

Web Services API Reference

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This Document

This document, *PayPal Web Services API Reference*, which describes the PayPal Web Services Application Programming Interface (API) and service, replaces the edition issued March, 2006.

Intended Audience

This document is written for programmers familiar with Web Services application programming standards such as the Simple Object Access Protocol (SOAP), the Web Services Description Language (WSDL), and XML Schema Definition (XSD) language.

Organization of This Document

Chapter 1, "Overview of the PayPal Web Services API," presents high-level information about the purposes of the API, supported development environments, and usage limits and fees.

Chapter 2, "PayPal Web Services API Architecture," describes the architecture of the API services, its security features, the PayPal SOAP and WSDL implementations, and data characteristics, such as character encodings, currency and date/time formats, and other information.

The central chapters describe individual PayPal Web Services APIs for a variety of business functions.

Appendix A, "Error Codes and Messages for All PayPal APIs," details specific errors and warnings for each individual PayPal Web Services API.

Notational Conventions

This document uses typefaces to identify the characteristics of text. These typefaces and the characteristics they imply are described below:

Typeface	How Used
serif italics	A document title.
	A term being discussed or defined. For example: A file is a readable or writable stream of characters
	Boolean values (not keywords). For example: The function returns true if it encounters an error.
monospaced	Pathnames or file names that appear in body text frames.
	Code-related names that appear in body text frames. Such names are used for functions, callbacks, arguments, data structures, and fields. For example: AbstractResponseType is the SOAP response type definition on which all PayPal API response methods are based.
	Components of Internet protocol requests and responses, such as HTTPS and FORM variables. For example: The PayPal system uses a method=POST request to return IPN status variables related to subscriptions, such as txn_type.
Serif bold	User interface names, such as window names or menu selections. For example: On the Profile page, click Email to confirm your email address
San-serif oblique	Placeholders used in the context of a format or programming standard or formal descriptions of PayPal system syntax. Placeholders indicate values or names that the reader should provide. Example: For example, amount is the variable for a single-item shopping cart, but amount_X is the name of the variable for a multi-item shopping cart. amount_3 is the item amount for the third item in a multiple-item shopping cart.

To convey additional information, this document may also apply color and underlining to words or phrases that use the typefaces described above. Such use is described below:

Text attribute	How Used
XXXXXX	Hypertext link to a page in the current document or to another document in the set.
xxxxxx	Hypertext link to a URL or that initiates a web action, such as sending mail.

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Click **Help Center** at the bottom of the box on the right side of the page.

Click Email PayPal Technical Support.

Complete the form.

Revision History

Revision history for PayPal Web Services API Reference.

TABLE 1.1 Revision History

Date	Description
July 2006	CardNumber field added to TransactionSearch API. Significantly improved error messages for Direct Payment API. Minor change to one Mass Pay API error message.
March 2006	Updated for new API credential: API signatures. New SOAP service endpoint for signatures. Miscellaneous minor corrections throughout.
January 2006	Additional error messages for Authorization & Capture APIs and Express Checkout APIs.
December 2005	Removed erroneous description that stated that the SetExpressCheckoutRequest field cpp-header-image must be URL-encoded.

Preface Revision History

The PayPal Web Services API provides programmatic access to PayPal features and services. Developers can build custom applications, tools, and services that correspond to the same services and tools available through the main PayPal website, https://www.paypal.com/. Typical applications include searching for transactions, paying en masse, and making refunds.

Get Started Quickly: Integration Center

PayPal's Integration Center at https://www.paypal.com/integration has step-by-step details for getting started with the PayPal Software Development Kits (SDKs), Website Payments Pro, Express Checkout, Website Payments Standard, Authorization & Capture, Instant Payment Notification, and more.

Visit the Integration Center at:

https://www.paypal.com/integration

Complementary Technical Documentation

All PayPal technical documentation is listed here. The description of each guide indicates its subject matter and documentation necessary for effective use of the guide.

TABLE 1.1 PayPal Technical Documentation

Guide Title	Description	Prerequisites
Website Payments Standard Integration Guide	Details basic PayPal payment process for shopping cart and single-item purchase. Account Profile settings for variations on basic payment process. Customization of PayPal's payment pages. HTML FORM variables for control of payment process. https://www.paypal.com/en_US/pdf/PP_WebsitePaymentsStandard_IntegrationGuide.pdf	None
Express Checkout Integration Guide	Details use of Express Checkout API. PayPal placement on merchants' websites and related business rules. https://www.paypal.com/en_US/pdf/PP_ExpressCheckout_IntegrationGuide.pdf	Website Payments Standard Integration Guide
Website Payments Pro Integration Guide	Details use of Express Checkout and Direct Payment APIs. PayPal placement on merchants' websites and related business logic. https://www.paypal.com/en_US/pdf/PP_WebsitePaymentsPro_IntegrationGuide.pdf	Website Payments Standard Integration Guide

Open Standards Background Information

TABLE 1.1 PayPal Technical Documentation

Guide Title	Description	Prerequisites
Order Management Integration Guide	Details Instant Payment Notification (IPN) and Payment Data Transfer (PDT) for automated receipt of payment information after payment completion. Details IPN HTML FORM variables and their meanings. Also includes information about Downloadable History Logs. https://www.paypal.com/en_US/pdf/PP_OrderManagement_IntegrationGuide.pdf	Website Payments Standard Integration Guide
Java SDK Guide .NET SDK Guide Classic ASP Guide PHP SDK Guide	Details the use of the PayPal Software Development Kits for Java, Microsoft .NET, Microsoft Classic ASP, and PHP to simplify use of the PayPal Web Services API. https://www.paypal.com/en_US/pdf/PP_SDK_Java_Guide.pdf https://www.paypal.com/en_US/pdf/PP_SDK_ClassicASP_Guide.pdf https://www.paypal.com/en_US/pdf/PP_SDK_PHP_Guide.pdf	 Website Payments Standard Integration Guide Website Payments Pro Integration Guide Authorization & Capture Integration Guide Sandbox User Guide API Reference
Sandbox User Guide	Describes the PayPal Sandbox testing environment for testing website payments and Web Services APIs. Details how to get PayPal API digital certificates. https://www.paypal.com/en_US/pdf/PP_Sandbox_UserGuide.pdf	All other PayPal guides for an understanding of how products work
Web Services API Reference	Field-by-field description of all PayPal Web Services APIs, their SOAP structures, and error messages. Location of PayPal WSDL and XSD files. https://www.paypal.com/en_US/pdf/PP_APIReference.pdf	None
Subscriptions and Recurring Payments Guide	Describes HTML FORM variables for using PayPal for subscriptions to goods and services. https://www.paypal.com/en_US/pdf/subscriptions.pdf	Website Payments Standard Integration Guide
Virtual Terminal User Guide	Details how to use the virtual terminal to accept credit card payments. https://www.paypal.com/en_US/pdf/VT_user_guide.pdf	None

Open Standards Background Information

This section contains references to background information for understanding and using the PayPal Web Services API.

Web Services Standards

Web Services are an ongoing open standards effort. For the latest information about developments in Web Services, see the following site:

http://www.webservices.org/

Cryptography

The PayPal Web Services API uses public key infrastructure, specifically PKCS#12 and Privacy Enhanced Mail (PEM). For more information about PKCS#12 and PEM files, see the following sites:

- PKCS12 and other forms of securely available credentials: http://www.faqs.org/rfcs/rfc3157.html
- PEM: http://www.ietf.org/rfc/rfc1421.txt

Overview of the PayPal Web Services API

Cryptography

The PayPal Web Services API provides programmatic access to PayPal features and services. Developers can build custom applications, tools, and services that correspond to the same services and tools available through the main PayPal website, https://www.paypal.com/. Typical applications include searching for transactions, paying en masse, and making refunds. The API is based on open standards known collectively as "Web Services," which include the Simple Object Access Protocol (SOAP), Web Services Definition Language (WSDL), and the XML Schema Definition language (XSD). These standards are supported by a wide range of development tools on a variety of platforms.

Services Architecture

Like many web services, PayPal Web Services is a combination of client-side and server-side schemas, hardware and software servers, and core services.

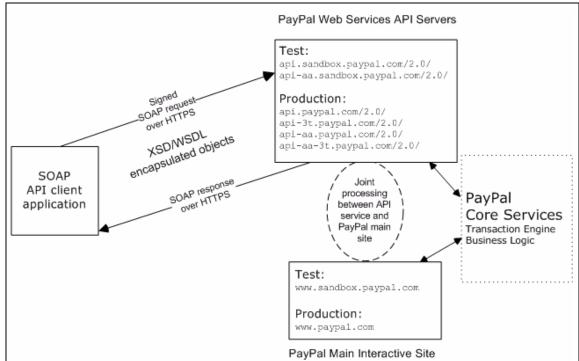


FIGURE 2.1 PayPal Web Services High-level Diagram

In an object-oriented processing model, the interface to SOAP requests/responses is an object in your application's native programming language. Your third-party SOAP client generates

business-object interfaces and network stubs from PayPal-provided WSDL and XSD files that specify the PayPal SOAP message structure, its contents, and the PayPal API service bindings. A business application works with data in the form of object properties to send and receive data by calling object methods. The SOAP client handles the details of building the SOAP request, sending it to the PayPal service, and converting the response back to an object.

PayPal WSDL/XSD Schema Definitions

The PayPal Web Services schema and its underlying eBay Business Language (eBL) base and core components are required for developing applications with the PayPal Web Services API. The following are the locations of the WSDL and XSD files.

TABLE 2.1 Location of PayPal WSDL and XSD Files

Development and Tes	Development and Test with the PayPal Sandbox API Service			
PayPal Schema	https://www.sandbox.paypal.com/wsdl/PayPalSvc.wsdl			
eBL Base https://www.sandbox.paypal.com/wsdl/eBLBaseComponent English by the blase				
Production with Live PayPal Web Services API Service				
PayPal Schema	https://www.paypal.com/wsdl/PayPalSvc.wsdl			
eBL Base Components and	http://www.paypal.com/wsdl/eBLBaseComponents.xsd			

API Concepts and Terminology

Here are some basic concepts and terminology relating to PayPal's API service and security authentication.

TABLE 2.2 Basic PayPal API Set-up Concepts and Terminology

Term	Definition
API Calls PayPal Application Programming Interface services, by which companies can make payments, sear transactions, refund payments, view transaction information, and other business functions.	
Business Partner	A business partner can also be known as "hosting service," "third-party e-commerce service," "shopping cart provider," "online storefront," or "gateway."

TABLE 2.2 Basic PayPal API Set-up Concepts and Terminology

Term	Definition		
API Certificate	A PayPal-generated unique digital certificate file that you download from the PayPal website and use on the client computer to encrypt the HTTPS requests of your API calls to PayPal's API server.		
	An API certificate is suitable if you have complete control over your own web server.		
API Signature	A PayPal-generated unique digital signature (a line of text, or hash) that you copy from PayPal's website and include in your API calls. An alternative to API Certificate security.		
	Your digital signature, your API username, and your API password all together are called three-token authentication, because you include each of them as a programatic token in your API calls.		
	An API signature is suitable for use with Microsoft Windows web servers or other shared web server configurations, such as those used by web hosting services.		
	Multiple API signatures can be associated with your API username and password. For security, every time you view your API credential/signature on https://www.paypal.com, a new signature is generated. In your API calls, you can use any of the signatures that PayPal generates for you. All the signatures are equally valid until you remove your credentials by clicking Remove on the View API Signature page.		
API Username and Password	A PayPal-generated identifying account name and password that you use specifically for making API calls. You include your API username and password with every API call. The API username and password are different from your PayPal login username (email address) and password.		
Subject	An indicator in an API call of the merchant for whom the call is being made. This is the programmatic aspect of third-party authentication. The value of the Subject field is the third-party's API username.		
First-Party Access	A company makes API calls itself from its own server to PayPal's server. The company has its own API certificate or API signature, username, and password. Example:		
	A staff programmer for a merchant's company obtains a PayPal-issued API certificate file and makes API calls for the company from the company's own web server.		
Third-Party Access	Another person or company makes API calls on the merchant's behalf. The merchant grants the third-party his permission to make API calls for him.		
	Examples:		
	A web hosting service has its own API certificate, API username, and API password. Its customers, who are merchants that use PayPal, give the hosting service their permission to make API calls on their behalf. The hosting service includes a merchant's API username in the "Subject" field of an API call.		
	A merchant company's programmer has her own PayPal-issued API signature, username, and password. She gives permission to a shopping cart service to access her API credentials. The shopping cart service makes API calls on the programmer's company's behalf, using the programmer's credentials.		

Security

The PayPal Web Services API service is protected to ensure that only authorized PayPal members use it. There are three primary levels of security:

- API username/password and third-party account authentication
- Public/private key encryption via an API certificate or API signature
- Secure Sockets Layer (SSL) data transport

A failure of authenticated security at any one of these levels denies access to the PayPal Web Services API.

SOAP RequesterCredentials: Username, Password, Signature, and Subject

For the security of your business, PayPal must verify that merchants or third-party developers are permitted to initiate a transaction before they make one. PayPal authenticates each request. If the request cannot be authenticated, a SOAP security fault is returned.

In the SOAP request header, your SOAP client must set the Username, Password elements to pass an API username/password combination. In addition, you can set the Signature or Subject elements to specify your API signature string and an optional third-party account email address for authentication. The following is a partial example of the RequesterCredentials elements required for all SOAP requests. For a correlation of these elements to the generic structure of an entire SOAP request, see "SOAP Request Envelope" on page 26.

