# Implementation Guide for Recurring / Single Click Payments

Using the REST API and CopyAndPay

*This document describes the option to both store and charge the card in one request*

# peach payments

# Overview

*In order to understand the instructions in this document we recommend that you go through the code examples and tutorials at the following link before proceeding further:*

https://peachpayments.docs.oppwa.com/tutorials

**Important Notes – Please Read before implementing Single Click or Recurring billing**

- We have used CURL to demonstrate sample requests – please refer to our online documentation for sample code in other languages
- All steps in the integration process referred to below are from the Copy and Pay sample documentation here:
  - Copy and Pay - https://peachpayments.docs.oppwa.com/integration-guide
  - Backoffice – https://peachpayments.docs.oppwa.com/backoffice
  - One-click - https://peachpayments.docs.oppwa.com/tutorials/integration-guide/one-click
  - Recurring - https://peachpayments.docs.oppwa.com/recurring

- You MAY have been provided 2 Entity IDs by your Peach Payments Account Manager. These will look like this:
  - **Once-off / 3DS Entity:** 8a829417454609c501455082e71c0d1a
  - **Recurring Entity:** ff8080814546170101455058076b0a83

  - All Once-off transactions or first time transactions where the user is not using a stored card
  - Use the Recurring Entity ONLY for transaction requests using a stored card (i.e. where registrationID is used)
  - IF you only received ONE entity ID then please use this for all cases below.

- Best practice suggests that you provide the user the choice of being able to store their card with your website. Ideally you should NOT automatically store their card without explicitly mentioning this to the user.
  - This choice can be presented in terms of a radio button or checkbox on your checkout page
  - See the following tutorial for this: https://peachpayments.docs.oppwa.com/one-click-payment-guide

*3DSecure Liability shift only applies if that particular transaction has gone through 3DSecure.Please note that in case you opt to skip 3DSecure for stored card or recurring payments then you (the merchant) carries the liability of any fraud on the transactions.*

# peach payments

# User Transaction Flow and Important Notes

**User Transaction Flow**
1. User comes to the merchant site and add products to the shopping cart
2. At the time of checkout user is presented with an option to register their card with this transaction
3. Once the user registers the card they no longer have to enter their card details for subsequent purchases
   a. Merchants will define their own transaction flow for subsequent transactions
   b. Most common implementations include presenting the user with a final review page before the user confirms the transaction
4. If the user wants to delete their card information then they have the option to do so through their account details / profile page
5. Merchants can allow users to store multiple cards and show the different card using the last four digits and brand of the card

## Implementation Logic

1. Execute the first transaction to store the card in the vault and then charge the card for the first transaction amount. There are 2 options to implementing this step:

   Please see this link before proceeding:
   https://peachpayments.docs.oppwa.com/widget-tokenisation

   a. Merchant Determined
      i. Add the parameter createRegistration=true to the Prepare CheckoutId request in Step 1 of Copy and Pay
   b. Shopper Determined
      i. Please see above link for details – in this case the user would check a checkbox which would then set the parameter createRegistration=true

   c. Execute the steps to create the form and then get the status of the transaction from Copy and Pay as per normal transactions.

2. Store the TOKEN for Credit Card in your databases for future use. ***A token is an alphanumeric string of digits that uniquely identify a card in our vault.***

   a. Once card is registered the system returns a parameter ***registrationId*** in the response of this first transaction (this will be in Step 3 of Copy and Pay i.e. Getting the Payment Status)

   b. The response of the transaction looks like this:

```
{
"id":"8a8294494dc3b4a1014dd4231f9e755b",
"registrationId":"8a8394824db31223014aa40577961db0"
"paymentType":"DB",
"paymentBrand":"VISA",
"amount":"50.99",
"currency":"ZAR",
"descriptor":"0446.2428.2274 PP01 Nedbank",
 "result":{
      "code":"000.100.110",
      "description":"Request successfully processed in 'Merchant in Integrator Test Mode'"   },
"card":{
      "bin":"424242",
      "last4Digits":"4242",
      "holder":"Rahul Jain",
      "expiryMonth":"12",
      "expiryYear":"2015"   },
"buildNumber":"20150605-080719.r184353.opp-tags-20150605_stage",
"timestamp":"2015-06-08 17:06:21+0000",
"ndc":"C62653F77945507AAC2A42F34F603104.sbg-vm-tx01"
 }
```

