PayFast

PayFast Checkout comes with everything you need to create the best online shopping experience for your customers. PayFast is a **PCI/DSS** certified processor of online transactions for VISA, Mastercard, PayPak, and UnionPay, and a PSO/PSP approved licensed entity by the **State Bank of Pakistan (SBP)**.

Through our Web-checkout, PayFast always prioritizes giving end users a smooth and seamless payment experience. We also constantly work to improve the service and provide new payment alternatives based on customer demand.

Google Pay™ Integration Guide

About Google Pay

Google Pay is a fast and simple payment method that allows you to make card payments without entering card details for each payment. The card data is safely stored by Google. This payment method is available for all devices (mobile phones and computers), regardless of the operating system and web browser.

PayFast provides Google Pay as the payment option on Web Checkout, making it more convenient for your clients to pay on your website.

Terms and Conditions

All merchants must adhere to the Google Pay APIs [Acceptable Use Policy](#) and accept the terms defined in the [Google Pay API Terms of Service](#).

Pre-requisite

PayFast is a payment gateway service provider; only the Partners/Merchants can access checkout, since we have integration with Google Pay, so it is easily available for PayFast's Partners/Merchants.

To become a PayFast Partner/Merchant, you must sign up on the link below and complete an onboarding application.

https://gopayfast.com/get-started/

Once Partner/Merchant completes the Onboarding application, they can generate their Partner/Merchant ID and secure key from the PayFast System.

Important Google Pay API Configuration

When implementing Google Pay with PayFast as the payment gateway, please ensure the following configuration within your Google Pay API integration:

1. Gateway and gatewayMerchantID

In your Google Pay API payment data request, set the `gateway` to `"gopayfastuat"` and the `gatewayMerchantId` to your assigned PayFast Merchant ID.

Replace `YOUR_PAYFAST_MERCHANT_ID` with the actual Merchant ID provided by PayFast after onboarding.

2. Allowed Authorization Methods

PayFast supports the following authorization methods for Google Pay:

1. PAN_ONLY
2. CRYPTOGRAM_3DS

Both `PAN_ONLY` (plain card number) and `CRYPTOGRAM_3DS` (tokenized cards) are supported for transactions processed via Google Pay and PayFast.

- `PAN_ONLY`: This authentication method is associated with payment cards stored on file with the user's Google Account. Returned payment data includes personal account number (PAN) with the expiration month and the expiration year.
- `CRYPTOGRAM_3DS`: This authentication method is associated with cards stored as Android device tokens. Returned payment data includes a 3-D Secure (3DS) cryptogram generated on the device.

Ensure your integration includes both methods for maximum compatibility.

Integration

To integrate with PayFast and avail the option of Google Pay, we need to perform below steps:

1. Get Access Token via API Call
2. Redirect to Web Checkout via Form Post.

Get Access Token via API Call

The API must be called from the backend server, and this API will return an access token in an encrypted form, e.g., "Xw2_GCN9-zWSEBJoNTPBjzNquq9DcR2RXu3ieaYpDv8". The integrator must save the access token; the API request/response is given below.

URL: https://ipguat.apps.net.pk/Ecommerce/api/Transaction/GetAccessToken

URL	https://ipguat.apps.net.pk/Ecommerce/api/Transaction/GetAccessToken
Method	POST
Parameters	MERCHANT_ID (Mandatory)
	SECURED_KEY (Mandatory)
	BASKET_ID (Mandatory)
	TXNAMT (Mandatory)
	CURRENCY_CODE (Mandatory)
Response Type	JSON

Response	{
	  "MERCHANT_ID":"<<MERCHANT_ID>>"
	  "ACCESS_TOKEN":"<<ACCESS_TOKEN>>" "NAME":"sha"
	   "GENERATED_DATE_TIME":"<<GENERATED_DATE_TIME>>"
	}

Redirect to Web Checkout via Form Post

A form with specific details which include Access token and other few necessary parameters must be post from Frontend server on a particular URL for redirection to Web Checkout, on performing this step Partner/Merchant will land on the PayFast Web Checkout where they can easily avail Google Pay Payment Option, Post request of form is given below.