TABLE 2.3 RequesterCredentials Authentication Elements in SOAP Header

Element	Value	Description	
<username></username>	api_username	Your API username, which is auto-generated by PayPal when you apply for a digital certificate to use the PayPal Web Services API. You can see this value on https://www.paypal.com/ in your Profile under API Access > API Certificate Information.	
		NOTE: The <i>PayPal Sandbox User Guide</i> contains details about how you can obtain digital certificates for use with the PayPal Web Services API.	
<password></password>	api_password	Your API password, which you specify when you apply for a digital certificate to use the PayPal Web Services API.	
<signature></signature>	api_signature	Your API signature, if you use one.	
		NOTE: The <signature> element must be included in the SOAP header, even if you do not rely on an API signature. In this case, set <signature> with no value:</signature></signature>	
		<signature></signature>	

TABLE 2.3 RequesterCredentials Authentication Elements in SOAP Header

Element	Value	Description	
<subject></subject>	authorizing_ account_ emailaddress	The email address of a third-party for whom you are sending requests to the PayPal Web Services API. Your API username must have been granted permission by this third-party to make any particular PayPal API request. Note: The <subject> element must be included in the SOAP header, even if you are not making a request on someone else's behalf. In this case, set <subject> with no value:</subject></subject>	
		<subject></subject>	

Public/Private Key Encryption

Your security with the PayPal Web Services API relies on a set of public/private security keys issued in the form of digital certificates by PayPal. These keys uniquely identify an API user to prove his authorization to access PayPal Web Services. Each SOAP request is signed by your private key, and PayPal Web Services processes a request *only* after authentication succeeds.

SSL Data Transport

All data must be transported over the Secure Hyper Text Transport Protocol (also known as SHTTP or HTTPS), which relies on the Secure Sockets Layer (SSL) data communications protocol.

SOAP Service Endpoints

Depending on your chosen authentication mechanism, your SOAP requests must be processed by different service endpoints.

TABLE 2.4 SOAP Service Endpoints

Authentication Mechanism	Live Production Endpoint	Test (Sandbox) Endpoint	
API Signature	https://api-3t.paypal.com/2.0/ https://api-aa-3t.paypal.com/2.0/	https://api.sandbox.paypal.com/2.0/	
API Certificate https://api.paypal.com/2.0/https://api-aa.paypal.com/2.		https://api-aa.sandbox.paypal.com/2.0/	

NOTE: For the correspondence between API calls and their service endpoints, see Table 2.8, "API Overview by Business Function and Service Endpoint" on page 32.

SOAP Implementation

This section contains information about the PayPal Web Services SOAP implementation.

SOAP Message Style: doc-literal

PayPal uses doc-literal SOAP messaging, not rpc-encoding. With doc-literal, a single service interface call passes an XML document in the request to the PayPal API server, which responds with an XML document instance.

SOAP Request Envelope

The following diagram illustrates the contents of a PayPal SOAP request envelope.

All PayPal APIs are based on two core structures: Abstract RequestType and AbstractResponseType.

SOAP Request Envelope

eBL:RequesterCredentials

API user-id: <Username>
API user password: <Password>
API Signature: <Signature>
Third-party Authentication: <Subject>

API user password: <Password>
API Signature: <Signature>
Third-party Authentication: <Subject>

API Signature: <Signature>
Third-party Authentication: <Subject>

FIGURE 2.2 Diagram of SOAP Request Envelope

Request Structure

The following is an annotated description of the SOAP request structure required by the PayPal Web Services API.

EXAMPLE 2.1 General Structure of PayPal API SOAP Request

```
1. <?xml version="1.0" encoding="UTF-8"?>
2. <SOAP-ENV:Envelope
     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4.
     xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
5.
     xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
6.
     xmlns:xsd="http://www.w3.org/2001/XMLSchema"
7.
     SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/">
8.
     <SOAP-ENV:Header>
9.
        <RequesterCredentials</pre>
         xmlns="urn:ebay:api:PayPalAPI">
10.
11.
            <Credentials xmlns="urn:ebay:apis:eBLBaseComponents">
12.
               <Username>api username
               <Password>api password</Password>
13.
14.
               <Signature/>
15.
               <Subject/>
16.
            </Credentials>
17.
        </RequesterCredentials>
18.
     </SOAP-ENV:Header>
19.
    <SOAP-ENV:Bodv>
20.
        <specific_api_name Req xmlns="urn:ebay:api:PayPalAPI">
21.
            <specific_api_name Request</pre>
22.
                  xsi:type="ns:specific_api_name_RequestType">
               <Version xsi:type="xsd:string">service version/Version>
23.
24.
               <required_or_optional_element xsi:type="some_type_here">
25.
                  data
26.
               </required or optional elements>
27.
            </specific_api_name Request>
28.
        </specific api name Req>
29.
     </SOAP-ENV:Body>
30.</SOAP-ENV:Envelope>
```

TABLE 2.5 Annotation of Generic SOAP Request

Lines	Comment	
12, 13	The <username> and <password> elements are part of the PayPal Web Services API <requestercredentials> security authentication mechanism you must construct for ever SOAP request header. For details, see "SOAP RequesterCredentials: Username, Password, Signature, and Subject" on page 24.</requestercredentials></password></username>	
14	The <signature> element should include your API signature string if that is the kind of API credential you are using. For more details, see "<signature>" on page 24.</signature></signature>	
15	The <subject> element can specify a third-party PayPal account by whom you are authorized to make this request. For more details, see "<subject>" on page 25.</subject></subject>	
19 through 27	The SOAP request for every PayPal API follows this element naming pattern. The API's specific name is appended with Req, and in this element the specific_api_name_Request is nested. Each specific_api_name_Request has a corresponding specific_api_name_RequestType.	

TABLE 2.5 Annotation of Generic SOAP Request

Lines	Comment
22	The number of the PayPal Web Services API version is required on each SOAP request.
24	For details about required and optional elements and values for specific requests, see the description of individual APIs.

Response Structure

The following is an annotated description of the structure of a SOAP response from the PayPal Web Services API.

EXAMPLE 2.1 General Structure of PayPal API SOAP Response: Success

```
1.<?xml version="1.0"?>
2.<SOAP-ENV:Envelope
xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
4. xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
5. xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
6. xmlns:xsd="http://www.w3.org/2001/XMLSchema"
7. xmlns:xs="http://www.w3.org/2001/XMLSchema"
8. xmlns:cc="urn:ebay:apis:CoreComponentTypes"
9. xmlns:wsu="http://schemas.xmlsoap.org/ws/2002/07/utility"
10. xmlns:saml="urn:oasis:names:tc:SAML:1.0:assertion"
11. xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
12. xmlns:wsse="http://schemas.xmlsoap.org/ws/2002/12/secext"
13. xmlns:ebl="urn:ebay:apis:eBLBaseComponents"
14. xmlns:ns="urn:ebay:api:PayPalAPI">
15. <SOAP-ENV:Header>
16. <Security xmlns="http://schemas.xmlsoap.org/ws/2002/12/secext"
xsi:type="wsse:SecurityType"/>
17. RequesterCredentials xmlns="urn:ebay:api:PayPalAPI"
xsi:type="ebl:CustomSecurityHeaderType">
18. Credentials xmlns="urn:ebay:apis:eBLBaseComponents"
xsi:type="ebl:UserIdPasswordType"/>
19. </RequesterCredentials>
20. </SOAP-ENV:Header>
21. <SOAP-ENV:Body id=" 0">
22. < specific api name Response xmlns="urn:ebay:api:PayPalAPI">
     <Timestamp>dateTime_in_UTC/GMT</Timestamp>
23.
24. <ack xmlns="urn:ebay:apis:eBLBaseComponents">Success</ack>
25. <Version xmlns="urn:ebay:apis:eBLBaseComponents">serviceVersion//Version>
     <CorrelationId</pre>
xmlns="urn:ebay:apis:eBLBaseComponents">applicationCorrelation</CorrelationID>
27. <Build xmlns="urn:ebay:apis:eBLBaseComponents">api build number</Build>
28.
             <elements_for_specific_api_response>
29.
                   data
             </elements_for_specific_api_response>
30.
31. </specific api name Response>
32. </SOAP-ENV:Body>
33.</SOAP-ENV:Envelope>
```

Lines	Comment		
22 and 31	The specific_api_name_Response start and end elements.		
23	Each API response contains a timestamp with its date and time in UTC/GMT.		
24	The <ack> element contains the string Success after the corresponding request has been successfully processed. (For a complete list of possible returned strings, see "AbstractResponseType" on page 36.)</ack>		
	In the case of errors, Ack is set to a value other than Success, and the response body contains an <errors> element with information to help you troubleshoot the cause of the error. See "Error Responses" on page 29.</errors>		
26	The <correlationid> element contains information about the PayPal application that processed the request.</correlationid>		
27 through 30	The different PayPal APIs return different structures depending on their response definitions. For detailed information, see the description of the individual APIs.		
	NOTE: Because a field is defined in the formal structure of an API response does not mean that that field is necessarily returned. Data are returned in a response only if PayPal has recorded data that corresponds to the field.		

Error Responses

If a request is malformed or some other error, the body of the SOAP response contains an <Errors> element with other elements that can help you troubleshoot the cause of the error. The most important of these additional elements are as follows:

- ShortMessage
- LongMessage
- ErrorCode

For a description of the contents of these elements, see Appendix A, "Error Codes and Messages for All PayPal APIs."

The following example shows the error response if your API username and password do not match a legitimate API username and password on file with PayPal.

EXAMPLE 2.1 Example of SOAP Error Response: Bad Username or Password

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope details not shown>
<SOAP-ENV:Header>
.
.details not shown
.
</SOAP-ENV:Header>
<SOAP-ENV:Body id=" 0">
```

PayPal Web Services API Definitions

