1	testuser1@demandware.com	<a href="#">View</a>	
sitegenesis_00018503	00018503	Priscilla Lorens	k3@test.com	<a href="#">View</a>	
sitegenesis_00018018	00018018	Test Test	test@test.com	<a href="#">View</a>	
sitegenesis_00017500	00017500	Adam E. Polk	AdamEPolk@inbound.plus	<a href="#">View</a>	
sitegenesis_00016500	00016500	Cheryl T. Nathan	CheryTNathan@dayrep.com	<a href="#">View</a>	
sitegenesis_00015504	00015504	Denys Lieu	denys_lieu@epam.com	<a href="#">View</a>	
sitegenesis_00015503	00015503	Peter Lorens	kim48@test.com	<a href="#">View</a>	
sitegenesis_00015502	00015502	Peter Paskuda	kim3@test.com	<a href="#">View</a>	
sitegenesis_00015004	00015004	Kim Mersen	kim2@test.com	<a href="#">View</a>	
sitegenesis_00015003	00015003	Kim Chynyr	kim1@test.com	<a href="#">View</a>	
Showing 1 - 10 of 53 items.					
Show <a href="#">50</a> <a href="#">All</a> Items					
<a href="#">1</a> <a href="#">2</a> <a href="#">3</a> <a href="#">4</a> <a href="#">5</a> <a href="#">6</a> <a href="#">Next &gt;&gt;</a>					
<a href="#">Vault Existing Customer</a> <a href="#">New Customer</a>					

Figure 30. Vaulted Customers List

To view customer information, click the **View** link on the right side of the customer record row. (See Figure 31.) On the Customer Details page, you can perform various actions on a customer record in the Vault:

- Add a payment method to a customer record (Figure 32 and Figure 33).
- Edit customer details (Figure 34).

- Look up payment method details (Figure 35).
- Edit a payment method (Figure 36).

**Customer Details**

**Customer ID : sitegenesis\_00015504**

<b>First Name:</b> Denys	<b>Last Name:</b> Lieu	<b>Email:</b> denys_lieukhyn1@epam.com	<b>Phone:</b> 333-333-3333	<b>Fax:</b>
<b>Website:</b>				
<b>Company:</b>				
<b>Created At:</b> 2/16/16 4:21 pm				
<b>Updated At:</b> 2/16/16 4:34 pm				

**Payment Methods:**

Token	Payment Method	Created At	Actions	Default
fc3h3b	Visa 411111****1111	2/16/16 4:37 pm	Show Details Edit Remove	<input type="radio"/>
db3g3w	Visa 411111****1111	2/16/16 4:34 pm	Show Details Edit Remove	<input checked="" type="radio"/>

**Addresses**

Address ID	Created At	Updated At	Address
xm	2/16/16 4:30 pm	2/16/16 4:31 pm	Dennis55555 Lieukhyn55555 11 Laso 1 Flagstaff, AL 86001 United States of America
8r	2/16/16 4:33 pm	2/16/16 4:33 pm	Denys Lieu 2222 Test 1 Flagstaff, AR 86001 United States of America
vs	2/16/16 4:34 pm	2/16/16 4:34 pm	Denys Lieu 2222 Test 1 Flagstaff, AR 86001 United States of America
rq	2/16/16 4:36 pm	2/16/16 4:36 pm	Denys Lieu 2222 Test 1 Flagstaff, AR 86001 United States of America
4z	2/16/16 4:37 pm	2/16/16 4:37 pm	Denys Lieu

