Integration with Express Checkout

- ## Express Checkout

  The Express Checkout button gives buyers another way to pay, and it complements your existing payment solution. Online shoppers appreciate the convenience and security of PayPal, where they can pay with their PayPal balance, bank account, or credit card. Risk as a Service (aka RAAS) can be integrated with EC, to mitigate the RISK before the transaction in PayPal is performed.

  - ### Integrations Steps

    1. **Pre Step - PayPal Classic APIs Getting Started Guide**
       To get start with PayPal Classic API Integration, see this guide for details.
    2. **Setting Up the Express Checkout Transaction**
       If you are not familiar with EC, you can get started With Express Checkout. Then referring to the EC Integration Guide to set up an Express Checkout Transaction.

       Important: EC token will be returned to you in the **SetExpressCheckout** response, this token is important and will be used in the RAAS **SetTransactionContext** API later. RAAS API call will **NOT** affect EC API call.

    3. **Set Transaction Context API call**
       1. Obtain the endpoint for the service and environment you are addressing.

          For PayPal Sandbox:

          ```
          https://svcs.sandbox.paypal.com/RiskAssessment/SetTransactionContext?wsdl
          ```

          For PayPal Product:

          ```
          https://svcs.paypal.com/RiskAssessment/SetTransactionContext?wsdl
          ```

       2. Obtain the API Credentials.

          PayPal has many services and some require that you specify a set of HTTP Headers in your calls. API Credentials are in the HTTP Headers.
          In Sandbox, you can use the below API Credentials

HTTP Header	Description	Sandbox Valu
X-PAYPAL-SECURITY-USERID	The API user name. This is one of the API credentials assigned to your account.	seller_1357486518_biz_api1.yahoo.com
X-PAYPAL-SECURITY-PASSWORD	The API password. This is one of the API credentials assigned to your account.	1357486538
X-PAYPAL-SECURITY-SIGNATURE	The API signature. This is one of the API credentials assigned to your	AFcWxV21C7fd0v3bYYYRCpSSRl31AlKtnA

In Live product, you need to request your API Credentials and engage Merchant Technical Support (MTS) to authorize you to access Risk Assessment Service for third party. You can contact MTS at https://www.paypal.com/mts

3. Prepare the request to call **SetTransactionContext** API using SOAP protocol

Important: Using the token value from **SetExpressCheckout** response as the **trackingId** field in the Soap Request. Request Sample can be reffed to the API documentation in the next section, also set the other corresponding fields for your specific scenario.

If succeed, you will receive the success response with:

```
<responseEnvelope>
    <ack>Success</ack>
</responseEnvelope>
```

4. Verify if the data is successfully send to the API
    1. Send a normal request with data and get the successful response including the data in request.
    2. Send a request with only trackingId field, as below, and to see if the response includes the data sent in the above step.

```
<soapenv:Envelope
    xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
    xmlns:pt="http://svcs.paypal.com/types/pt">
    <soapenv:Header />
    <soapenv:Body>
        <pt:SetTransactionContextRequest>
            <requestEnvelope>
                 <errorLanguage>en_US</errorLanguage>
              </requestEnvelope>
              <trackingId>change it to your ec token
    here</trackingId>
          </pt:SetTransactionContextRequest>
      </soapenv:Body>
    </soapenv:Envelope>
```

Error Handling

The response message contains an `ACK` value. Unless `ACK=Success`, you must check further for an error or warning message.

You must check each response from the PayPal server for an indication that an error occurred. Because there are several warning and failure values, the safest way to check the response is to check for `ACK=Success`. If the `ACK` returns any other value, you must examine the response for error numbers and messages.

A non-successful response can contain more than one error number and message. SOAP error fields are: `ErrorCode`, `ShortMessage` and `LongMessage`.

Important: Because error codes are not guaranteed to be unique, you must use both the code and the messages to determine the appropriate action to take when an error occurs.

Some errors are transitory in nature and you can retry the operation; for example, an error that indicates a problem with PayPal. If the problem persists for more than an hour, it is probably related to your RAAS implementation because PayPal servers are up and running almost all of the time.

Some errors indicate problems with the API credentials; for example, API username/password/signature is incorrect. In this case, please refer to Integration Steps 3b to use correct credentials. If this problem occurs in Product, refer to Creating and Managing Classic API Credentials to fix it.

Some errors indicate with "User is not allowed to perform this action", in this case, please make sure:

- The type of API Caller's PayPal account must be Business or Premium.
- The API Caller's PayPal account must be verified.
- The API Caller's PayPal account must be authorized to access Risk Assessment Service.

Other errors indicate a problem with your integration, such as accepting invalid input on your website and passing it in your request message to PayPal. You need to perform sufficient testing using the Sandbox to prevent problems from arising after going live.

Error Codes List for RAAS API:

Error Code	Error Type	Description
500000	DEFAULT ERROR	Default error, when not mapping with other errors.
500002	INTERNAL ERROR	For example, invoking of internal services failed.
520003	INVALID CREDENTIALS	For example, API username/password/signature is incorrect.
580001	INVALID REQUEST	For example, data validation is not succeeded.

Learn More

Find more information in the following guides:

- PayPal Classic APIs Getting Started Guide
- PayPal SOAP API Basics
- PayPal Development & Integration Guides
- Express Checkout API Getting Started Guide
- Express Checkout Integration Guide
- RAAS API Documentation