```
<GetTransactionDetailsResponse xmlns="urn:ebay:api:PayPalAPI"><Timestamp</pre>
xmlns="urn:ebay:apis:eBLBaseComponents">2005-02-09T21:51:26Z</Timestamp>
<Ack xmlns="urn:ebay:apis:eBLBaseComponents">Failure</Ack>
<Errors xmlns="urn:ebay:apis:eBLBaseComponents" xsi:type="ebl:ErrorType">
<ShortMessage xsi:type="xs:string">Authentication/Authorization
Failed</ShortMessage>
<LongMessage xsi:type="xs:string">Username/Password is
incorrect</LongMessage>
<ErrorCode xsi:type="xs:token">10002</ErrorCode>
<SeverityCode xmlns="urn:ebay:apis:eBLBaseComponents">Error
</Errors>
<CorrelationID
xmlns="urn:ebay:apis:eBLBaseComponents">debugging info</Version>
<Version xmlns="urn:ebay:apis:eBLBaseComponents">1.000000/Version><Build</pre>
xmlns="urn:ebay:apis:eBLBaseComponents">1.0006</Build>
. other elements in response
</SOAP-ENV:Body></SOAP-ENV:Envelope>
```

CorrelationID for Reporting Problems to PayPal

The value returned in CorrelationID is important for PayPal to determine the precise cause of any error you might encounter. We suggest that you capture the value of CorrelationID so you can report it to PayPal.

Test Tools: PayPal SDK Console

The PayPal SDK includes the console, which is a good tool for testing and learning the PayPal Web Services API. For more details about the console, see the *PayPal SDK Guides*.

PayPal Web Services API Definitions

The PayPal Web Services API comprises individual API definitions for specific business functions. As a foundation, the API relies on eBay Business Language (eBL) base and core components. The core eBL structures AbstractRequestType and AbstractResponseType are the basis of the SOAP request and response of each PayPal

API. AbstractResponseType is also the framework for error messages common across all PayPal APIs.

PayPal has made some schema design decisions that can affect how businesses design their own applications.

- Enumerations: Enumerations are defined directly in the PayPal API schema.
- Troubleshooting information: The PayPal API returns information about elements that trigger errors.

• Backward compatibility: The PayPal API is versioned so that business applications are backward compatible when new elements are introduced to the server-side schema.

Note: eBL defines many structures that are specific to processing auctions. PayPal's Web Services schema includes these definitions to maintain compatibility with eBay's Web Services and for possible future joint use of Web Services across both eBay and PayPal. The material in this book focuses only on those Web Services definitions pertinent to use of the PayPal Web Services API.

Character Encoding, Data Types and Formats, and Currencies

This section details allowed character encoding and character sets, date data types, and formats.

UTF-8 Character Encoding

The PayPal Web Services API service assumes that all data in SOAP requests is in Unicode, specifically, the Unicode (or UCS) Transformation Format, 8-bit encoding form (UTF-8).

In SOAP responses, the service always returns data in UTF-8.

Numeric and Date/Time Formats

The PayPal Web Services API schema defines the following data types for numeric and date/time values.

- Numeric data types:
 - int (32-bit), not integer.
 - For percentage values: float, not decimal.
- Date/time values: Coordinated Universal Time (UTC/GMT), using ISO 8601 format, and of type ns:dateTime.

PayPal-Supported Currencies. The following currencies are supported by PayPal.

TABLE 2.7 PayPal-Supported Currencies, Currency Codes, and Maximum Transaction Amounts

Code	Currency	Maximum Transaction Amount
AUD	Australian Dollar	12,500 AUD
CAD	Canadian Dollar	12,500 CAD
EUR	Euro	8,000 EUR
GBP	Pound Sterling	5,500 GBP
JPY	Japanese Yen	1,000,000 JPY
USD	U.S. Dollar	10,000 USD

PayPal Web Services API Definitions

The core currency amount data type is derived from string, and all currency amount elements have the following structure. The currencyID attribute is required.

<Amount currencyID="currencyCode">ns:BasicAmountType</Amount>

(The element name Amount is an example; actual element names can vary depending on the specific API.)

BasicAmountType has a data type of ebl:CurrencyCodeType, which defines a large number of different currency codes. However, for your processing to succeed, you must set *currencyCode* to one of the values from the first column of Table 2.7, "PayPal-Supported Currencies, Currency Codes, and Maximum Transaction Amounts" on page 31. Some APIs support only a subset of these currencies.

API Overview By Business Function and Service Endpoint

The PayPal Web Services API consists of individual APIs for specific business uses, and the individual APIs are grouped into two service endpoints.

TABLE 2.8 API Overview by Business Function and Service Endpoint

Business Function	SOAP Request/Response	Production (Live) Endpoint	Test (Sandbox) Endpoint:
Authorization & Capture API	DoCaptureRequest DoCaptureResponse DoAuthorizationRequest DoAuthorizationResponse DoVoidRequest DoVoidResponse DoReauthorizationRequest DoReauthorizationRespons e	api-aa.paypal.com/2.0/ api-aa-3t.paypal.com/2.0/	api-aa.sandbox.paypal.com/2.0/
Direct Payments API	DoDirectPaymentRequest DoDirectPaymentResponse	api-aa.paypal.com/2.0/ api-aa-3t.paypal.com/2.0/	
Express Checkout API	SetExpressCheckoutReques t SetExpressCheckoutRespon se GetExpressCheckoutDetail sRequest GetExpressCheckoutDetail sResponse DoExpressCheckoutPayment Request DoExpressCheckoutPayment Response	api-aa.paypal.com/2.0/api-aa-3t.paypal.com/2.0/	api-aa.sandbox.paypal.com/2.0/

Business Function SOAP Request/Response Production (Live) Endpoint Test (Sandbox) Endpoint: api.paypal.com/2.0/ GetTransaction GetTransactionDetailsReq api.sandbox.pavpal.com/2.0/ **Details API** api-3t.paypal.com/2.0/ GetTransactionDetailsRes ponse MassPay API MassPayRequest api.paypal.com/2.0/ api.sandbox.paypal.com/2.0/ MassPayResponse api-3t.paypal.com/2.0/ Refund RefundTransactionRequest api.paypal.com/2.0/ api.sandbox.pavpal.com/2.0/ Transaction API RefundTransactionRespons api-3t.paypal.com/2.0/ Transaction TransactionSearchRequest api.paypal.com/2.0/ api.sandbox.paypal.com/2.0/ TransactionSearchRespons Search API api-3t.paypal.com/2.0/

TABLE 2.8 API Overview by Business Function and Service Endpoint

APIs to Exchange Funds or Display Information

All PayPal Web Services APIs deal with business transactions. However, the APIs can be further categorized as follows:

- APIs that result in an exchange of funds:
 - Authorization & Capture
 - Direct Payment
 - Express Checkout
 - MassPay
 - RefundTransaction
- APIs that provide information about business transactions:
 - GetTransactionDetails
 - TransactionSearch

Instant Payment Notification and the APIs

Use of a PayPal Web Services API that results in an exchange of funds triggers the sending of an Instant Payment Notification email to the recipient of the funds. The APIs that send Instant Payment Notification email messages are as follows:

- MassPay
- RefundTransaction

For more information about Instant Payment Notification, see the *PayPal Order Management Integration Guide*.

PayPal Web Services API Architecture

PayPal Web Services API Definitions



Core eBL Request/Response Structures

The PayPal Web Services API is built on core structures from the eBL schema that define required elements in all SOAP requests and responses:

- AbstractRequestType
- AbstractResponseType

Diagram of core eBL Types

The following diagram represents the composition of the AbstractRequestType and AbstractResponseType elements.

FIGURE 3.1 Core eBL Types

Request

AbstractRequestType

DetailLevel

ErrorLanguage MessageID

* Version

Response

AbstractResponseType

Timestamp

Ack

CorrelationID

Errors

Version

Build

Errors

ShortMessage

LongMessage

ErrorCode

SeverityCode

ErrorParameters

AbstractRequestType

 ${\tt AbstractRequestType} \ is \ the \ base \ type \ definition \ of \ all \ PayPal \ Web \ Services \ SOAP \ requests.$

IMPORTANT: You must set the value of the Version element for all requests to any PayPal Web Services API.

Fields

TABLE 3.1 AbstractRequestType Fields

Element	Description	Data Type	Allowable Values	Required?
Version	A string representing the version of the request payload schema	xs:string	2.0	Yes

AbstractResponseType

AbstractResponseType is the base type definition of all PayPal Web Services SOAP responses.

Fields

For error codes and messages and their meanings, see Appendix , "Error Codes and Messages for All PayPal APIs."

TABLE 3.2 AbstractResponseType Fields

Element	Description	Data Type	Possible Values
Timestamp	The date and time (UTC/GMT) the response was generated by the PayPal Web Services service as a result of processing a request	xs:dateTime	Transaction-specific

TABLE 3.2 AbstractResponseType Fields

Element	Description	Data Type	Possible Values
Ack	A token representing the application-level acknowledgement code. Contains one of the following enumerated values: Success: Request processing succeeded Failure: Request processing failed SuccessWithWarning: Request processing completed successfully but with some warning information that could be useful for the requesting application to process or record. FailureWithWarning: Request processing failed with some error and warning information that the requesting application should process to determine causes of failure. CustomCode: Reserved for internal or future use.	xs:token	Success Failure SuccessWithWarning FailureWithWarning CustomCode
CorrelationID	A string that identifies the exact API request that produced this response Character length: 41 characters maximum.	xs:string	Transaction-specific
Errors	Error code for debugging a response. ErrorCode: token defining the error code number ShortMessage: string containing the error message LongMessage: string describing the error message	ns:ErrorType xs:token xs:string	Transaction-specific
Version	A string representing the version of the response payload schema	xs:string	1.0
Build	A string representing the specific software build that processes the request and generates the response	xs:string	

Core eBL Request/Response Structures

AbstractResponseType

Authorization & Capture API

The Authorization & Capture API consists of individual requests and responses, as shown below.

TABLE 4.1 Authorization & Capture API Names, Purposes, and Types of Authorization

API	Purpose	Used With Type of Authorization
1. DoCapture	Settle an order or previously authorized transaction and obtain payment for either the complete amount or any portion of it.	Order and Basic
2. DoAuthorization	Authorize an order that can be fulfilled over 29 days.	Order only
3. DoVoid	Void an original authorization or order	Order and Basic
4. DoReauthorization	Reauthorize a previously authorized transaction	Basic only

Funds Availability

Both DoAuthorization and DoReauthorization check the availability of a PayPal member's funds to obtain another honor period or to make a payment higher than you originally authorized, up to 115% of the originally authorized amount (not to exceed an increase of \$75 USD).

DoCapture

DoCaptureRequest is your request to completely or partially settle an order, an authorization, or reauthorization.

Note: DoCaptureRequest is for use with both basic and order authorizations.

Diagram of DoCapture Types

The following diagram represents the composition of the DoCaptureRequestType and DoCaptureResponseType elements. Elements required in the request are marked with an asterisk.

FIGURE 4.1 DoCapture Types

Request

DoCaptureRequestType

- * AuthorizationID
- * Amount
- * CompleteType

InvoiceID

Note

Response

DoCaptureResponseResponseDetailsType

AuthorizationID

PaymentInfo

PaymentInfoType

TransactionID

TransactionType

PaymentType

PaymentDate

GrossAmount

FeeAmount

SettleAmount

TaxAmount

ExchangeRate

PaymentStatus

PendingReason

DoCaptureRequest

Request to capture funds from a PayPal member's account.

TABLE 4.2 DoCaptureRequest Fields

Element	Description	Data Type	Allowable Values	Required?
Authorization ID	The authorization identification number of the payment you want to capture. This can be an order number, an order authorization number, or a rauthorization number. Character length and limits: 19 single-byte characters maximum	xs:string	See description.	Yes
Amount	Amount to capture. Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).	ebl:BasicAmount Type	See description.	Yes
CompleteType	Indicates if this capture is the last capture you intend to make. The default is Complete.	ebl:Complete CodeType	Default: Complete	Yes
	NOTE: If CompleteType is Complete, any remaining amount of the original reauthorized transaction is automatically voided.		NotComplete	
	Character length and limits: 12 single-byte alphanumeric characters			
InvoiceID	Your invoice number or other identification number.	xs:string	See description.	No
	NOTE: The InvoiceID value is recorded only if the authorization you are capturing is an order authorization, not a basic authorization.			
	Character length and limits: 127 single-byte alphanumeric characters			
Note	An informational note about this settlement that is displayed to the payer in email and in his transaction history.	xs:string	See description.	No
	Character length and limits: 255 single-byte characters			

DoCaptureResponse

Response to DoCaptureRequest.

Fields

TABLE 4.3 DoCaptureResponse Fields

Element	Description	Data Type	Possible Values
Authorization ID	The authorization identification number you specified in the request. Character length and limits: 19 single-byte characters maximum	xs:string	See description.
PaymentInfo	Information about the payment.	ebl:PaymentInfo Type	See Table 4.4 on page 42.

TABLE 4.4 Response: PaymentInfoType Elements

Element	Description	Data Type	Possible Values Transaction- specific	
TransactionID	Unique transaction ID of the payment. Character length and limitations: 17 single-byte characters	xs:string		
Transaction Type	The type of transaction Character length and limitations: 15 single-byte characters	ns:Payment TransactionCode Type	cart express-checkout	
PaymentType	Indicates whether the payment is instant or delayed. Character length and limitations: Seven single-byte characters	ebl:PaymentCode Type xs:string	none echeck instant	
PaymentDate	Time/date stamp of payment	xs:dateTime	Transaction- specific	
GrossAmount	The final amount charged, including any shipping and taxes form your Merchant Profile.	ebl:BasicAmountType	Transaction- specific	
FeeAmount	PayPal fee amount charged for the transaction	ebl:BasicAmountTyp e	Transaction- specific	
SettleAmount	Amount deposited in your PayPal account after a currency conversion.	ebl:BasicAmountTyp	Transaction- specific	

TABLE 4.4 Response: PaymentInfoType Elements

Element	Description	Data Type	Possible Values