URL: https://ipguat.apps.net.pk/Ecommerce/api/Transaction/PostTransaction

Method	POST
Form Parameters	Description
MERCHANT_ID	A unique ID provided by PAY2M
MERCHANT_NAME	Brand name
TOKEN	Access token fetched by web hook as mentioned in Table 1.0
PROCCODE	00
TXNAMT	The amount which needs to be paid by the customer
CUSTOMER_MOBILE_NO	Customer's mobile number
CUSTOMER_EMAIL_ADDRESS	Customer's email address
SIGNATURE	A random string value
VERSION	A random string value
TXNDESC	Short description of the goods purchased by customer
SUCCESS_URL	URL where customer will be redirected to in the browser if payment is successful.
FAILURE_URL	URL where customer will be redirected to in the browser if payment is unsuccessful.
BASKET_ID	A unique order id from the merchant, which will represent customer's order.
ORDER_DATE	Date of the order. (Format: YYYY-MM-DD e.g. 2018-01-01)
CHECKOUT_URL	URL payment information is pushed to the merchant at the backend.
STORE_ID	Alphanumeric string which would come from merchant portal's outlet section after outlet creation <optional>
CURRENCY_CODE	QAR <optional>
TRAN_TYPE	Transaction type for settlement <optional>

Transaction Journey

Step 1. Get Access Token

Merchant ID and Secure Key are the two values that will be sent to fetch the access token. TXNAMT, BASKET_ID, and Currency_code are mandatory parameters for generating access tokens. The API must be called from the backend.

Example Code

```php
<?php
$merchant_id = 103;
   $secured_key = 'PzPx6ut-SVay7tCUMqG';
   $basket_id = 'ITEM-' . generateRandomString(4); // Generate basket_id with 4 random characters (letters
and numbers)
   $trans_amount = '500';
   $currency_code = 'PKR';


   /**
    * Function to generate a random string of letters and numbers starts here
    */
   function generateRandomString($length = 4)
   {
      $characters = '0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZ'; // Only capital letters and numbers
      $charactersLength = strlen($characters);
      $randomString = '';
      for ($i = 0; $i < $length; $i++) {
         $randomString .= $characters[rand(0, $charactersLength - 1)];
      }
      return $randomString;
   }

   /**
    * Function to generate a random string of letters and numbers ends here
    */

   /** Access Token Function starts here
    * Get access token with merchant id, secured key, basket id, transaction amount, currency code
    *
    */
   $token = getAccessToken(
      $merchant_id,
      $secured_key,
      $basket_id,
      $trans_amount,
      $currency_code

   );
   function getAccessToken(
```

```php
      $merchant_id,
      $secured_key,
      $basket_id,
      $trans_amount,
      $currency_code

) {
   $tokenApiUrl = 'https://ipguat.apps.net.pk/Ecommerce/api/Transaction/GetAccessToken';
   $urlPostParams = sprintf(
      'MERCHANT_ID=%s&SECURED_KEY=%s&BASKET_ID=%s&TXNAMT=%s&CURRENCY_CODE=%s',
      $merchant_id,
      $secured_key,
      $basket_id,
      $trans_amount,
      $currency_code
   );

   $ch = curl_init();
   curl_setopt($ch, CURLOPT_URL, $tokenApiUrl);
   curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);
   curl_setopt($ch, CURLOPT_POST, 1);
   curl_setopt($ch, CURLOPT_POSTFIELDS, $urlPostParams);
   curl_setopt($ch, CURLOPT_USERAGENT, 'CURL/PHP PayFast Example');
   $response = curl_exec($ch);
   curl_close($ch);
   $payload = json_decode($response);
   $token = isset($payload->ACCESS_TOKEN) ? $payload->ACCESS_TOKEN : '';
   return $token;
}

/** Access Token Function ends here
 */


/**
 * process response coming from PayFast
 *
 */

/** Validation Hash starts here */
/** Validation Hash ends here */
?>
```