Figure 31. Customer Details Page

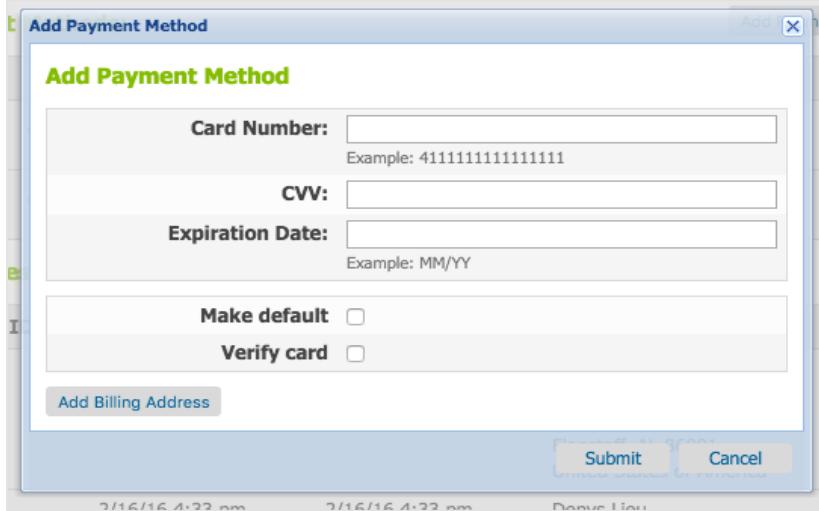


Figure 32. Add Payment Method to Customer

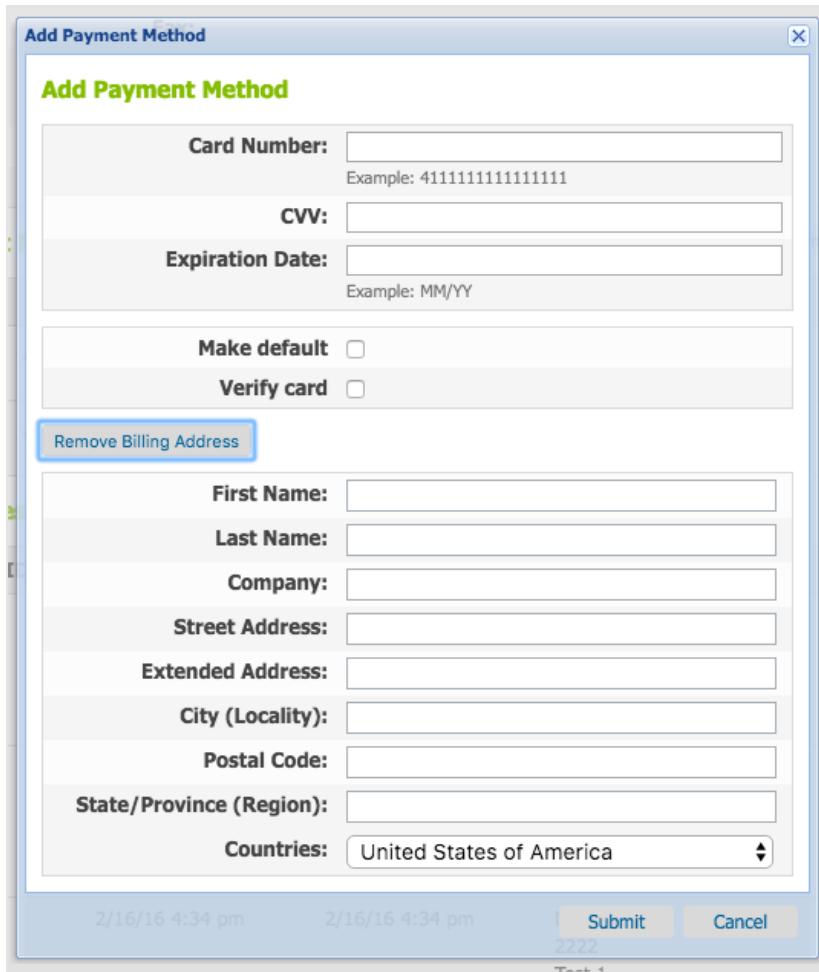


Figure 33. Add Payment Method to Customer and Billing Address

**Customer Details**

**Customer ID : sitegenesis\_00015504**

First Name:	Denys
Last Name:	Lieu
Email:	denys_lieukhyn1@epam.com
Phone:	333-333-3333
Fax:	
Website:	
Company:	

**Payment Methods:**

**Add Payment Method**

Figure 34. Edit Customer Details

**Payment Method Details**

**Payment Method Details**

<b>Card Type:</b>	Visa
<b>Credit Card Number:</b>	411111****1111
<b>Credit Card Unique Identifier:</b>	64d1230ad1f996b6442b1727a63e7a93
<b>Expiration Date:</b>	12/2025
<b>Created On:</b>	2016-02-16T16:37:21Z
<b>Default:</b>	No
<b>Customer Location:</b>	US

**Billing Address**

<b>First Name:</b>	Denys
<b>Last Name:</b>	Lieu
<b>Company:</b>	
<b>Street Address:</b>	Test 1
<b>Extended Address:</b>	2222
<b>City (Locality):</b>	Flagstaff
<b>Postal Code:</b>	86001
<b>State/Province (Region):</b>	AR
<b>Country Name:</b>	United States of America

United States of America  
2/16/16 4:34 pm      2/16/16 4:34 pm      **Edit** Denys Lieu      **Cancel**

Figure 35. Look up Payment Method Details

**Edit Payment Method**

**Edit Payment Method**

<b>Card Number:</b>	411111****1111
Example: 4111111111111111	
<b>CVV:</b>	
<b>Expiration Date:</b>	12/2025
Example: MM/YY	
<b>Make default</b> <input type="checkbox"/>	
<b>Verify card</b> <input type="checkbox"/>	
<a href="#">Remove Billing Address</a>	
<b>First Name:</b>	Denys
<b>Last Name:</b>	Lieu
<b>Company:</b>	
<b>Street Address:</b>	Test 1
<b>Extended Address:</b>	2222
<b>City (Locality):</b>	Flagstaff
<b>Postal Code:</b>	86001
<b>State/Province (Region):</b>	AR
<b>Countries:</b>	United States of America <input type="button" value="▼"/>

2/16/16 4:34 pm      2/16/16 4:34 pm      [Submit](#)      [Cancel](#)

Figure 36. Edit Payment Method

#### 5.2.3 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.

Depends on buttons locations styling will be available for pdp/mini-cart/cart/billing pages (Figure 37). To read more about styling options visit [Customize the PayPal Buttons](#). After configuration done click **Save Smart Button Configuration** to update styling.



Figure 37. PayPal Styles Configuration view

### 5.3 Storefront Functionality

The Braintree integration introduces two new features to Salesforce Commerce Cloud Store Front Reference Architecture (SFRA) storefront: Braintree hosted fields for credit card processing, and storage and use of payment methods from the Braintree Vault. The Billing page displays the hosted fields during checkout. (See Figure 38.)

The screenshot shows a payment form titled "Payment". At the top, there's a section for "Billing Address" with a dropdown menu showing "Denys Makovii 2259 Oak Street Old Forge NY 13420". Below it are buttons for "Update Address" and "Add New". There are two tabs: "CREDIT" (selected) and "PayPal". The main area contains fields for "Email" (with an info icon), "Name on Card", "Card Number" (with an example of 4111111111111111), "CVV" (with an example of MM/YY), and "Expiration Date". A "Next: Place Order" button is at the bottom.

Figure 38. Billing Page with Braintree Hosted Fields for Guest Checkout

These fields are form fields hosted on Braintree, which are useful for PCI compliance. Commerce Cloud stores no sensitive credit card data; this information is handled only on Braintree. If the buyer has logged in and “Store Payment Method in Vault” in Site Preferences is set to **Vault always** or **Vault on Success**, the customer can save their credit card data and make it the default payment method. (See Figure 39.) This card will be tokenized on Braintree, and Commerce Cloud will store a Payment Method token for future payment actions.

Payment

Billing Address

Denys Makovii 2259 Oak Street Old Forge NY 13420

[Update Address](#) [Add New](#)

 CREDIT 

\* Name on Card

\* Card Number  
  
Example: 4111111111111111

\* CVV

\* Expiration Date  
  
Example: MM/YY

Save this card  
 Make default

[Next: Place Order](#)

Figure 39. Billing Page with “Save this card” and “Make default” Options Selected

If a customer is logged in and their profile includes saved credit cards, these cards will be displayed in the Select a Credit Card drop-down list. The customer can then choose a card to pay for their transaction. (See Figure 40 and Figure 41.)

Payment

Billing Address

Denys Makovii 2259 Oak Street Old Forge, NY 13420

[Update Address](#) [Add New](#)

Select a Credit Card

Visa \*\*\*\*1111 04/2020 Denys Makovii

\* Name on Card  
Denys Makovii

\* Card Number  
\*\*\*\*\*1111

Example: 4111111111111111

\* CVV  
\*\*\*

\* Expiration Date  
04/2020

Example: MM/YY

Make default

[Next: Place Order](#)

Figure 40. Billing Page with Braintree Hosted Fields for Logged-in Customer Checkout

Payment

Billing Address

Denys Makovii 2259 Oak Street Old Forge, NY 13420

[Update Address](#) [Add New](#)

 CREDIT 

Select a Credit Card

New Card

✓ Visa \*\*\*\*1111 04/2020 Denys Makovii  
Amex \*\*\*\*0005 12/2022 Denys Makovii

\* Name on Card

Denys Makovii

\* Card Number

\*\*\*\*\*1111

Example: 4111111111111111

\* CVV

\*\*\*

\* Expiration Date

04/2020

Example: MM/YY

Make default

[Next: Place Order](#)