TaxAmount	Tax charged on the transaction	ebl:BasicAmount Type xs:string	Transaction- specific
ExchangeRate	Exchange rate if a currency conversion occurred. Relevant only if you are billing in the customer's non-primary currency. If the customer chooses to pay with a currency other than the non-primary currency, the conversion occurs in the customer's account. Character length and limitations: a decimal multiplier	xs:string	Transaction- specific
PaymentStatus	Status of the payment: The status of the payment: None: No status Canceled-Reversal: This means a reversal has been canceled. For example, you won a dispute with the customer, and the funds for the transaction that was reversed have been returned to you. Completed: The payment has been completed, and the funds have been added successfully to your account balance. Denied: You denied the payment. This happens only if the payment was previously pending because of possible reasons described for the PendingReason element. Expired: the authorization period for this payment has been reached. Failed: The payment has failed. This happens only if the payment was made from your customer's bank account. Pending: The payment is pending. See the PendingReason element for more information. Refunded: You refunded the payment. Reversed: A payment was reversed due to a chargeback or other type of reversal. The funds have been removed from your account balance and returned to the buyer. The reason for the reversal is specified in the ReasonCode element. Processed: A payment has been accepted. Voided: An authorization for this transaction has been voided.	ebl:PaymentStatus CodeType xs:token	None Canceled-Reversal Completed Denied Expired Failed Pending Refunded Reversed Processed Voided

 TABLE 4.4 Response: PaymentInfoType Elements

Element	Description	Data Type	Possible Values
PendingReason	Note: PendingReason is returned in the response only if PaymentStatus is Pending. The reason the payment is pending:	ebl:PendingStatus CodeType xs:token	none address echeck intl multi-currency
	none: No pending reason address: The payment is pending because your customer did not include a confirmed shipping address and your Payment Receiving Preferences is set such that you want to manually accept or deny each of these payments. To change your preference,		verify other
	go to the Preferences section of your Profile . echeck: The payment is pending because it was made by an eCheck that has not yet cleared. intl: The payment is pending because you hold a non-U.S. account and do not have a withdrawal mechanism. You must manually accept or deny this		
	payment from your Account Overview. multi-currency: You do not have a balance in the currency sent, and you do not have your Payment Receiving Preferences set to automatically convert and accept this payment. You must manually accept		
	or deny this payment. verify: The payment is pending because you are not yet verified. You must verify your account before you can accept this payment.		
	other: The payment is pending for a reason other than those listed above. For more information, contact PayPal Customer Service.		

DoAuthorization

DoAuthorizationRequest is your request to authorize a customer order that can be fulfilled within 29 days. You use DoAuthorizationRequest when you are ready to ship goods to your customer. After you ship, you can capture funds with DoCapture.

NOTE: DoAuthorizationRequest is for use only with order authorizations, not basic authorizations.

To use DoAuthorization you must have previously created a customer order. You can create an order in several ways:

- With the DoExpressCheckoutPaymentRequest or DoDirectPaymentRequest PaymentAction element set to Order.
- With a shopping cart or PayPal Website Payments transaction with the paymentaction HTML variable set to order

Diagram of DoAuthorization Types

The following diagram represents the composition of the DoAuthorizationRequestType and DoAuthorizationResponseType elements. Elements required in the request are marked with an asterisk.

FIGURE 4.2 DoAuthorization Types

Request

DoAuthorizationRequestType

* TransactionID

TransactionEntity

* Amount

TransactionEntityType

None

Auth

Reauth

Order

Payment

Response

DoAuthorizationResponseType

TransactionID Amount

DoAuthorizationRequest

Request to authorize all or part of a customer order amount.

Fields

TABLE 4.5 DoAuthorizationRequest Fields

Element	Description	Data Type	Allowable Values	Required?
TransactionID	The value of the order's transaction identification number returned by a PayPal product.	xs:string	See description.	Yes
	Character length and limits: 19 single-byte characters maximum			
Amount	Amount to authorize. Limitations: Must not exceed \$10,000 USD in any	ebl:BasicAmount Type	See description.	Yes
	currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).			
TransactionEnt ity	Type of transaction to authorize. The only allowable value is order, which means that the transaction represents a customer order that can be fulfilled over 29 days.	ebl:Transaction EntityType	Order	No

DoAuthorizationResponse

Response to DoAuthorizationRequest.

TABLE 4.6 DoAuthorizationResponse Fields

Element	Description	Data Type	Possible Values
TransactionID	An authorization identification number. Character length and limits: 17 single-byte characters	xs:string	See description.
Amount	The amount you specified in the request.	ebl:BasicAmount Type	See description.

DoVoid

DoVoidRequest voids an order or an authorization.

IMPORTANT: The AuthorizationID value on DoVoidRequest must be the original authorization identification number, not the value of AuthorizationID returned by DoReauthorizationResponse.

By definition, when the authorization period expires, the authorization or reauthorization of a transaction is implicitly voided.

Note: DoVoidRequest is for use with both basic and order authorizations.

Diagram of DoVoid Types

The following diagram represents the composition of the DoVoidRequestType and DoVoidResponseType elements. Elements required in the request are marked with an asterisk.

FIGURE 4.3 DoVoid Types

Request

DoVoidRequestType

* AuthorizationID

Note

Response

DoVoidResponseType AuthorizationID

DoVoidRequest

Request to void a prior authorization.

Fields

TABLE 4.7 DoVoidRequest Fields

Element	Description	Data Type	Allowable Values	Required?
AuthorizationI D	The value of the original authorization identification number returned by a PayPal product.	xs:string	See description.	Yes
	IMPORTANT: If you are voiding a transaction that has been reauthorized, use the ID from the original authorization, and not the reauthorization.			
	Character length and limits: 19 single-byte characters			
Note	An informational note about this settlement that is displayed to the payer in email and in his transaction history.	xs:string	See description.	No
	Character length and limits: 255 single-byte characters			

DoVoidResponse

 $Response \ to \ {\tt DoVoidRequest}.$

TABLE 4.8 DoVoidResponse Fields

Element	Description	Data Type	Possible Values
Authorization ID	The authorization identification number you specified in the request. Character length and limits: 19 single-byte characters	xs:string	See description.

DoReauthorization

To use DoReauthorization you must have previously authorized a transaction. You can authorize a transaction in several ways:

- From the **Merchant Services** tab of your PayPal merchant account.
- With the DoExpressCheckoutPaymentRequest PaymentAction element set to Authorization.
- With a shopping cart transaction (such as one that uses PayPal Website Payments) with the paymentaction HTML variable set to authorization.

You can invoke DoReauthorizationRequest as many times as necessary to obtain one successful reauthorization. When DoReauthorizationResponse returns success, the settlement period restarts, you can capture funds, but you can no longer reauthorize.

Note: DoReauthorizationRequest is for use only with basic authorizations, not order authorizations.

Diagram of DoReauthorization Types

The following diagram represents the composition of the DoReauthorizationRequestType and DoReauthorizationResponseType elements. Elements required in the request are marked with an asterisk.

FIGURE 4.4 DoReauthorization Types

Request Response

DoReauthorizationRequestType

- * AuthorizationID
- * Amount

DoReauthorizationResponseType

AuthorizationID

DoReauthorizationRequest

Request to use Authorization & Capture to reauthorize a transaction.

Fields

TABLE 4.9 DoReauthorizationRequest Fields

Element	Description	Data Type	Allowable Values	Required?
Authorization ID	The value of a previously authorized transaction identification number returned by a PayPal product.	xs:string	Any previously authorized PayPal transaction identification number.	Yes
	Note: You can obtain a buyer's transaction number from the TransactionID element of the PayerInfo structure returned by GetTransactionDetailsRespons e.			
	Character length and limits: 19 single-byte characters maximum			
Amount	Amount to reauthorize. Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).	cc:BasicAmount Type	See description.	Yes

DoReauthorizationResponse

Response to DoReauthorizationRequest.

TABLE 4.10 DoReauthorizationResponse Fields

Element	Description	Data Type	Possible Values
Authorization	A new authorization identification number.	xs:string	See description.
ID	Character length and limits: 19 single-byte characters		

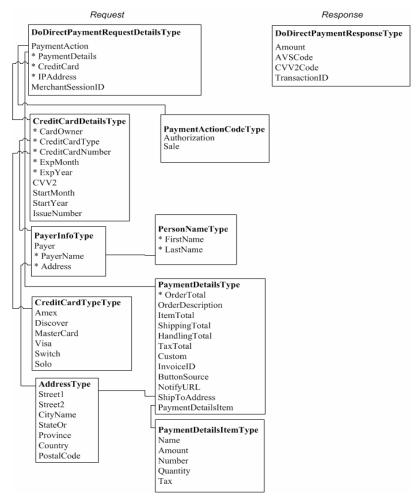
Direct Payment API

With the Direct Payment API, you can obtain payment through PayPal directly from a buyer's credit card without the buyer logging into PayPal.

Diagram of DoDirectPayment Types

The following diagram represents the composition of the DoDirectPaymentRequestType and DoDirectPaymentResponseType elements. Elements required in the request are indicated with an asterisk.

FIGURE 5.1 DoDirectPayment Types



DoDirectPaymentRequest

Request to use PayPal Direct Payment to obtain payment.

You must include the PaymentAction element in DoDirectPaymentRequest. Allowable values for the PaymentAction element are Sale or Authorization:

- Set PaymentAction to Sale if the buyer's order is final (for example, if the total cost of the order is complete with shipping, handling and tax charges). This transaction is your payment, and you expect no additional charge to the buyer.
- Set PaymentAction to Authorization if the total cost of the order at point of sale is not complete for some reason (such as unknown shipping charges) and you expect to capture funds after checkout is complete. You can then use PayPal Authorization & Capture to obtain payment.

In either case, besides the PaymentAction element, DoDirectPaymentRequest requires additional elements, such as the amount of the transaction, IP address of the buyer's browser, credit card number, type, and expiration date, and information about both the payer and the payment.

TABLE 5.1 DoDirectPaymentRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
PaymentAction	 How you want to obtain payment: Authorization indicates that this payment is a basic authorization subject to settlement with PayPal Authorization & Capture. Sale indicates that this is a final sale for which you are requesting payment. Character length and limit: Up to 13 single-byte alphabetic characters 	ebl:PaymentAction CodeType xs:token	Default: The transaction resulting from DoDirect Payment Request will be a final sale. Authorization Sale NOTE: Order is not allowed for Direct Payment.	No
CreditCard	Information about the credit card to be charged.	ebl:CreditCard DetailsType	See Table 5.2 on page 53.	Yes
PaymentDetails	Information about the payment	ebl:PaymentDetails Type	See Table 5.3 on page 54.	Yes



Element	Description	Data Type	Allowable Values	Required ?
IPAddress	IP address of the payer's browser as recorded in its HTTP request to your website.	xs:string	Any valid Internet Protocol address.	Yes
	NOTE: PayPal records this IP addresses as a means to detect possible fraud.			
	Character length and limitations: 15 single-byte characters, including periods, in dotted-quad format: ???.???.???			
Merchant	Your customer session identification token.	xs:string		No
SessionId	NOTE: PayPal records this optional session identification token as an additional means to detect possible fraud.			
	Character length and limitations: 64 single-byte numeric characters			

TABLE 5.2 CreditCardDetailsType Fields

Element	Description	Data Type	Allowable Values	Required ?
CreditCardType	Type of credit card. Character length and limitations: Up to ten single-byte alphabetic characters. IMPORTANT: If the credit card type is Switch or Solo: 1. The value of PaymentAction must be Authorization. 2. The currencyId must be GBP.	ebl:CreditCardType Type	Visa MasterCard Discover Amex Switch. See important note in description. Solo. See important note in description.	Yes
CreditCard Number	Credit card number Character length and limitations: numeric characters only. No spaces or punctutation. Must conform with modulo and length required by each credit card type.	xs:string	See description.	Yes
ExpMonth	Credit card expiration month Character length and limitations: Two single-byte numeric characters, including leading zero.	xs:int	See description.	Yes
ExpYear	Credit card expiration year Character length and limitations: Four single-byte numeric characters.	xs:int	See description.	Yes

TABLE 5.2 CreditCardDetailsType Fields

Element	Description	Data Type	Allowable Values	Required ?
CVV2	Card Verification Value, version 2.	xs:string	See description.	No.
	NOTE: You must include a CVV2 value for those credit cards that use CVV2.			See note in description.
	Required for Visa, MasterCard, American Express, and Discover cards. Other card types might not require a CVV2 value.			
	Character length for Visa, MasterCard, and Discover: exactly three digits.			
	Character length for American Express: exactly four digits.			
	IMPORTANT: To comply with credit card processing regulations, once a transaction has been completed, you must not store the value of CVV2.			
CardOwner	Details about the owner of the credit card.	ns:PayerInfoType	See Table 5.7 on page 60.	Yes
StartMonth	Month that Switch or Solo card was issued. Character length: two-digit, zero-filled if necessary.	xs:int	See description.	No.
StartYear	Year that Switch or Solo card was issued. Character length: four digits.	xs:int	See description.	No.
IssueNumber	Issue number of Switch or Solo card. Character length: two numeric digits maximum.	xs:int	See description.	No.

TABLE 5.3 Request: PaymentDetailsType Fields

Element	Description	Data Type	Allowable Values	Required?
OrderTotal	Total of order, including shipping, handling, and tax.	ebl:BasicAmount Type	See description.	Yes
	NOTE: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.	1100		
	Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).			
ItemTotal	Sum of cost of all items in this order. Character length and limitations: 127 single-byte characters	ebl:BasicAmount Type	See description.	No

TABLE 5.3 Request: PaymentDetailsType Fields

Element	Description	Data Type	Allowable Values	Required?
ShippingTotal	Total shipping costs for this order. NOTE: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.	ebl:BasicAmount Type	See description.	No
	Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).			
HandlingTotal	Total handling costs for this order.	ebl:BasicAmount	See description.	No
	NOTE: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.	Туре		
	Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).			
TaxTotal	Sum of tax for all items in this order.	ebl:BasicAmount	See description.	No
	NOTE: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.	Туре		
	Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).			
Order Description	Description of items the customer is purchasing. Character length and limitations: 127 single-byte alphanumeric characters	xs:string	See description.	No
Custom	A free-form field for your own use. Character length and limitations: 256 single-byte alphanumeric characters	xs:string	See description.	No
InvoiceID	Your own invoice or tracking number, as set by you in the InvoiceID element of SetExpressCheckoutRequest. Character length and limitations: 127 single-byte alphanumeric characters	xs:string	See description.	No
ButtonSource	An identification code for use by third-party applications to identify transactions. Character length and limitations: 32 single-byte alphanumeric characters	xs:string	See description.	No

TABLE 5.3 Request: PaymentDetailsType Fields

Element	Description	Data Type	Allowable Values	Required?
NotifyURL	Your URL for receiving Instant Payment Notification (IPN) about this transaction.	xs:string	See description.	No
	NOTE: If you do not specify NotifyURL in the request, the notification URL from your Merchant Profile is used, if one exists.			
	Character length and limitations: 2,048 single-byte alphanumeric characters			
ShipToAddress	Address the order will be shipped to.	ebl:AddressType	See Table 5.4 on page 56.	No
PaymentDetails Item	Details about each individual item included in the order	ebl:PaymentDetails ItemType	See Table 5.6 on page 60.	No

IMPORTANT: Any fields in the WSDL or XSD files that are not described here are ignored. For example, do not set CountryName.

TABLE 5.4 Request: ShipToAddress: AddressType Fields

Element	Descriptions	Data Type	Allowable Values	Required ?
Name	Person's name associated with this address. Character length and limitations: 32 single-byte characters	xs:string	See description.	Yes
Streetl	First street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	Yes
Street2	Second street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	No
CityName	Name of city. Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
StateOr Province	State or province. Character length and limitations: 40 single-byte characters	xs:string	See Table 5.5 on page 57	No
PostalCode	U.S. ZIP code or other country-specific postal code. Character length and limitations: 20 single-byte characters	xs:string	See description.	No

TABLE 5.4 Request: ShipToAddress: AddressType Fields

Element	Descriptions	Data Type	Allowable Values	Required ?
Country	Country code.	ebl:CountryCode	See Appendix B.	Yes
	Character limit: Two single-byte characters	Туре		
		xs:string		

TABLE 5.5 StateOrProvince: Abbreviations for Canada and U.S.

British Columbia Manitoba New Brunswick Newfoundland and Labrador	AB BC MB NB NF
Manitoba Manitoba Mew Brunswick Mewfoundland and Labrador Mewfoundland and Labrador Memory Me	MB NB
New Brunswick Newfoundland and Labrador	NB NF
Newfoundland and Labrador	NF
Northwest_Territories	VТ
	N I
Nova_Scotia	NS
Nunavut 1	NU
Ontario	ON
Prince_Edward_Island	PE
Quebec	QC
Saskatchewan	SK
Yukon	YK
Alabama	A L
Alaska	AK
American_Samoa	AS
Arizona	ΑZ
Arkansas	AR
California	CA
Colorado	CO
Connecticut	CT
Delaware I	DE

TABLE 5.5 StateOrProvince: Abbreviations for Canada and U.S.

District Of ColumbiaDCFederated States Of MicronesiaFMFloridaFLGeorgiaGAGuamGUHawaiiHIIdahoIDIllinoisILIndianaINIowaIAKansasKSKentuckyKYLouisianaLAMaineMEMarshall_IslandsMHMarylandMDMassachusettsMAMichiganMIMinnesotaMNMississisippiMSMissouriMOMontanaMTNebraskaNENevadaNVNew HampshireNHNew JerseyNJNew MexicoNMNew YorkNY	Canadian Province or U.S. State	
Florida FL Georgia GA Guam GU Hawaii HI Idaho ID Illinois IL Indiana IN Iowa IA Kansas KS Kentucky KY Louisiana LA Maine ME Marshall_Islands MH Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	District Of Columbia	DC
Georgia GA Guam GU Hawaii HI Idaho ID Illinois IL Indiana IN Iowa IA Kansas KS Kentucky KY Louisiana LA Maine ME Marshall_Islands MH Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NMA	Federated States Of Micronesia	FM
Guam GU Hawaii HI Idaho ID Illinois IL Indiana IN Iowa IA Kansas KS Kentucky KY Louisiana LA Maine ME Marshall_Islands MH Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NMI	Florida	FL
Hawaii HI Idaho ID Illinois IL Indiana IN Iowa IA Kansas KS Kentucky KY Louisiana LA Maine ME Marshall_Islands MH Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NMA	Georgia	GA
Idaho ID Illinois IL Indiana IN Iowa IA Kansas KS Kentucky KY Louisiana LA Maine ME Marshall_Islands MH Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Guam	GU
Illinois IL Indiana IN Iowa IA Kansas KS Kentucky KY Louisiana LA Maine ME Marshall_Islands MH Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Hawaii	HI
Indiana IN Iowa IA Kansas KS Kentucky KY Louisiana LA Maine ME Marshall_Islands MH Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Idaho	ID
Iowa IA Kansas KS Kentucky KY Louisiana LA Maine ME Marshall_Islands MH Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Illinois	IL
Kansas KS Kentucky KY Louisiana LA Maine ME Marshall_Islands MH Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Indiana	IN
Kentucky Louisiana LA Maine ME Marshall_Islands MH Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Iowa	IA
Louisiana LA Maine ME Marshall_Islands MH Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Kansas	KS
MaineMEMarshall_IslandsMHMarylandMDMassachusettsMAMichiganMIMinnesotaMNMississippiMSMissouriMOMontanaMTNebraskaNENevadaNVNew HampshireNHNew JerseyNJNew MexicoNM	Kentucky	KY
Marshall_IslandsMHMarylandMDMassachusettsMAMichiganMIMinnesotaMNMississippiMSMissouriMOMontanaMTNebraskaNENevadaNVNew HampshireNHNew JerseyNJNew MexicoNM	Louisiana	LA
Maryland MD Massachusetts MA Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Maine	ME
MassachusettsMAMichiganMIMinnesotaMNMississippiMSMissouriMOMontanaMTNebraskaNENevadaNVNew HampshireNHNew JerseyNJNew MexicoNM	Marshall_Islands	МН
Michigan MI Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Maryland	MD
Minnesota MN Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Massachusetts	MA
Mississippi MS Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Michigan	MI
Missouri MO Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Minnesota	MN
Montana MT Nebraska NE Nevada NV New Hampshire NH New Jersey NJ New Mexico NM	Mississippi	MS
NebraskaNENevadaNVNew HampshireNHNew JerseyNJNew MexicoNM	Missouri	МО
NevadaNVNew HampshireNHNew JerseyNJNew MexicoNM	Montana	MT
New HampshireNHNew JerseyNJNew MexicoNM	Nebraska	NE
New Jersey NJ New Mexico NM	Nevada	NV
New Mexico NM	New Hampshire	NH
	New Jersey	NJ
New York NY	New Mexico	NM
	New York	NY

TABLE 5.5 StateOrProvince: Abbreviations for Canada and U.S.

Canadian Province or U.S. State	
North Carolina	NC
North Dakota	ND
Northern Mariana Islands	MP
Ohio	ОН
Oklahoma	OK
Oregon	OR
Palau	PW
Pennsylvania	PA
Puerto Rico	PR
Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Utah	UT
Vermont	VT
Virgin_Islands	VI
Virginia	VA
Washington	WA
West_Virginia	WV
Wisconsin	WI
Wyoming	WY
Armed_Forces_Americas	AA
Armed_Forces	AE
Armed_Forces_Pacific	AP

TABLE 5.6 Request: PaymentDetailsItemType Fields

Element	Description	Data Type	Allowable Values	Required ?
Name	Item name. Character length and limitations: 127 single-byte characters	xs:string	See description.	No
Amount	Cost of item Note: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies. Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).	ebl:BasicAmount Type	See description.	No
Number	Item number. Character length and limitations: 127 single-byte characters	xs:string	See description.	No
Quantity	Item quantity. Character length and limitations: Any positive integer	xs:string	See description.	No
Tax	Item sales tax. Character length and limitations: any valid currency amount; currency code is set the same as for OrderTotal.	ebl:BasicAmount Type	See description.	No

TABLE 5.7 CardOwner: PayerInfoType Fields

Element	Description	DataType	Allowable Values	Required ?
Payer	Email address of payer. Character length and limitations: 127 single-byte characters	ns:EmailAddress Type	See description.	No
FirstName	Payer's first name. Character length and limitations: 25 single-byte characters	ns:PersonName Type	See description.	Yes
LastName	Payer's last name. Character length and limitations: 25 single-byte characters	ns:PersonName Type	See description.	Yes

TABLE 5.7 CardOwner: PayerInfoType Fields

Element	Description	DataType	Allowable Values	Required ?
Address	Payer's billing address information	ns:AddressType	See Table 5.8 on page 61.	Yes

TABLE 5.8 CardOwner: AddressType Fields

Element	Description	DataType	Allowable Values	Required ?
Streetl	First street address Character length and limitations: 100 single-byte characters	xs:string	See description.	Yes
Street2	Second street address Character length and limitations: 100 single-byte characters	xs:string	See description.	No
CityName	Name of city Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
StateOr Province	State or province Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
Country	Country code. Character length and limitations: Two single-byte characters.	ebl:CountryCode Type xs:string	See Appendix 1.	Yes
PostalCode	U.S. Zip code or other country-specific postal code Character length and limitations: 20 single-byte characters	xs:string	See description.	Yes

DoDirectPaymentResponse

Response to DoDirectPaymentRequest.

The Direct Payment API response contains the TransactionID element. In the case of a final Sale, TransactionID is your record of the transaction processed with PayPal. In the case of an Authorization, TransactionID is your key to capturing funds with PayPal Authorization & Capture.

DoDirectPaymentResponse also returns the result of checking the buyer's postal address and credit card number (as submitted by you with DoDirectPaymentRequest) against the U.S. banking industry standard Address Verification System (AVS) and Credit Card Verification (CVV2) system.

TABLE 5.9 DoDirectPaymentResponse Fields

Element	Description	Data Type	Possible Values
TransactionID	Unique transaction ID of the payment.	xs:string	See description.
	IMPORTANT: If the PaymentAction of the request was Authorization, the value of TransactionID is your AuthorizationID for use with the Authorization & Capture APIs.		
	Character length and limitations: 19 single-byte characters		
Amount	The amount of the payment as specified by you on DoDirectPaymentRequest.	ebl:BasicAmount Type	See description.
AVSCode	Address Verification System response code. Character limit: One single-byte alphanumeric character	xs:string	See Table 5.10, "AVS Response Codes" on page 63.
CVV2Code	Result of the CVV2 check by PayPal.	xs:string	See Table 5.11, "CVV2 Response Codes" on page 63.

TABLE 5.10 AVS Response Codes

AVS Code	Meaning	Matched Details
A	Address	Address only (no ZIP)
В	International "A"	Address only (no ZIP)
C	International "N"	None
D	International "X"	Address and Postal Code
Е	Not allowed for MOTO (Internet/Phone) transactions	Not applicable
F	UK-specific "X"	Address and Postal Code
G	Global Unavailable	Not applicable
I	International Unavailable	Not applicable
N	No	None
P	Postal (International "Z")	Postal Code only (no Address)
R	Retry	Not applicable
S	Service not Supported	Not applicable
U	Unavailable	Not applicable
W	Whole ZIP	Nine-digit ZIP code (no Address)
X	Exact match	Address and nine-digit ZIP code
Y	Yes	Address and five-digit ZIP
Z	ZIP	Five-digit ZIP code (no Address)
All others	Error	Not applicable

TABLE 5.11 CVV2 Response Codes

CVV2 Code	Meaning	Matched Details
M	Match	CVV2
N	No match	None

TABLE 5.11 CVV2 Response Codes

CVV2 Code	Meaning	Matched Details	
P	Not Processed	Not applicable	
S	Service not Supported	Not applicable	
U	Unavailable	Not applicable	
X	No response	Not applicable	
All others	Error	Not applicable	

Express Checkout API

The Express Checkout API is the Website Payments Pro alternative to standard PayPal shopping cart processing.

IMPORTANT: For a full understanding of the complete details about how to use PayPal Express Checkout, consult the PayPal Express Checkout Integration Guide.

The Express Checkout API consists of three distinct SOAP requests that you make at the three integration points during a customer checkout:

- 1. SetExpressCheckout
- 2. GetExpressCheckoutDetails
- 3. DoExpressCheckoutPayment

IMPORTANT: All currency amount fields in the three Express Checkout APIs require that the currencyID attribute be set to one of the supported currency codes. For any one particular buyer's checkout session, do not mix currencies either in any single SOAP request or across SOAP requests. For example, do not set currencyID to USD in one request and then to GBP in a later request for the same buyer.

SetExpressCheckout

* Country

SetExpressCheckout indicates to PayPal that you are using Express Checkout to obtain payment from your customer.

Diagram of Set ExpressCheckout Types

The following diagram represents the composition of the SetExpressCheckoutRequestType and SetExpressCheckoutResponseType elements. Elements required in the request are indicated with an asterisk.

FIGURE 6.1 SetExpressCheckout Types

Request Response SetExpressCheckoutRequestDetailsType **SetExpressCheckoutResponseType** * OrderTotal Token * ReturnURL * CancelURL Token MaxAmount OrderDescription Custom InvoiceID ReqConfirmShipping NoShipping AddressOverride LocaleCode PageStyle cpp-header-image cpp-header-border-color cpp-header-back-color cpp-payflow-color Address **PaymentAction** BuyerEmail **PaymentActionCodeType** Authorization Order Sale AddressType Name * Street1 Street2 * CityName * StateOrProvince * PostalCode

${\bf SetExpressCheckoutRequest}$

Request to use PayPal Express Checkout to obtain payment.

IMPORTANT: Any fields in the WSDL or XSD files that are not described here are ignored. For example, do not set CountryName.

TABLE 6.1 SetExpressCheckoutRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