c. Now the merchant must store the relevant card data in the users profile. For this you will modify the Get Status part of the Copy and Pay Code to log the data into your databases
d. The **"registrationId":"8a8394824db31223014aa40577961db0"** value is the TOKEN for the credit card in our vault
e. You are also allowed to store the paymentBrand, last4Digits, holder, expiryMonth, expiryYear , values in your database. These will NOT be required for a payment later
f. Please store the entityID on which this transaction was executed for future reference.
g. The TOKEN is to be used to reference the stored card in subsequent Debit (DB), Refund (RF) and Deregistration (DR) transactions.

**SUBSEQUENT TRANSACTIONS (i.e. paying with a stored card)**

**Here there are 2 way to implement the process:**

**A. Stored cards are present by Peach within the COPYANDPAY widget**

In this process the merchant uses the CopyandPay widget for all checkouts and presents the stored cards to the user within the widget.

Please see the following link for the integration steps:
https://peachpayments.docs.oppwa.com/tutorials/integration-guide/one-click

**The merchant has the option to skip 3DSecure in this flow for payments using stored cards.**

**To skip 3DSecure for stored cards:**

Please add the following parameter to your request: (this is in addition to the what the tutorial shows)

  a.  "recurringType=REGISTRATION_BASED"


**B.  Stored cards are present by the merchant on the checkout page (i.e. merchant uses Server 2 Server API for integration)**

**3.** One Click transactions **WITH 3DSecure **RECOMMENDED****

Merchants may not want to take on the liability of fraud for One Click transactions.

We enable merchants to implement 3DSecure on stored cards as well i.e. user goes through 3DSecure even when opting to pay with a stored card.

  i.   To implement this flow please see the link below:
       a.  https://peachpayments.docs.oppwa.com/tutorials/server-to-server/one-click-payment-guide
  **ii.**  Now when you submit the transaction to the **3DS Entity then the transaction will be pushed via 3DSecure.**
  **iii.** **The transaction will work the same as:**
       a.  https://peachpayments.docs.oppwa.com/tutorials/server-to-server#async
  iv.  Please add parameter to transaction request:
       a.  Please add the following parameter to your request: (this is in addition to the what the tutorial shows)

**4.** One Click transactions **WITHOUT 3DSecure**

Please note that in both scenarios listed below the URL/Endpoint for sending the request already contains the registrationID / TOKEN of the card you want to charge:

https://test.oppwa.com/v1/registrations/**{registration.id}**/payments

When executing a payment please replace **{registration.id}** with the actual stored TOKEN / registrationID for the user and use this as the endpoint for the request.

*If you were provided with 2 entityIds and are using the RECURRING ENTITY ID as the entityID value for these requests then please add the following parameter to your request: (this is in addition to the what the tutorial shows)*

        b.   "recurringType=REPEATED "

OR

*If you were provided with 1 entityId and are using the 3DS ENTITY ID as the entityID value for these requests then please add the following parameter to your request: (this is in addition to the what the tutorial shows)*

        a.   "recurringType= REGISTRATION_BASED"

To charge the customer's stored card for any one-click / recurring payments without 3dsecure  please implement the following tutorial:

        i.   https://peachpayments.docs.oppwa.com/recurring
       ii.   Here you can ignore Sending the Initial Payment step
      iii.   Go straight to Sending a Repeated Payment

    b.  **Please also include your order ID or transaction ID in the request** – this is important for your reconciliation with our platform and your orders
        i.  **For this add the following parameter to your request**:
            1.   merchantTransactionId = YOUR ORDER ID

    c.  A sample request looks like this:

*Curl https://test.oppwa.com/v1/registrations/8a8394824db31223014aa40577961db0/payments \  -d*
        *"authentication.userId=ff808081392eb9b201392f0b6d0200a3" \  -d*
        *"authentication.password=wCJFfx6F" \  -d*
        ***"authentication.entityId= ff80808145461701014450058076b0a83" \  -d***
        ***"merchantTransactionId =1234ABCD" \  -d***
        *"recurringType=REPEATED" \  -d*
        *"amount=10.00" \  -d*
        *"currency=ZAR" \  -d*
        *"paymentType=DB"*