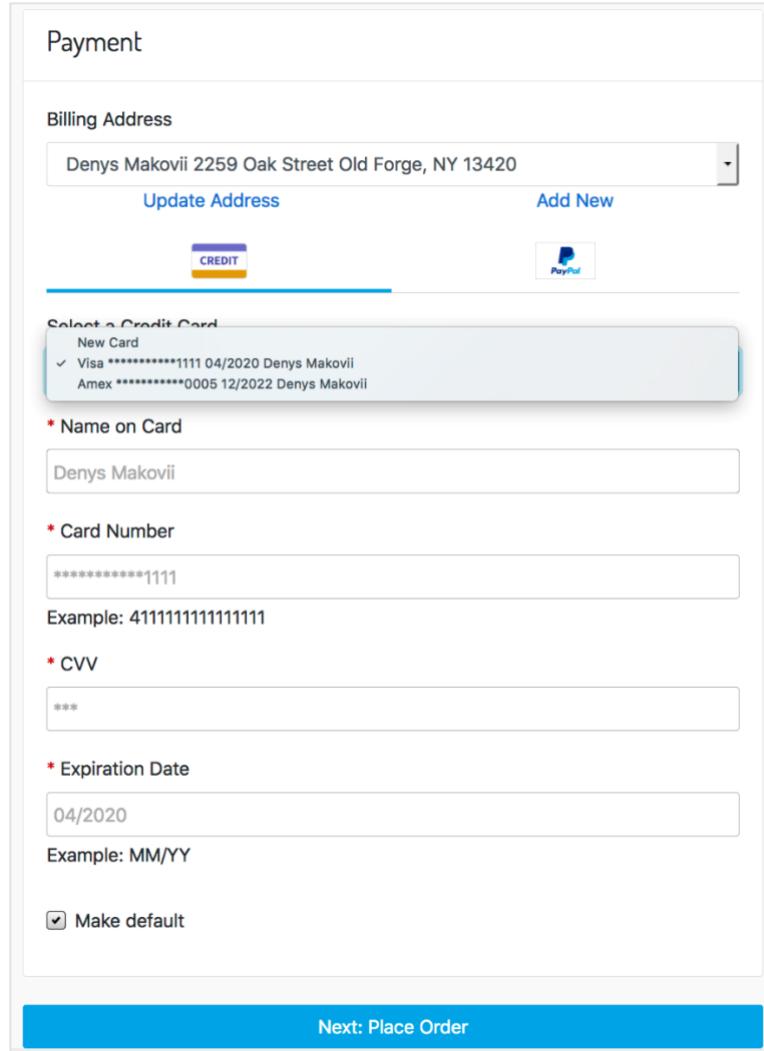


Figure 41. Billing Page with Multiple Saved Cards

This integration extends My Account Payment Methods functionality to work with the Braintree Vault. A customer can add or delete credit cards in the Braintree Vault.

Home / My Account

## Credit Cards

Denys Makovii (default)	
Credit Visa *****1111 Ending 4/2020	X

Denys Makovii	
Credit Amex *****0005 Ending 12/2022	X

[Back to My Account](#) [Add New Card](#)

## PayPal accounts

[Back to My Account](#) [Add New PayPal account](#)

Figure 42. My Account / Payment Settings Page with Braintree Payment Methods List

## Payment

[View](#)

Denys Makovii
Credit Visa
*****1111
Ending 4/2020

[Add New Card](#)

[Add New PayPal account](#)

Figure 43. Braintree / PayPal Saved Payment Method (on My Account / Payment Settings Page)

Add Credit Card

\* Name on Card

\* Card Number

Example: 4111111111111111

\* CVV

\* Expiration Date

Example: MM/YY

Make default payment

[Cancel](#) [Save](#)

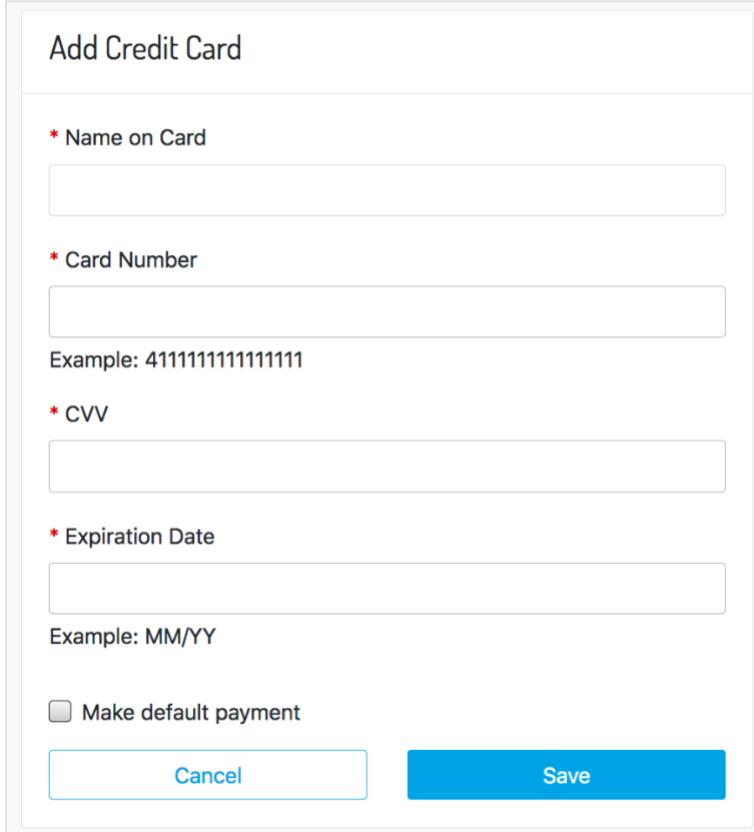
A screenshot of a Braintree-hosted credit card form. It consists of several input fields with placeholder text and validation examples. At the bottom are 'Cancel' and 'Save' buttons.