Token	On your first invocation of SetExpressCheckoutRequest, the value of this token is returned by SetExpressCheckoutResponse.	ebl:Express CheckoutTokenType	See the description of "Token" on page 72.	No
	IMPORTANT: Include this element and its value only if you want to modify an existing checkout session with another invocation of SetExpressCheckoutReque st; for example, if you want the customer to edit his shipping address on PayPal.			
	Character length and limitations: 20 single-byte characters			
OrderTotal	The total cost of the order to the customer. If shipping cost and tax charges are known, include them in OrderTotal; if not, OrderTotal should be the current sub-total of the order.	cc:BasicAmount Type	See description.	Yes
	NOTE: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.			
	Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.			

TABLE 6.1 SetExpressCheckoutRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
MaxAmount	The expected maximum total amount of the complete order, including shipping cost and tax charges.	cc:BasicAmount Type	See description.	No
	NOTE: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.			
	Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.			
Order Description	Description of items the customer is purchasing. Character length and limitations: 127 single-byte alphanumeric characters	xs:string	See description.	No
Custom	A free-form field for your own use, such as a tracking number or other value you want PayPal to return on GetExpressCheckoutDetailsResponse and DoExpressCheckoutPaymentResponse. Character length and limitations: 256 single-byte alphanumeric characters	xs:string	See description.	No
InvoiceID	Your own unique invoice or tracking number. PayPal returns this value to you on DoExpressCheckoutPaymentResponse. Character length and limitations: 127 single-byte alphanumeric characters	xs:string	See description.	No
ReturnURL	URL to which the customer's browser is returned after choosing to pay with PayPal. Note: PayPal recommends that the value of Returnurl be the final review page on which the customer confirms the order and payment. Character length and limitations: no limit.	xs:string	See description.	Yes
CancelURL	URL to which the customer is returned if he does not approve the use of PayPal to pay you. Note: PayPal recommends that the value of CancelurL be the original page on which the customer chose to pay with PayPal.	xs:string	See description.	Yes
	Character length and limitations: no limit			

TABLE 6.1 SetExpressCheckoutRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
Address	Customer's shipping address.	ebl:AddressType	See Table 6.2 on	No
	NOTE: If you include a shipping address and set the AddressOverride element on the request, PayPal returns this same address in GetExpressCheckoutDetailsRes ponse.		page 71.	
ReqConfirm Shipping	The value 1 indicates that you require that the customer's shipping address on file with PayPal be a confirmed address.	xs:string	0	No
	NOTE: Setting this element overrides the setting you have specified in your Merchant Account Profile.			
	Character length and limitations: One single-byte numeric character.			
NoShipping	The value 1 indicates that on the PayPal pages, no shipping address fields should be displayed whatsoever.	xs:string	0	No
	Character length and limitations: Four single-byte numeric character.			
Address Override	The value 1 indicates that the PayPal pages should display the shipping address set by you in the Address element on this SetExpressCheckoutRequest, not the shipping address on file with PayPal for this customer.	xs:string	0 1	No
	NOTE: Displaying the PayPal street address on file does not allow the customer to edit that address.			
	Character length and limitations: Four single-byte numeric character.			
LocaleCode	Locale of pages displayed by PayPal during Express	xs:string	AU Or en_AU	No
	Checkout.		DE Or de_DE	
	Character length and limitations: Five single-byte alphabetic characters, upper- or lowercase.		FR Or fr_FR	
	any and characters, appear of to refease.		GB or en_GB	
			IT Or it_IT	
			JP Or ja_JP US Or en US	

TABLE 6.1 SetExpressCheckoutRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
PageStyle	Sets the Custom Payment Page Style for payment pages associated with this button/link. PageStyle corresponds to the HTML variable page_style for customizing payment pages. The value is the same as the Page Style Name you chose when adding or editing the page style from the Profile subtab of the My Account tab of your PayPal account. Character length and limitations: 30 single-byte alphabetic characters.	xs:string	See description.	No
cpp-header- image	A URL for the image you want to appear at the top left of the payment page. The image has a maximum size of 750 pixels wide by 90 pixels high. PayPal recommends that you provide an image that is stored on a secure (https) server. Character length and limitations: 127	xs:string	See description.	No
cpp-header- border-color	Sets the border color around the header of the payment page. The border is a 2-pixel perimeter around the header space, which is 750 pixels wide by 90 pixels high. Character length and limitations: Six character HTML hexadecimal color code in ASCII	xs:string	See description.	No
cpp-header- back-color	Sets the background color for the header of the payment page. Character length and limitation: Six character HTML hexadecimal color code in ASCII	xs:string	See description.	No
cpp-payflow- color	Sets the background color for the payment page. Character length and limitation: Six character HTML hexadecimal color code in ASCII	xs:string	See description.	No

TABLE 6.1 SetExpressCheckoutRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
PaymentAction	How you want to obtain payment: Authorization indicates that this payment is a basic authorization subject to settlement with PayPal Authorization & Capture. Order indicates that this payment is is an order authorization subject to settlement with PayPal Authorization & Capture. Sale indicates that this is a final sale for which you are requesting payment. IMPORTANT: You cannot set PaymentAction to Sale on SetExpressCheckoutReque st and then change PaymentAction to Authorization on the final API DoExpressCheckoutPaymen tRequest. Character length and limit: Up to 13 single-byte alphabetic characters	ebl:PaymentAction CodeType xs:token	Default: The transaction resulting from DoExpress Checkout Payment Request will be a final sale. Authorization Order Sale	No
BuyerEmail	Email address of the buyer as entered during checkout. PayPal uses this value to pre-fill the PayPal membership sign-up portion of the PayPal login page. Character length and limit: 127 single-byte alphanumeric characters	ebl:EmailAddress Type	See description.	No

Note: The AddressType elements are required only if you include the Address element in the SOAP request.

IMPORTANT: Any fields in the WSDL or XSD files that are not described here are ignored. For example, do not set CountryName.

TABLE 6.2 Address (Shipping Address): AddressType Elements

Element	Descriptions	Data Type	Allowable Values	Required?
Name	Person's name associated with this shipping address.	xs:string	See description.	No
	Character length and limitations: 32 single-byte characters			

 TABLE 6.2 Address (Shipping Address): AddressType Elements

Element	Descriptions	Data Type	Allowable Values	Required?
Street1	First street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	Yes
Street2	Second street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	No
CityName	Name of city. Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
StateOr Province	State or province Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
PostalCode	U.S. Zip code or other country-specific postal code Character length and limitations: 20 single-byte characters	xs:string	See description.	Yes
Country	Country code. Character limit: Two single-byte characters.	ebl:CountryCode Type xs:string	See Appendix B.	Yes

SetExpressCheckoutResponse

 $Response \ to \ {\tt SetExpressCheckoutRequest}.$

TABLE 6.3 SetExpressCheckoutResponse Fields

Element	Description	Data Type	Value
Token	A timestamped token by which you identify to PayPal that you are processing this payment with Express Checkout.	xs:string	See description.
	NOTE: The token expires after three hours.		
	If you set Token in the SetExpressCheckoutRequest, the value of Token in the response is identical to the value in the request. Character length and limitations: 20 single-byte characters		

GetExpressCheckoutDetails

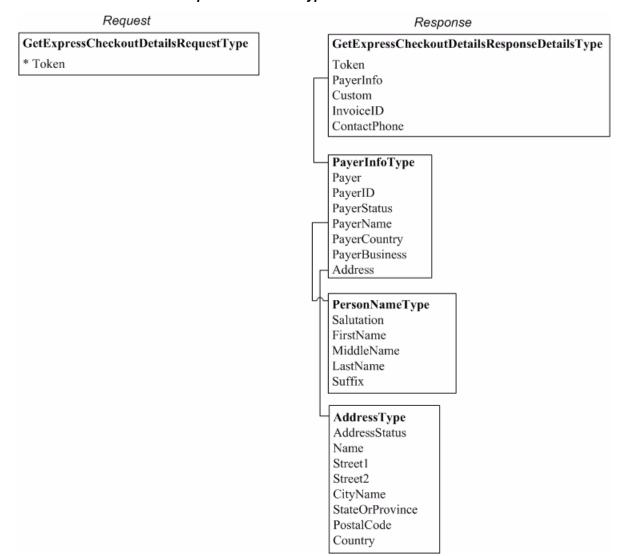
GetExpressCheckoutDetails returns information about the customer, including name and address on file with PayPal.

Diagram of GetExpressCheckoutDetails Types

The following diagram represents the composition of the GetExpressCheckoutDetailsRequestType and GetExpressCheckoutDetailsResponseType elements.

Elements required in the request are indicated with an asterisk.

FIGURE 6.2 GetExpressCheckout Types



GetExpressCheckoutDetails

${\bf GetExpressCheck out Details Request}$

Obtain details about a payment to be processed by PayPal Express Checkout.

Fields

TABLE 6.4 GetExpressCheckoutDetailsRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
Token	A timestamped token, the value of which was returned by SetExpressCheckoutResponse. Character length and limitations: 20 single-byte characters	xs:string	An unexpired token	Yes

GetExpressCheckoutDetailsResponse

 $Response \ to \ {\tt GetExpressCheckoutDetailsRequest}.$

TABLE 6.5 GetExpressCheckoutDetailsResponse Fields

Element	Description	Data Type	Possible Values
Token	The timestamped token value that was returned by SetExpressCheckoutResponse and passed on GetExpressCheckoutDetailsRequest.	xs:string	See the description of "Token" on page 72.
	Character length and limitations: 20 single-byte characters		
PayerInfo	Information about the payer.	ebl:PayerInfoType	See Table 6.6 on page 75.
Custom	A free-form field for your own use, as set by you in the Custom element of SetExpressCheckoutRequest. Character length and limitations: 256 single-byte	xs:string	See description.
	alphanumeric characters		
InvoiceID	Your own invoice or tracking number, as set by you in the InvoiceID element of SetExpressCheckoutRequest. Character length and limitations: 127 single-byte alphanumeric characters	xs:string	See description.

TABLE 6.5 GetExpressCheckoutDetailsResponse Fields

Element	Description	Data Type	Possible Values
ContactPhone	Payer's contact telephone number.	xs:string	See description.
	NOTE: PayPal returns a contact telephone number only if your Merchant account profile settings require that the buyer enter one.		
	Character length and limitations: Field mask is XXX-XXXX (for US numbers) or +XXX XXXXXXXX (for international numbers)		

Note: Empty elements are returned if there is no representative data for the customer. For example, if the customer does not represent a business (and therefore has no business name on file with PayPal), the returned element has no value, like this: <PayerBusiness/>.

Note:

TABLE 6.6 Response: PayerInfoType Elements

Element	Description	DataType	Possible Values
Payer	Email address of payer. Character length and limitations: 127 single-byte characters	ebl:EmailAddress Type	See description.
PayerID	Unique PayPal customer account number. Character length and limitations:17 single-byte characters maximum.	ebl:UserIDType	See description.
PayerStatus	Status of payer. Character length and limitations: 10 single-byte alphabetic characters.	ebl:PayPalUser StatusCodeType	verified unverified
PayerName	First and last name of payer	ebl:PersonNameType	See Table 6.7 on page 76.
PayerCountry	Payer's country of residence in the form of ISO standard 3166 two-character country codes. Character length and limitations: Two single-byte characters	ebl:CountryCode Type	See Appendix B.
PayerBusiness	Payer's business name. Character length and limitations: 127 single-byte characters	xs:string	See description.
Address	Payer's shipping address address information.	xs:string	See Table 6.8 on page 76.

TABLE 6.7 Response: PayerName Elements

Element	Description	DataType	Possible Values
Salutation	Payer's salutation Character length and limitations: 20 single-byte characters	xs:string	See description.
FirstName	Payer's first name Character length and limitations: 25 single-byte characters	ebl:PersonNameType	See description.
MiddleName	Payer's middle name Character length and limitations: 25 single-byte characters	ebl:NameType	
LastName	Payer's last name Character length and limitations: 25 single-byte characters	ebl:NameType	See description.
Suffix	Payer's suffix Character length and limitations: 12 single-byte characters	ebl:SuffixType	See description.
FirstName	Payer's first name. Character length and limitations: 25 single-byte characters	ebl:NameType	See description.
LastName	Payer's last name. Character length and limitations: 25 single-byte characters	ebl:NameType	See description.

TABLE 6.8 Response: AddressType Fields

Element	Descriptions	Data Type	Possible Values
AddressStatus	Status of street address on file with PayPal	ebl:AddressStatus	none
		TypeCode	Confirmed
			Unconfirmed
Name	Person's name associated with this address.	xs:string	See description.
	Character length and limitations: 32 single-byte characters		
Street1	First street address.	xs:string	See description.
	Character length and limitations: 100 single-byte characters		

TABLE 6.8	Response:	AddressTy	pe Fields
------------------	-----------	-----------	-----------

Element	Descriptions	Data Type	Possible Values
Street2	Second street address. Character length and limitations: 100 single-byte characters	xs:string	See description.
CityName	Name of city. Character length and limitations: 40 single-byte characters	xs:string	See description.
StateOr Province	State or province Character length and limitations: 40 single-byte characters	xs:string	See description.
PostalCode	U.S. Zip code or other country-specific postal code Character length and limitations: 20 single-byte characters	xs:string	See description.
Country	Country code. Character limit: Two single-byte characters.	ebl:CountryCode Type xs:string	See Appendix B.

DoExpressCheckoutPayment

With DoExpressCheckoutPayment, you either obtain payment through Express Checkout for a final sale or request authorization for later capture of payment.

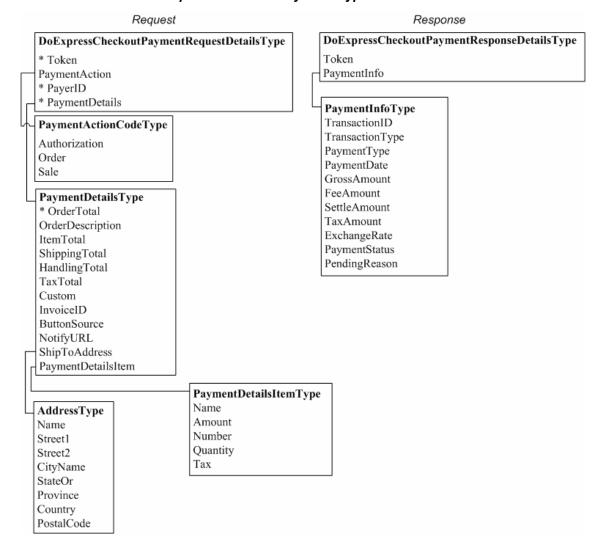
Diagram of DoExpressCheckoutPayment Types

The following diagram represents the composition of the

 ${\tt DoExpressCheckoutPaymentRequestType} \ and \\$

DoExpressCheckoutPaymentResponseType elements. Elements required in the request are indicated with an asterisk.

FIGURE 6.3 DoExpressCheckoutPayment Types



DoExpressCheckoutPaymentRequest

Request to obtain payment with PayPal Express Checkout.

