

## PayPal First billing agreement transaction

### **Overview**

This tutorial takes you through the steps required to do your first transaction using PayPal billing agreement API with Verifone.

### What is a billing agreement and how does it work?

Billing agreement API enables a customer and a merchant to enter a contract.

The merchant can bill a customer any time, without requiring a customer to login and authorize the transaction.

With a Billing Agreement the amount and the frequency of transactions are not fixed.

### **Examples**

- An agreement to pay eBay seller fees for listing items on eBay
- An agreement between Uber and customer

In this scenarios, a customer gives their agreement only once, and later they do not have to authorize every time to PayPal. Billing the customer is done completely by merchant's side.

## Step 1: Set up

Before making a transaction, you need:

- A PayPal account
- A valid JWT Token received from the entity service
- paymentProviderContract. It is created as part of onboarding merchant into Verifone via the Common Portal.

### Step 2: Create a billing agreement token

```
First, we need to core POST request URL: /billingAgreement/initiate

Body:
```

```
{
"ppcUid": "21261b6f-07df-4b63-3f4f-7fa0b83a20db",
"description": "Stored PayPal account with The Partner merchant",
"enableAddressChange": true,
"returnUrl": "https://68f8497efb9ce8aeef3ed419c6ef0597.m.pipedream.net/success",
"cancelUrl": "https://68f8497efb9ce8aeef3ed419c6ef0597.m.pipedream.net/cancel"
}
```

### Response:

```
{
    "approvalUrl": "https://www.sandbox.paypal.com/agreements/approve?ba_token=BA-29L89918T33851208",
    "billingToken": "BA-29L89998T33851208"
}
```

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## **Step 3: Approve token**

Copy the approval Url from the step 2. Open the link in a browser. Login and approve the billing agreement token.

Note: Store billingToken as you will need it in step 4 for creating a billing agreement.

## Step 4: Create a billing agreement

After approving with PayPal, use POST request with PPC and billingToken to create a Billing agreement.

```
/billingAgreement/create
```

```
{
"billingToken":"BA-29L89998T33851208",
"ppcUid":"21261b6f-07df-4b63-3f4f-7fa0b83a20db"
}
```

Response:

```
{
    "agreementId": {
        "id": "B-IWW844616B620123",
        "state": "ACTIVE",
        "description": "Stored PayPal account with The Partner merchant",
        "merchant": {
        "payeeInfo": {
        "email": "merchant@business.example.com"
        },
        "payer": {
        "payerInfo": {
        "email": "payer@business.example.com",
        "firstName": "John",
        "lastName": "John",
        "payerId": "VJRXDDV4UWZ2W"
        },
        "plan": {
        "merchantPreferences": {}
    },
        "createTime": "2021-03-03T11:56:27.000Z",
        "updateTime": "2021-03-03T11:56:27.000Z"
}
```

Note: You need to store the billing agreement ID, as you need it for making subsequent transactions.

# **Step 5: Integrate PayPal Risk Mitigation components**

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FraudNet is a JavaScript library developed by PayPal and embedded into a merchant's web page to collect browser-based data to help reduce fraud. Upon checkout, these data elements are sent directly to PayPal Risk Services for fraud and risk assessment.

To integrate FraudNet, embed a short code snippet in the merchant website and add a custom header to the Verifone call. See <u>Integrating</u> FraudNet.

Please note that FraudNet is for desktop browsers only. For risk analysis data gathered on mobile devices, please refer to <u>Magnes</u> documentation.

## **Step 6: Set Transaction Context Overview**

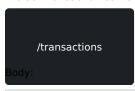
The Set Transaction Context API is a standalone service that works in conjunction with payment APIs. Use this API to set the transaction context to send additional data about a customer to PayPaI before a customer transaction is processed. PayPaI uses this data to complete a pre-transaction risk management evaluation.

See PayPal Risk Analysis.

## Step 7: Create a transaction

Create a transaction that later will be used for capturing using billing agreement.

**Note:** Send the trackingld used in the Set transaction context API, and the Risk mitigation components in the header paypalFraudld. This would enable PayPal to make a decision by combining the information collected using Risk Mitigation components (FraudNet and Magnes), the Set transaction context API, and the create transaction API.



```
{
  "context": {
  "paymentProviderContract": "26761b6f-07df-4b63-9f4f-7fa0b83a20db"
},
  "intent": "AUTHORIZE",
  "amount": {
  "currencyCode": "USD",
  "value": 20000
},

  "applicationContext": {
  "returnUr1": "https://68f8497efb9ce8aeef3ed419c6ef0597.m.pipedream.net/success",
  "cancelUr1": "https://68f8497efb9ce8aeef3ed419c6ef0597.m.pipedream.net/cancel"
},
  "shipping": {
  "address": {
  "country": "IN",
  "postalCode": "91",
  "countrySubdivision": "IN-MH",
  "city": "yyy",
  "addressLine1": "add1",
  "addressLine2": "add2"
},
```



```
"fullName": "JamesSmith" } }
```

#### Response:

```
{
"id": "e432ddb2-82a8-4213-a7da-8a7c0a3952de",
"status": "INITIATED",
"orderId": "1W065188KT702530J",
"createdAt": "2021-03-25T13:56:27Z",
"approvalUrl": "https://www.sandbox.paypal.com/checkoutnow?token=1W065188KT702530J"
}
```

## Step 8: Authorize transaction by billing agreement

Use transaction ID from step 5 and agreement ID from step 4.

```
/transactions/{TRANSACTION_ID}/authorize
```

```
{
    "agreementId":"B-1WW844616B620123"
}
```

### Response:

```
{
"id": "e123ddb2-82a8-4213-a7da-8a7c0a3952de",
"authorizationId": "2JM15603JS454230B",
"createdAt": "2021-03-25T14:00:46Z",
"expiresAt": "2021-04-23T14:00:46Z",
"status": "AUTHORISED",
"payer": {
"payer": {
"payerId": "VJRXDDV4UWZ4W",
"shippingAddress": {
"country": "IN",
"postalCode": "400097",
"countrySubdivision": "Maharashtra",
"city": "Mumbai",
"addressLine1": "Flat no. 507 Wing A Raheja Residency",
"addressLine2": "Film City Road"
}
```

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# Step 9: Capture transaction by billing agreement

Use transaction ID from step 5 and agreement ID from step 4.

```
/transactions/{TRANSACTION_ID}/capture
Body:
```

```
{
"agreementId": "B-1WW844616B620123"
}
```

### Response:

```
{
    "id": "9512303c-c7a2-4417-8cdd-92a617890053",
    "captureId": "6CB11430732996717",
    "createdAt": "2021-03-25T14:07:23Z",
    "isFinalCapture": true,
    "status": "AUTHORISED"
}
```

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