Figure 44. Braintree Hosted Fields in Add a Credit Page

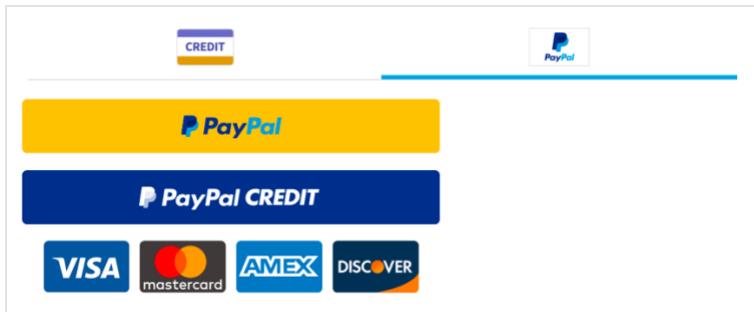


Figure 45. Braintree PayPal Functionality on the Checkout / Payment Methods Page

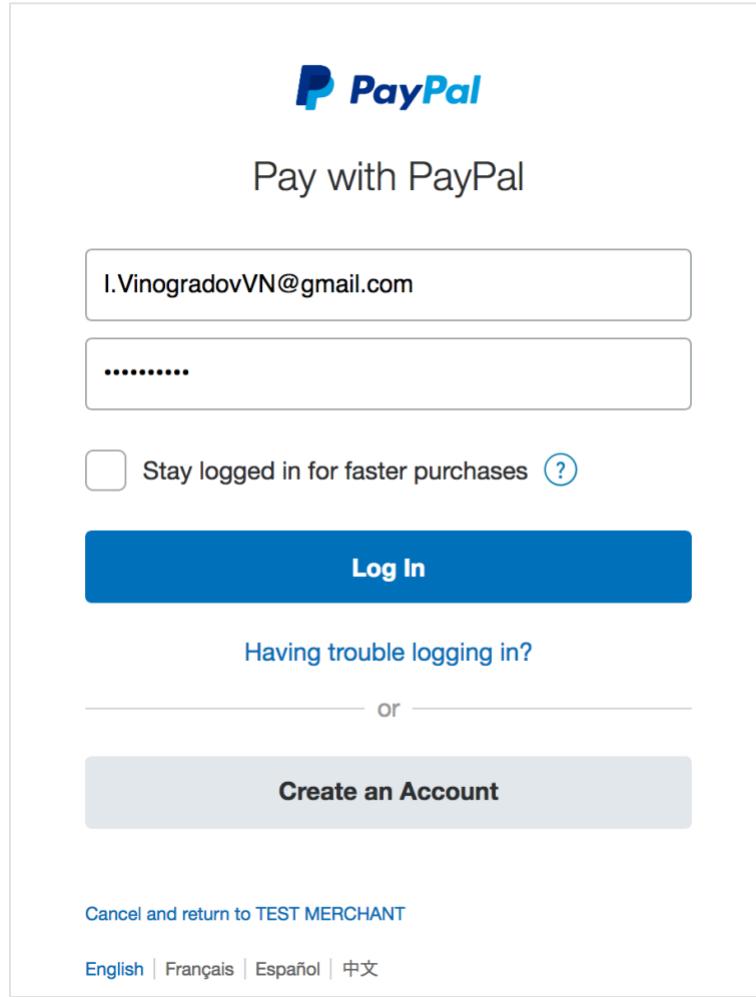


Figure 46. Braintree PayPal Payment Page

# Your Cart

[Continue Shopping](#)

1 Items

Need Help? Call [1-800-555-0199](#)

## Refined Denim Pants



Color: Indigo  
Size: 28  
In Stock  
[Edit](#) [Add to](#)  
[Wishlist](#)

Each  
**\$195.00**

Quantity

1 ▾

Total

**\$195.00**

X

Enter Promo Code

Promo Code

**Submit**

Shipping

Ground ( 7-10 Business Days ) ▾

Shipping cost **\$7.99**

Sales Tax **\$10.15**

**Estimated Total** **\$213.14**

**PayPal**



**Checkout**

Figure 47. Braintree PayPal Functionality on the Cart Page

The screenshot shows a mobile shopping cart page with the following details:

- Cart Summary:** 2 Items
- Items:**
  - 3/4 Sleeve V-Neck Top:** Grey Heather, Size L, In Stock. Price: \$24.00 (Quantity: 1, Total: \$24.00). Includes "Edit" and "Add to Wishlist" links.
  - Light Hematite Button Clip-on Earrings:** Color: Hematite, In Stock. Price: \$18.00 (Quantity: 1, Total: \$18.00). Includes "Edit" and "Add to Wishlist" links.
- Shipping:** Ground (7-10 Business Days) - \$15.99
- Taxes:** Sales Tax - \$2.90
- Total:** Estimated Total - \$60.89
- Payment Options:** PayPal, VISA, Mastercard, AMEX, Discover, Buy with Apple Pay
- Checkout:** A large blue button at the bottom right.
- Footer:** Links to Locate Store, Account (My Account, Check Order, Wish List), Customer Service (Contact Us, Gift Certificates, Help), and About (About Us, Privacy, Terms).