IMPORTANT: PayPal requires that a merchant using Express Checkout display to the customer the same exact amount that the merchant sends to PayPal in the OrderTotal element with the DoExpressCheckoutPaymentRequest API.

TABLE 6.9 DoExpressCheckoutPaymentRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
Token	The timestamped token value that was returned by SetExpressCheckoutResponse and passed on GetExpressCheckoutDetailsRequest. Character length and limitations: 20 single-byte characters	xs:string	See description.	Yes
PaymentAction	 How you want to obtain payment: Authorization indicates that this payment is a basic authorization subject to settlement with PayPal Authorization & Capture. Order indicates that this payment is is an order authorization subject to settlement with PayPal Authorization & Capture. Sale indicates that this is a final sale for which you are requesting payment. IMPORTANT: You cannot set PaymentAction to Sale on SetExpressCheckoutReque st and then change PaymentAction to Authorization on the final PayPal Express Checkout API DoExpressCheckoutPaymen tRequest. Character length and limit: Up to 13 single-byte alphabetic characters 	ebl:PaymentAction CodeType xs:token	Default: The transaction resulting from DoExpress Checkout Payment Request will be a final sale. Authorization Order Sale	No
PayerID	Encrypted PayPal customer account identification number as returned by GetExpressCheckoutDetailsResponse. Character length and limitations: 127 single-byte characters.	ebl:UserIDType	See description.	Yes

DoExpressCheckoutPayment

TABLE 6.9 DoExpressCheckoutPaymentRequest Fields

Element	Description	Data Type	Allowable Values	Required ?
PaymentDetails	Information about the payment	ebl:PaymentDetails Type	See Table 6.10 on page 80.	Yes

TABLE 6.10 Request: PaymentDetailsType Fields

Element	Description	Data Type	Allowable Values	Required ?
OrderTotal	Total of order, including shipping, handling, and tax.	ebl:BasicAmount Type	See description.	Yes
	NOTE: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.			
	Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.			
ItemTotal	Sum of cost of all items in this order. Limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Decimal separator must be a period (.), and the thousands separator must be a comma (,).	ebl:BasicAmount Type	See description.	No
Shipping	Total shipping costs for this order.	ebl:BasicAmount	See description.	No
Total	NOTE: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.	Туре		
	Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.			

TABLE 6.10 Request: PaymentDetailsType Fields

Element	Description	Data Type	Allowable Values	Required ?
Handling Total	Total handling costs for this order. Note: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies. Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters	ebl:BasicAmount Type	See description.	No
TaxTotal	maximum for USD. Sum of tax for all items in this order. Note: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.	ebl:BasicAmount Type	See description.	No
	Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.			
Order Description	Description of items the customer is purchasing. Character length and limitations: 127 single-byte alphanumeric characters	xs:string	See description.	No
Custom	A free-form field for your own use. Character length and limitations: 256 single-byte alphanumeric characters	xs:string	See description.	No
InvoiceID	Your own invoice or tracking number. Character length and limitations: 127 single-byte alphanumeric characters	xs:string	See description.	No
ButtonSource	An identification code for use by third-party applications to identify transactions. Character length and limitations: 32 single-byte alphanumeric characters	xs:string	See description.	No
NotifyURL	Your URL for receiving Instant Payment Notification (IPN) about this transaction. Note: If you do not specify NotifyURL in the request, the notification URL from your Merchant Profile is used, if one exists. Character length and limitations: 2,048 single-byte alphanumeric characters	xs:string	See description.	No

TABLE 6.10 Request: PaymentDetailsType Fields

Element	Description	Data Type	Allowable Values	Required ?
ShipToAddress	Address the order will be shipped to.	ebl:AddressType	See Table 6.11 on page 82.	No
PaymentDetails Item	Details about each individual item included in the order	ebl:PaymentDetails ItemType	See Table 6.12 on page 83.	No

Note: The AddressType elements are required only if you include the Address element in the SOAP request.

IMPORTANT: Any fields in the WSDL or XSD files that are not described here are ignored. For example, do not set CountryName.

TABLE 6.11 Request: ShipToAddress: AddressType Fields

Element	Descriptions	Data Type	Allowable Values	Required ?
Name	Person's name associated with this address. Character length and limitations: 32 single-byte characters	xs:string	See description.	Yes
Street1	First street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	Yes
Street2	Second street address. Character length and limitations: 100 single-byte characters	xs:string	See description.	No
CityName	Name of city. Character length and limitations: 40 single-byte characters	xs:string	See description.	Yes
StateOr Province	State or province. Character length and limitations: 40 single-byte characters	xs:string	See description.	No
PostalCode	U.S. ZIP code or other country-specific postal code. Character length and limitations: 20 single-byte characters	xs:string	See description.	No
Country	Country code. Character limit: Two single-byte characters	ebl:CountryCode Type xs:string	See Appendix B.	Yes

TABLE 6.12 Request: PaymentDetailsItemType Fields

Element	Description	Data Type	Allowable Values	Required ?
Name	Item name. Character length and limitations: 127 single-byte characters	xs:string	See description.	No
Amount	Cost of item Note: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.	ebl:BasicAmount Type	See description.	No
	Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator must be a comma (,). Equivalent to nine characters maximum for USD.			
Number	Item number. Character length and limitations: 127 single-byte characters	xs:string	See description.	No
Quantity	Item quantity. Character length and limitations: Any positive integer	xs:string	See description.	No
Tax	Item sales tax. Currency code must be set the same as for OrderTotal. NOTE: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies. Character length and limitations: Must not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator must be a period (.), and the thousands separator	ebl:BasicAmount Type	See description.	No
	must be a comma (,). Equivalent to nine characters maximum for USD.			

DoExpressCheckoutPaymentResponse

 $Response \ to \ {\tt DoExpressCheckoutPaymentRequest}.$

TABLE 6.13 DoExpressCheckoutPaymentResponse Fields

Element	Description	Data Type	Possible Values
Token	The timestamped token value that was returned by SetExpressCheckoutResponse and passed on GetExpressCheckoutDetailsRequest. Character length and limitations:20 single-byte characters	xs:string	See the description of "Token" on page 72.
PaymentInfo	Information about the payment.	ebl:PaymentInfo	See Table 6.14 on page 84.

TABLE 6.14 Response: PaymentInfoType Elements

Element	Description	Data Type	Possible Values
TransactionID	Unique transaction ID of the payment. IMPORTANT: If the PaymentAction of the request was Authorization or Order, the value of TransactionID is your AuthorizationID for use with the	xs:string	Transaction- specific
	Authorization & Capture APIs. Character length and limitations:19 single-byte characters		
Transaction Type	The type of transaction Character length and limitations:15 single-byte characters	ns:Payment TransactionCode Type	cart express-checkout
PaymentType	Indicates whether the payment is instant or delayed. Character length and limitations: Seven single-byte characters	ebl:PaymentCode Type xs:string	none echeck instant
PaymentDate	Time/date stamp of payment	xs:dateTime	Transaction- specific
GrossAmount	The final amount charged, including any shipping and taxes from your Merchant Profile. Character length and limitations: Does not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator is a period (.), and the thousands separator is a comma (,). Equivalent to nine characters maximum for USD.	ebl:BasicAmount Type	Transaction- specific

TABLE 6.14 Response: PaymentInfoType Elements

Element	Description	Data Type	Possible Values
FeeAmount	PayPal fee amount charged for the transaction Character length and limitations: Does not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator is a period (.), and the thousands separator is a comma (,). Equivalent to nine characters maximum for USD.	ebl:BasicAmount Type	Transaction- specific
SettleAmount	Amount deposited in your PayPal account after a currency conversion.	ebl:BasicAmount Type	Transaction- specific
TaxAmount	Tax charged on the transaction. Character length and limitations: Does not exceed \$10,000 USD in any currency. No currency symbol. Regardless of currency, decimal separator is a period (.), and the thousands separator is a comma (,). Equivalent to nine characters maximum for USD.	ebl:BasicAmount Type xs:string	Transaction- specific
ExchangeRate	Exchange rate if a currency conversion occurred. Relevant only if your are billing in their non-primary currency. If the customer chooses to pay with a currency other than the non-primary currency, the conversion occurs in the customer's account. Character length and limitations: a decimal that does not exceed 17 characters, including decimal point	xs:string	Transaction- specific
PaymentStatus	Status of the payment: Completed: The payment has been completed, and the funds have been added successfully to your account balance. Pending: The payment is pending. See the PendingReason element for more information.	ebl:PaymentStatus CodeType xs:token	Completed Pending

DoExpressCheckoutPayment

TABLE 6.14 Response: PaymentInfoType Elements

Element	Description	Data Type	Possible Values
PendingReason	The reason the payment is pending: none: No pending reason address: The payment is pending because your customer did not include a confirmed shipping address and your Payment Receiving Preferences is set such that you want to manually accept or deny each of these payments. To change your preference, go to the Preferences section of your Profile .	ebl:PendingStatus CodeType xs:token	none address echeck intl multi-currency verify other
	echeck: The payment is pending because it was made by an eCheck that has not yet cleared.		
	intl: The payment is pending because you hold a non-U.S. account and do not have a withdrawal mechanism. You must manually accept or deny this payment from your Account Overview .		
	multi-currency: You do not have a balance in the currency sent, and you do not have your Payment Receiving Preferences set to automatically convert and accept this payment. You must manually accept or deny this payment.		
	verify: The payment is pending because you are not yet verified. You must verify your account before you can accept this payment.		
	other: The payment is pending for a reason other than those listed above. For more information, contact PayPal customer service.		

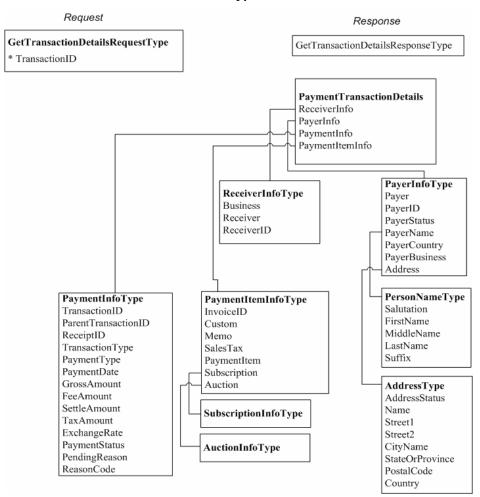
GetTransactionDetails API

The GetTransactionDetails API retrieves information about a single transaction.

Diagram of GetTransactionDetails Types

The following diagram represents the composition of the GetTransactionDetailsRequestType and GetTransactionDetailsResponseType elements.

FIGURE 7.1 GetTransactionDetails Types



GetTransactionDetailsRequest

Get details about a transaction.

Fields

TABLE 7.1 GetTransactionDetailsRequest Fields

Element	Description	Data Type	Possible Values	Required?
TransactionID	Unique identifier of a transaction.	xs:string	Transaction-specific	Yes
	NOTE: The details for some kinds of transactions cannot be retrieved with GetTransactionDetailsRequest. You cannot obtain details of bank transfer withdrawals, for example.			
	Character length and limitations: 17 single-byte alphanumeric characters			

GetTransactionDetailsResponse

Response to GetTransactionDetailsRequest.

Note: Because a field is defined in the formal structure of GetTransactionDetailsResponse does not mean that that field is necessarily returned. Data are returned in a response only if PayPal has recorded data that corresponds to the field.

Fields

For error codes and messages and their meanings, see Appendix, "Error Codes and Messages for All PayPal APIs."

TABLE 7.2 GetTransactionDetailsResponse Fields

Element	Included Element	Description	Data Type and Possible Values
Payment Transaction	ReceiverInfo PayerInfo	Wrapper structure	
Details	PaymentInfo		
	PaymentItem Info		

TABLE 7.2 GetTransactionDetailsResponse Fields

Element	Included Element	Description	Data Type and Possible Values
ReceiverInfo	Email address or account ID of the payment recipient (the seller). Equivalent to Receiver if payment is sent to primary account. Character length and limitations: 127 single-byte alphanumeric characters Receiver Primary email address of the payment recipient (the seller). If you are the recipient of the payment and the payment is sent to your non-primary email address, the value of Receiver is still your primary email address. Character length and limitations: 127 single-byte alphanumeric characters Payer ID Unique account ID of the payment recipient (the seller). This value is the same as the value of the recipient's referral ID. Includes elements described below Payer Email address of payer Character length and limitations: 127 single-byte characters PayerID Unique customer ID Character length and limitations: 17 single-byte characters PayerStatus Status of payer's email address	ebl:ReceiverInfo	
	Business	seller). Equivalent to Receiver if payment is sent to primary account. Character length and limitations: 127 single-byte	xs:string
	Receiver	seller). If you are the recipient of the payment and the payment is sent to your non-primary email address, the value of Receiver is still your primary email address. Character length and limitations: 127 single-byte	xs:string
	ReceiverID	This value is the same as the value of the recipient's	xs:string
PayerInfo		Includes elements described below	ebl:PayerInfo Type
	Payer	Character length and limitations: 127 single-byte	ns:EmailAddress Type
	PayerID	Character length and limitations: 17 single-byte	ebl:UserIDType
	PayerStatus	Status of payer's email address	ebl:PayPalUser StatusCodeType Verified Unverified
PayerName (included in PayerInfo)	Salutation	Payer's salutation Character length and limitations: 20 single-byte characters	xs:string
	FirstName	Payer's first name Character length and limitations: 25 single-byte characters	ebl:NameType