Step 2: Fill out the Checkout form to redirect to the Payment Page.
Fill in all required fields on the checkout form and submit to proceed to the payment page.

```
<!-- For data integrity purposes, transaction amount and basket_id, Currency_code should be the same as
the ones sent inthe  token request -->
   <!-- Actual Payment Request -->



 <form class="form-inline" id='PayFast_payment_form' name='PayFast-payment-form' method='post'
     action="https://ipguat.apps.net.pk/Ecommerce/api/Transaction/PostTransaction">

CURRENCY_CODE: <input type="TEXT" name="CURRENCY_CODE" value="<?php echo $currency_code; ?>"
/><br /> <br>
     Merchant_ID: <input type="TEXT" name="MERCHANT_ID" value="<?php echo $merchant_id; ?>" /><br
/> <br>
     MERCHANT_NAME: <input type="TEXT" name="MERCHANT_NAME" value="Payfast Merchant" /><br />
<br>
     TOKEN: <input type="TEXT" name="TOKEN" value="<?php echo $token; ?>" /><br /> <br>
     BASKET_ID: <input type="TEXT" name="BASKET_ID" value="<?php echo $basket_id; ?>" /><br /> <br>
     TXNAMT: <input type="TEXT" name="TXNAMT" value="<?php echo $trans_amount; ?>" /><br /> <br>
     ORDER_DATE: <input type="TEXT" name="ORDER_DATE" value="<?php echo date('Y-m-d H:i:s', time());
?>" /><br /> <br>
     SUCCESS_URL: <input type="TEXT" name="SUCCESS_URL"
value="http://localhost/redirection/success.php" /><br /> <br>
     FAILURE_URL: <input type="TEXT" name="FAILURE_URL"
value="http://localhost/redirection/failure.php" /><br /> <br>
     CHECKOUT_URL: <input type="TEXT" name="CHECKOUT_URL"
value="http://localhost/redirection/checkoup.php.php" /><br /> <br>
     CUSTOMER_EMAIL_ADDRESS: <input type="TEXT" name="CUSTOMER_EMAIL_ADDRESS"
value="someone234@gmai.com" /><br /> <br>
     CUSTOMER_MOBILE_NO: <input type="TEXT" name="CUSTOMER_MOBILE_NO" value="01224444567"
/><br /> <br>
     SIGNATURE: <input type="TEXT" name="SIGNATURE" value="SOMERANDOM-STRING" /><br /> <br>
     VERSION: <input type="TEXT" name="VERSION" value="MERCHANTCART-0.1" /><br /> <br>
     Item Description: <input type="TEXT" name="TXNDESC" value="Item Purchased from Cart" /><br />
<br>
     Proccode: <input type="TEXT" name="PROCCODE" value="00" /><br /> <br>
     Transaction Type: <input type="TEXT" name="TRAN_TYPE" value='ECOMM_PURCHASE' /><br /> <br>
     Store ID/Terminal ID (optional): <input type="TEXT" name="STORE_ID" value='' /><br /> <br>
     Create Recurring Token:
     <SELECT name="RECURRING_TXN">
       <option value="">Do NOT Create Token</option>
       <option value="TRUE">YES, Create Token</option>
     </SELECT>
     <br /> <br>



     <!-- <input type="SUBMIT" value="SUBMIT"> -->
     <div class="row">
```

```
        <input type="submit" id="submitBtn" value="Submit">
      </div>
    </div>
  </form>
```

On initiating the Post request merchant website will redirect to the checkout page, where the end user can easily avail the Google Pay payment option.

Step 3: Select the Google Pay option.

Step 4: Click the Buy with Gpay Button
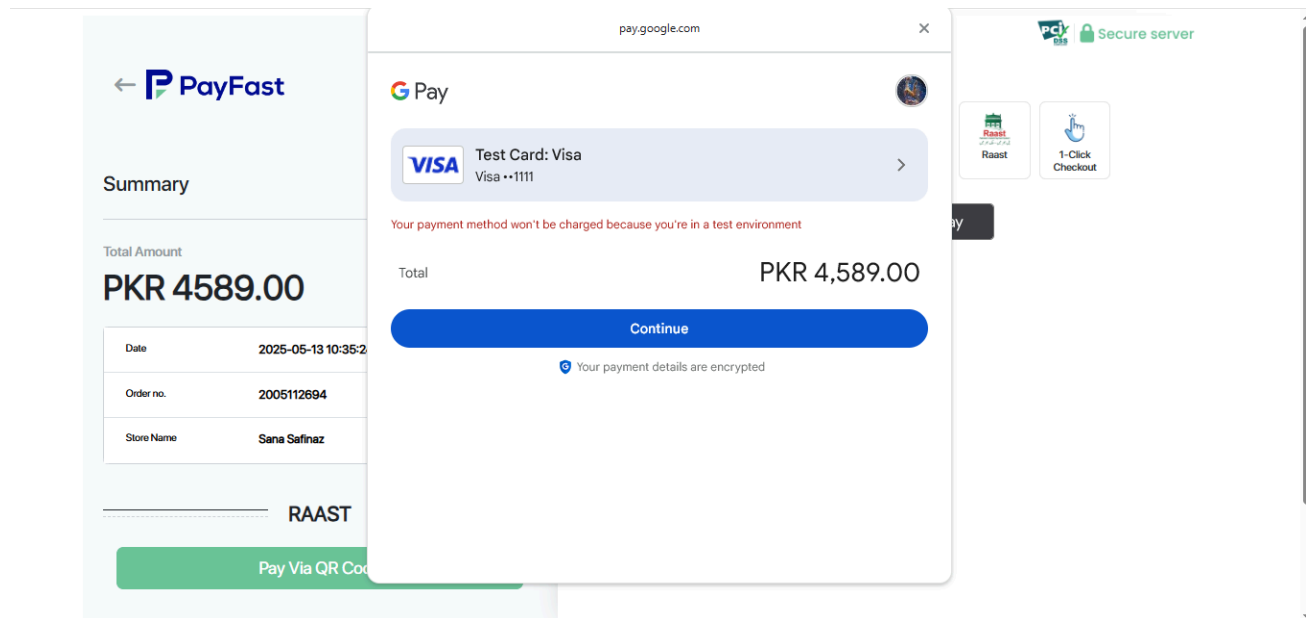
Step 5: Click the Pay Button

Note: The Transaction journey will complete here