Figure 48. Braintree Apple Pay Functionality on the Cart Page

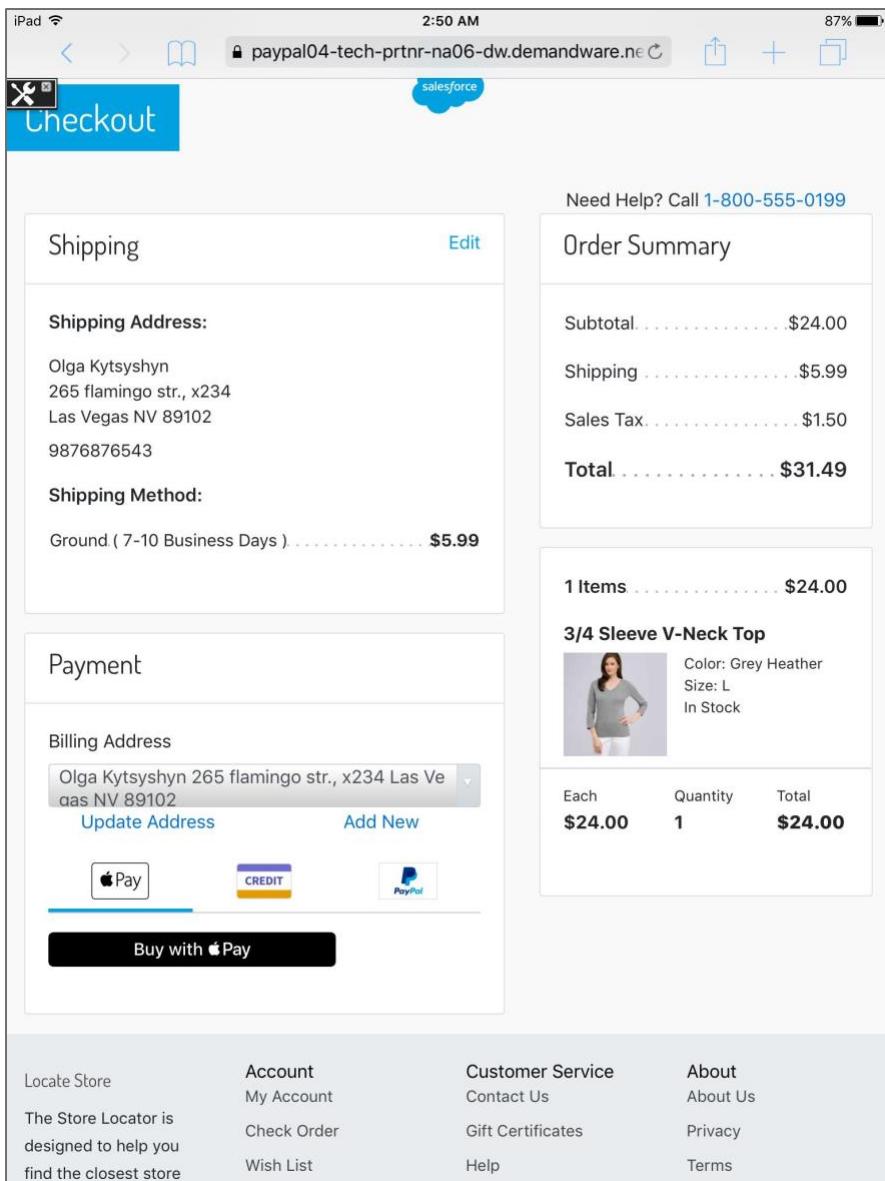


Figure 49. Braintree Apple Pay Functionality on the Checkout / Payment Methods Page

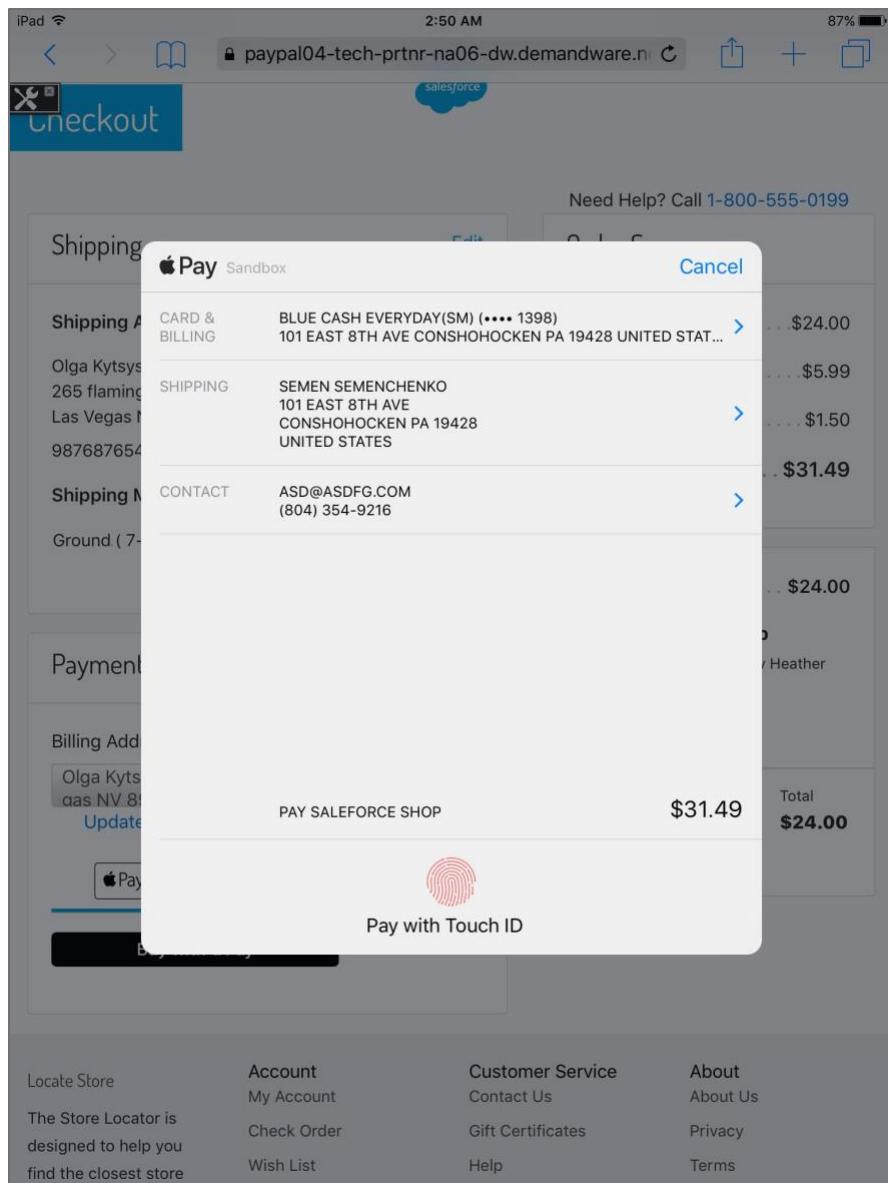


Figure 50. Apple Pay Popup

Total items 1      Total \$430.48

Payment

dfgdfg  
Credit Visa  
\*\*\*\*\*1111  
Ending 1/2022

privalia.mp.dev-buyer-01@privalia.com

Venmo-Joe-1

[Manage Payment Methods](#)

Locate Store

PayPal accounts

privalia.mp.dev-buyer-01@privalia.com (default)

Back to My Account

Add New PayPal account

Venmo accounts

Venmo-Joe-1 (default)

Back to My Account

Add New Venmo account

Locate Store

Account

EE 2-Day SHIPPING FOR ORDERS OVER \$300

salesforce

Search (keywords,etc)

Payments

Add Venmo account

venmo

Ebam-Testing

Make default payment

Cancel      Save

Figure 51. Venmo My Account section

9:55      06-dw.demandware.net

\*Email      \*Phone Number  
9876543210

CREDIT      PayPal      venmo

Order Summary

Subtotal ..... \$199.99

Shipping ..... \$7.99

Sales Tax ..... \$10.40

10:02

Payment      Edit

Billing Address:  
Joy Graham  
473 Wisemen Street  
Sevierville TN 37862  
Polkskoi.st@gmail.com  
9876543210

Payment:  
Venmo  
\$218.38

Order Summary

Subtotal ..... \$199.99

Shipping ..... \$7.99

Place Order

Figure 53. Venmo on checkout

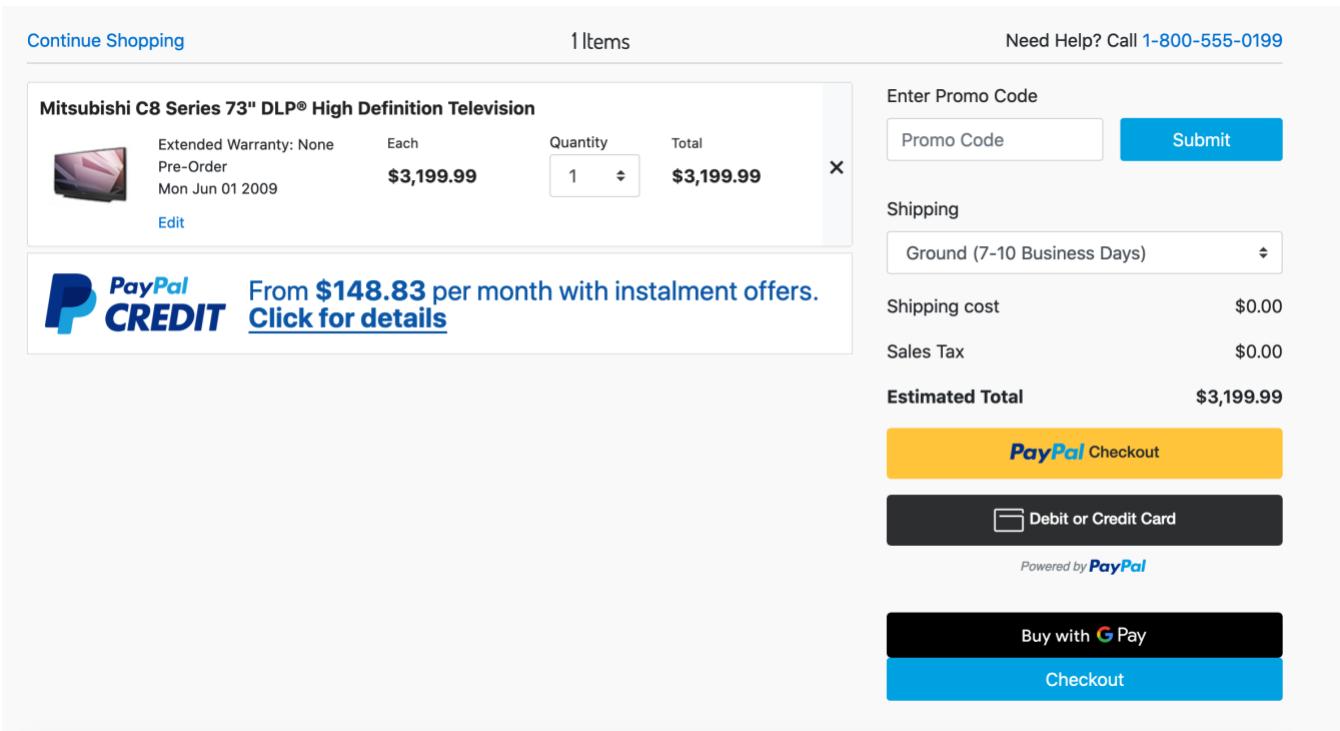


Figure 52. Google Pay button on Cart page

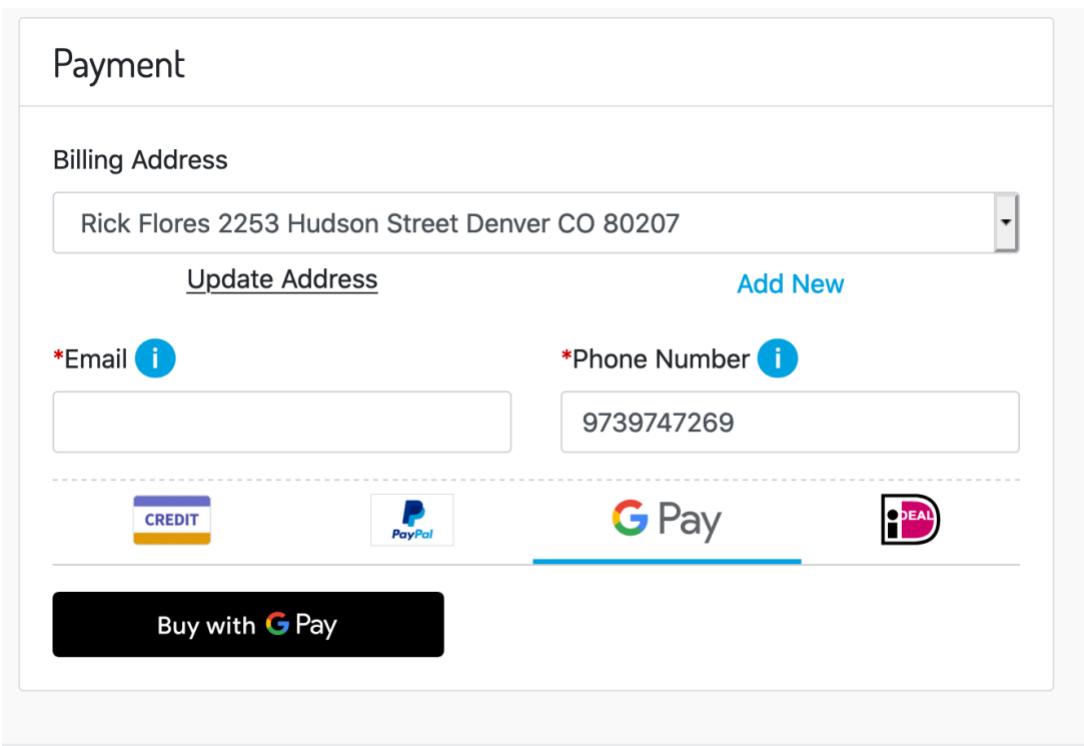


Figure 53. Google Pay Button on Billing page

## No saved Credit Cards

[Back to My Account](#)[Add New Card](#)

## PayPal accounts

I.VinogradovVN@gmail.com  
(default)

x

[Back to My Account](#)[Add New PayPal account](#)

## No saved Venmo accounts

[Back to My Account](#)[Add New Venmo account](#)

## Google Pay account

MasterCard 7497

x

[Back to My Account](#)[Add New Google Pay account](#)

Figure 54. Saved credit card from Google Pay in My Account

#### 5.3.1 Local payment methods

Business logic of local payment methods is different from other payment methods. Order will be placed immediately after customer confirm transaction in pop-up window (Figure 56) or app on a phone.

To help customer there is small notification in the payment tab (Figure 55). This text coming from resource file (*braintree.checkout.lpm.tabmessage* property) and can be changed according to customers locale.

If payment failed or customer didn't confirm a transaction no failed order record will be created, and customer basket will be open so customer can choose another payment method or try again.

**Pagamento**

Indirizzo di fatturazione

Rick Flores 2253 Hudson Street Denver BC 80207

[Aggiorna indirizzo](#) [Aggiungi nuovo](#)

\*E-mail [i](#) \*Numero di telefono [i](#)

3cd3ldtkdii@iffymedia.com 9739747269

CREDIT PayPal Sofort. MyBank

Your order will be placed immediately after return to the storefront.

[MyBank](#)

Figure 55. Local payment method notification



Figure 56 Local payment pop-up

custom presentation of Credit options.

---

## 6 Level 2 and 3 processing

### 6.1 Overview

Starting from 19.1.2 version Braintree cartridge supports Level 2 and Level 3 data for Apple Pay and Credit Cards payments and Level 2 data for PayPal payments.

### 6.2 Configuration

In Business Manager navigate to Merchant Tools -> Custom Preferences -> BRAINTREE\_COMMON and set Level 2 and 3 Processing preferences to Yes.

Some fields required configuration on code-level, and some are supported out of the box.

#### L2 Fields

Tax amount: Passed

Purchase Order Number: **Not passed**

#### L3 Fields

Shipping Amount: Passed

Discount Amount: Passed

Ships From Postal Code: **Not passed**

Shipping.

- Postal Code: Passed
- Country Alpha 3: Passed (see notes below)

#### Line Items

- Name: Passed
- Kind: Passed
- Quantity: Passed
- Unit Amount: Passed
- Unit of Measure: **Not passed**
- Total Amount: Passed
- Tax Amount: Passed
- Discount Amount: Passed
- Product Code: Passed
- Commodity Code: **Not passed**

Unit of measure and commodity code can be configured on product level in Business Manager. In product configuration page in General tab find Braintree Level3 line items group and add values to inputs.

Ships from postal code and purchase number has to be added on code level at braintreeApi.js at line 266 and line 277.

For Apple Pay and PayPal when checkout comes not from billing page - Country Alpha 3 will be passed only for cases when customers shipping country matches customer locale in SFCC. Review section multi-location support for more details

---

## 7 Multi-location addresses support

### 7.1 General info

Out of the box Braintree using build in SFRA core location support for checkout from billing page.

For checkout from pdp/minicart/cart using Apple Pay or PayPal cartridge doesn't provide any validation for addresses that was received from PayPal or Apple pay. Addresses will be mapped to Shipping or Billing address in Order automatically.

---

## 8 Multi-brand support

### 8.1 General info

Braintree cartridges doesn't come with multi-brand support out of the box.

On service level build in logic will use only int\_braintree.http.xml.payment.Braintree service and credential attach to the service to communicate Braintree API.

---

## 9 Version and SFRA Support Info

### 9.1 JavaScript Files and Cartridge Version Locations

The JavaScript files to be add to your page are located at:

int\_braintree/cartridge/config/braintreePreferences.js

The file with the current version of the Braintree cartridge is located at:

int\_braintree/cartridge/templates/resources/braintree\_version.properties

The file with the current version of the SFRA cartridge is located at:

app\_storefront\_base/cartridge/templates/resources/version.properties

## 9.2 SFRA Versions Support

Braintree cartridge version 20.2.2 supports SFRA 5.1.0 only

## 9.3 Compatibility Mode

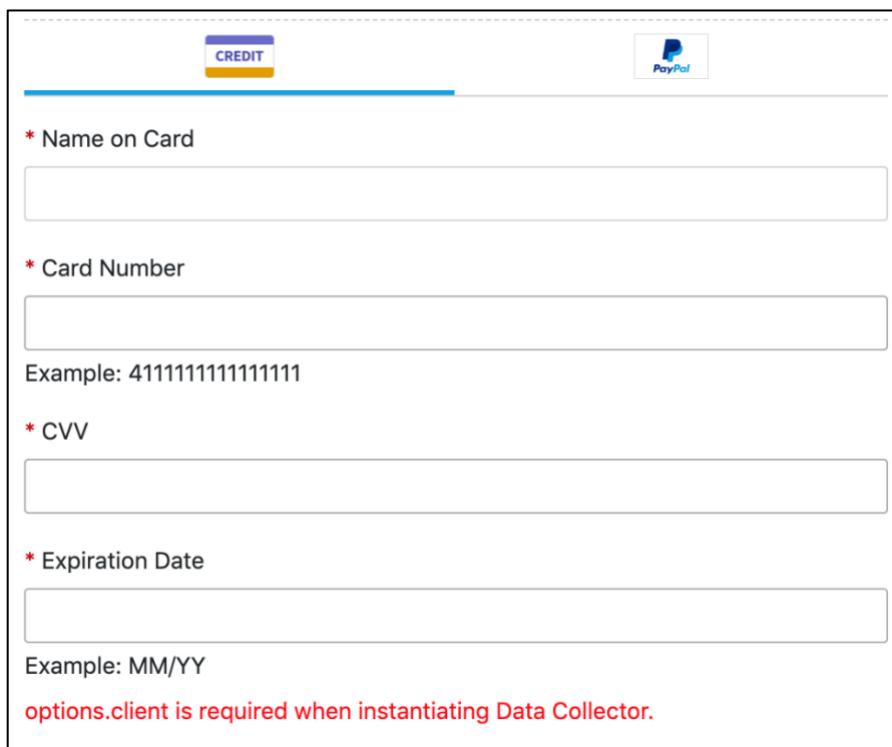
Cartridge tested with Compatibility Mode 18.10

---

# 10 Service Errors Handling

## 10.1 Service Timeout Handle

If a Braintree service becomes unavailable, the customer will see errors on the card or payment page.



The screenshot shows a payment form with fields for Name on Card, Card Number, CVV, and Expiration Date. Above the form, there are 'CREDIT' and 'PayPal' logos. Below the fields, there is sample card number and expiration date information. A red error message at the bottom states: 'options.client is required when instantiating Data Collector.'

\* Name on Card

\* Card Number

Example: 4111111111111111

\* CVV

\* Expiration Date

Example: MM/YY

options.client is required when instantiating Data Collector.

Figure 57. Hosted Fields Error

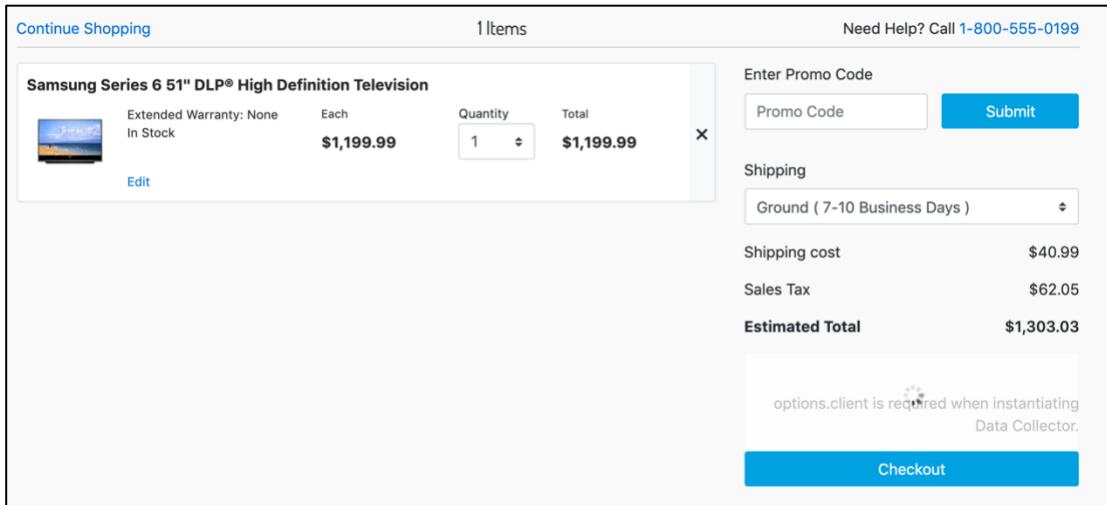


Figure 58. PayPal button didn't render due to service error

Depending on the error type, details can also be found in the logs with the `custom-Braintree` and `service-Braintree` prefix. For more details, please see [Section Error! Reference source not found.](#), “[Error! Reference source not found..](#)”

## 10.2 Handling Error Service Response

If unexpected error occurs while processing transaction, a customer will see a message (Figure 59):

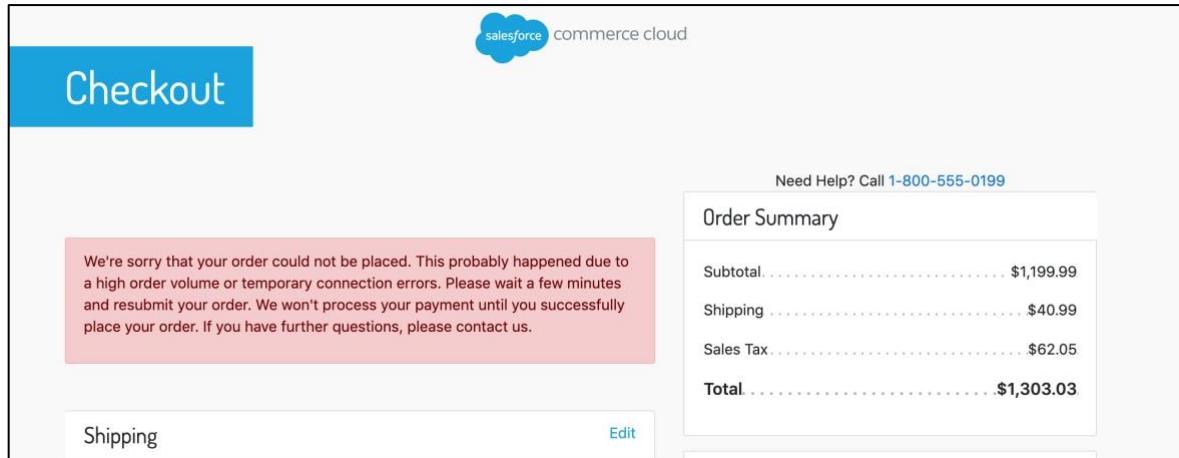


Figure 59. Transaction Error Message

If there was a response from Braintree there is 3 use cases

- 1) If declined response with status code starting form 2 comes from Braintree side, customer will be redirected to a billing page with message:

*There was a problem processing your payment. Please verify your payment information and try again.*

For more information about response code please review [Declines](#).

- 2) If declined response with status code 3000 comes from Braintree side, customer will be redirected to a billing page with message:  
*Network error, please try again later*
- 3) If declined response with status code 91540 comes from Braintree side, customer will be redirected to a billing page with message:  
 There was a problem processing your payment. Please re-enter your payment information and try again.
- Error details can be found in the log with the **custom-Braintree** prefix and in failed order details (Figure 60). Service request/response details can be found in the log with the **service-Braintree** prefix.

Merchant Tools > Ordering > Orders > Order: 00028303(SiteGenesis)

General Attributes Payment Notes History

**Payment Information for Order '00028303'**

Order Total:	\$1,986.59
Amount Paid:	\$0.00
Balance Due:	\$1,986.59
Invoice Number:	
Payment Status:	Not Paid
Payment Method:	CREDIT_CARD Processor: BRAINTREE_CREDIT Transaction: Amount: \$1,986.59
Billing Address:	Rick Flores 2253 Hudson Street Denver CO 80207 us
Braintree Payment Method Nonce Unknown or expired payment_method_nonce. Braintree Order Fail Reason: Unknown or expired payment_method_nonce. Braintree 3D secure is required: false	

[Print Invoice](#)

Figure 60. Error Details

**NOTE:** For fallback / recovery: If you continue to see issues where the Braintree Hosted Fields (credit card fields) are invoking errors, or the PayPal or PayPal Credit buttons and/or experiences are not rendering or if you are seeing general 401 errors in the logs, please contact your Braintree rep or file a support case so that we may investigate this further. These orders will not be sent to or processed by Braintree. Please note that when contacting Braintree, we may ask for details that may need to be extracted from the logs as well as assistance with reproducing the issue step by step.

## 11 Automated Testing

Cartridge has unit, integration and function tests included in the repository.

Please use instructions described in the `test/unit/README.md`, `test/integration/README.md`, and `test/acceptance/README.md` files in the repository to configure and run tests.

## 12 Known Issues

### 12.1 Missing Email Filed in the Credit Card Form

In SFRA 3.6.0, a new contact information form was added to the billing page with phone and email fields. To avoid duplication in Braintree cartridge version 18.2.1, the email field was removed from the credit card form.

To fix this, the field reference must be changed from:

```
billing.creditCardFields.email
```

to

```
billing.contactInfoFields.email
```

UI Reference:

The screenshot displays the Braintree Payment interface. At the top, it says "Payment". Below that is a "Billing Address" section with a dropdown menu showing "Rick Flores 2253 Hudson Street Denver NJ 80207" and buttons for "Update Address" and "Add New". Underneath is a "CREDIT" button and a "PayPal" button. The main form area contains several input fields: an "Email" field with a blue info icon, a "Name on Card" field, a "Card Number" field with an example value "4111111111111111", a "CVV" field, and an "Expiration Date" field with an example value "MM/YY".

Figure 61. Before SFRA 3.6.0

**Payment**

Billing Address

Rick Flores 2253 Hudson Street Denver NJ 80207

[Update Address](#) [Add New](#)

\*Email [i](#) \*Phone Number [i](#)

973-974-7269

CREDIT  PayPal 

\* Name on Card

\* Card Number  
  
Example: 4111111111111111

\* CVV

\* Expiration Date  
  
Example: MM/YY

Figure 62. After SFRA 3.6.0