	MiddleName	Payer's middle name Character length and limitations: 25 single-byte characters	ebl:NameType
	LastName	Payer's last name Character length and limitations: 25 single-byte characters	ebl:NameType

GetTransactionDetailsResponse

TABLE 7.2 GetTransactionDetailsResponse Fields

Element	Included Element	Description	Data Type and Possible Values
	Suffix	Payer's suffix Character length and limitations: 12 single-byte characters	ebl:SuffixType
	PayerCountry	Payment sender's country of residence using standard two-character ISO 3166 country codes. See Appendix. Character length and limitations: Two single-byte characters	ebl:CountryCode Type
	PayerBusiness	Payer's business name. Character length and limitations: 127 single-byte characters	xs:string
Address (included in PayerInfo)		Includes the following elements.	ebl:AddressType
	AddressOwner	eBay company that maintains this address	ebl:AddressOwner TypeCode xs:token eBay PayPal
	AddressStatus	Status of the address on file with PayPal	ebl:AddressStatus CodeType xs:token None Confirmed Unconfirmed
	Name	Person's name associated with this address. Character length and limitations: 32 single-byte alphanumeric characters	xs:string
	Street1	First street address. Character length and limitations: 300 single-byte alphanumeric characters	xs:string
	Street2	Second street address. Character length and limitations: 300 single-byte alphanumeric characters	xs:string
	CityName	Name of city. Character length and limitations: 120 single-byte alphanumeric characters	xs:string
	StateOrProvince	State or province. Character length and limitations: 120 single-byte alphanumeric characters	xs:string
	Country	Character limit: Two single-byte characters. See Appendix.	ns:Country

TABLE 7.2 GetTransactionDetailsResponse Fields

Element	Included Element	Description	Data Type and Possible Values
	CountryName	Expanded name of country. Character length and limitations: 64 single-byte alphanumeric characters	xs:string
	Phone	Phone number associated with this address	xs:string
	PostalCode	Postal code	xs:string
PaymentInfo		Includes the following elements.	ebl:PaymentInfo
	ParentTransaction ID	 Original transaction to which this transaction is related. This field is populated for the following transaction types: Reversal Capture of an authorized transaction. Reauthorization of a transaction. Capture of an order. The value of ParentTransactionID is the original OrderID. Authorization of an order. The value of ParentTransactionID is the original OrderID. Capture of an order authorization. Void of an order. The value of ParentTransactionID is the original OrderID. Character length and limitations: 19 single-byte characters 	xs:string
	TransactionID	PayPal transaction identification number Character length and limitations: 19 single-byte characters	xs:string
	ReceiptID	Receipt ID Character length and limitations: 16 digits in XXXX-XXXX-XXXXX format	xs:string
	TransactionType	The type of transaction cart: Transaction created by customer via the PayPal Shopping Cart feature. send-money: Transaction created by customer from the Send Money tab on the PayPal website. web-accept: Transaction created by customer via Buy Now, Donation, or Auction Smart Logos. subscr-*: Transaction created by customer via Subscription. eot means "end of subscription term." merch-pmt: preapproved payment. mass-pay: Transaction created via MassPay. virtual-terminal: Transaction created via merchant virtual terminal.	ebl:Payment TransactionCode Type xs:token cart send_money web-accept subscr-failed subscr- cancelsubscr- paymentsubscr- signupsubscr- eotsubscr- modifymercht- pmtmass- payvirtual- terminal

TABLE 7.2 GetTransactionDetailsResponse Fields

Element	Included Element	Description	Data Type and Possible Values
PaymentType	The type of payment	ebl:PaymentCode Type xs:string none echeck instant	
	PaymentDate	Date and time of payment	xs:dateTime
	GrossAmount	Full amount of the customer's payment, before transaction fee is subtracted	xs:string
	FeeAmount	Transaction fee associated with the payment	xs:string
	SettleAmount	Amount deposited into the account's primary balance after a currency conversion from automatic conversion through your Payment Receiving Preferences or manual conversion through manually accepting a payment. This amount is calculated after fees and taxes have been assessed.	ebl:BasicAmount Type
	TaxAmount	Amount of tax for transaction	xs:string
	ExchangeRate	Exchange rate for transaction	xs:string

TABLE 7.2 GetTransactionDetailsResponse Fields

Element	Included Element	Description	Data Type and Possible Values
	PaymentStatus	The status of the payment:	ebl:PaymentStatu
		None: No status	CodeType
		Canceled-Reversal: A reversal has been canceled. For	xs:token
		example, you won a dispute with the customer, and the	None
		funds for the transaction that was reversed have been	Canceled-Reversa
		returned to you.	Completed
		Completed: The payment has been completed, and the	Denied
		funds have been added successfully to your account	Expired
		balance.	Failed
		Denied: You denied the payment. This happens only if the	In-Progress
		payment was previously pending because of possible	Partially-
		reasons described for the PendingReason element.	Refunded
		Expired: This authorization has expired and cannot be	Pending
		captured.	Processed
		Failed: The payment has failed. This happens only if the	Refunded
		payment was made from your customer's bank account.	Reversed
		In-Progress: The transaction is in process of authorization	Voided
		and capture.	
		Partially-Refunded: The transaction has been partially	
		refunded	
		Pending: The payment is pending. See	
		"PendingReason" on page 94 for more	
		information.	
		Refunded: You refunded the payment.	
		Reversed: A payment was reversed due to a chargeback	
		or other type of reversal. The funds have been removed	
		from your account balance and returned to the buyer. The	
		reason for the reversal is specified in the ReasonCode	
		element.	
		Processed: A payment has been accepted.	
		Voided: This authorization has been voided.	

GetTransactionDetailsResponse

TABLE 7.2 GetTransactionDetailsResponse Fields

Element	Included Element	Description	Data Type and Possible Values
	PendingReason	The reason the payment is pending:	ebl:PendingStatus
		none: No pending reason	CodeType
		address: The payment is pending because your customer	xs:token
		did not include a confirmed shipping address and your	none
		Payment Receiving Preferences is set such that you want	authorization
		to manually accept or deny each of these payments. To	address
		change your preference, go to the Preferences section of	echeck
		your Profile .	intl
		authorization: You set < PaymentAction>	multi-currency
		AuthorizationOn	unilateral
		SetExpressCheckoutRequest and have not yet captured	upgrade
		funds.	verify
		echeck: The payment is pending because it was made by an eCheck that has not yet cleared.	other
		intl: The payment is pending because you hold a non-	
		U.S. account and do not have a withdrawal mechanism.	
		You must manually accept or deny this payment from	
		your Account Overview.	
		multi-currency: You do not have a balance in the	
		currency sent, and you do not have your Payment	
		Receiving Preferences set to automatically convert and	
		accept this payment. You must manually accept or deny	
		this payment.	
		unilateral: The payment is pending because it was	
		made to an email address that is not yet registered or confirmed.	
		upgrade: The payment is pending because it was made	
		via credit card and you must upgrade your account to	
		Business or Premier status in order to receive the funds.	
		upgrade can also mean that you have reached the monthly	
		limit for transactions on your account.	
		verify: The payment is pending because you are not yet	
		verified. You must verify your account before you can	
		accept this payment.	
		other: The payment is pending for a reason other than	
		those listed above. For more information, contact PayPal	
		Customer Service.	

TABLE 7.2 GetTransactionDetailsResponse Fields

Element	Included Element	Description	Data Type and Possible Values
	ReasonCode	The reason for a reversal if TransactionType is reversal: none: No reason code chargeback: A reversal has occurred on this transaction due to a chargeback by your customer. guarantee: A reversal has occurred on this transaction due to your customer triggering a money-back guarantee. buyer-complaint: A reversal has occurred on this transaction due to a complaint about the transaction from your customer. refund: A reversal has occurred on this transaction because you have given the customer a refund. other: A reversal has occurred on this transaction due to a reason not listed above.	ebl:ReasonCodeType xs:token none chargeback guarantee buyer-complaint refund other
PaymentItem Info		Includes the following elements	ebl:PaymentItem InfoType
	InvoiceID	Invoice number you set in the original transaction. Character length and limitations: 127 single-byte alphanumeric characters	xs:string
	Custom	Custom field you set in the original transaction. Character length and limitations: 127 single-byte alphanumeric characters	xs:string
	Memo	Memo entered by your customer in PayPal Website Payments note field. Character length and limitations: 255 single-byte alphanumeric characters	xs:string
PaymentItem	SaleTax	Amount of tax charged on payment	xs:string
	Name	Item name set by you or entered by the customer. If this was a shopping cart transaction, PayPal appends the number of the item to the HTML item_name variable. For example, item_name1, item_name2, and so forth. Character length and limitations: 127 single-byte alphanumeric characters	xs:string
	Number	Item number set by you. If this was a shopping cart transaction, PayPal appends the number of the item to the HTML item_name variable. For example, item_name1, item_name2, and so forth. Character length and limitations: 127 single-byte alphanumeric characters	xs:string
	Quantity	Quantity set by you or entered by the customer. Character length and limitations: no limit	xs:string
	Amount	Cost of item	ebl:BasicAmount Type

GetTransactionDetailsResponse

TABLE 7.2 GetTransactionDetailsResponse Fields

Element	Included Element	Description	Data Type and Possible Values
	Options	PayPal item options for shopping cart	ns:OptionType name: xs:string value: xs:string
Subscription		Includes the following elements	ebl:Subscription InfoType
	SubscriptionID	ID generated by PayPal for the subscriber. Character length and limitations: no limit	xs:string
	SubscriptionDate	Subscription start date	xs:dateTime
	EffectiveDate	Date when the subscription modification will be effective	xs:dateTime
	RetryTime	Date PayPal will retry a failed subscription payment.	xs:dateTime
	Username	Username generated by PayPal and given to subscriber to access the subscription. Character length and limitations: 64 alphanumeric single-byte characters	xs:string
	Password	Password generated by PayPal and given to subscriber to access the subscription. For security, the value of the password is hashed. Character length and limitations: 128 alphanumeric single-byte characters	xs:string
	Recurrences	The number of payment installments that will occur at the regular rate. Character length and limitations: no limit	xs:string
	reattempt	Indicates whether reattempts should occur upon payment failures	xs:string
	recurring	Indicates whether regular rate recurs. $1 = Yes$	xs:string
Subscription TermsType	Amount	The amount subscriber is to be charged in one payment. Character length and limitations: no limit	eb:BasicAmount Type
	period	The period of time that the subscriber will be charged. Character length and limitations: no limit	xs:string
Auction		Includes the following elements	ebl:AuctionInfo Type
	BuyerID	Customer's auction ID	xs:string
	ClosingDate	Auction's close date	xs:string
	multiItem	Counter used for multi-item auction payments	xs:string

MassPay API

The MassPay API is the programmatic counterpart to the Mass Payment feature available through the PayPal website. You can include up to 250 payments per MassPayRequest. You must have a PayPal balance in each currency in which you want to make a payment and have sufficient funds to cover the entire Mass Payment amount and fee. You cannot mix currencies in the same MassPayRequest; a separate request is required for each currency.

The posting of payment transactions to individual recipient accounts is not handled by the MassPay API but by a separate PayPal process.

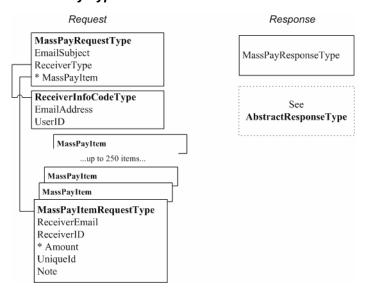
Instant Payment Notification

The MassPay API triggers the sending of an Instant Payment Notification email to the recipient of the funds.

Diagram of MassPay Types

The following diagram represents the composition of the MassPayRequestType, MassPayRequestItemType, and MassPayResponseType elements.

FIGURE 8.1 MassPay Types



MassPayRequest

Process payments en masse to up to 250 different recipients.

Fields

TABLE 8.1 MassPayRequestType Fields

Element	Description	Data Type	Possible Values	Required?
EmailSubject	Subject line of the email sent to all recipients. This subject is not contained in the input file; you must create it with your application. Character length and limitations: 255 single-byte alphanumeric characters	xs:string	See description.	No
ReceiverType	Indicates how you identify the recipients of payments in all MassPayItems: either by EmailAddress (ReceiverEmail in MassPayItem) or by UserID (ReceiverID in MassPayItem).	ebl:ReceiverInfo CodeType xs:token	See Table 8.2.	No
MassPayItem	Details of each payment. Note: A single MassPayRequest can include up to 250 MassPayItems	ebl:MassPayItem Type	See Table 8.3.	Yes

TABLE 8.2 ReceiverInfoCodeType Enumeration

Element	Description	Required?
EmailAddress	Email address of recipient on file with PayPal. Character length and limitations: 12 single-byte alphanumeric characters.	No
UserID	Unique PayPal customer account number. Character length and limitations: 6 single-byte characters maximum.	No

TABLE 8.3 MassPayItemType Fields

Element	Description	Data Type	Possible Values	Required?
ReceiverEmail	Email address of recipient. IMPORTANT: You must specify either Receiver— Email or ReceiverID, but you must not mix ReceiverEmail and ReceiverID in the group of MassPayItems. Use only one or the other, but not both, in a single request. Character length and limitations: 127 single-byte characters maximum.	ebl:EmailAddress Type	See descirption.	No
ReceiverID	Unique PayPal customer account number. This value corresponds to the value of PayerID returned by GetTransactionDetails. IMPORTANT: You must specify either Receiver—Email or ReceiverID, but you must not mix ReceiverEmail and ReceiverID in the group of MassPayItems. Use only one or the other, but not both, in a single request. Character length and limitations: 17 single-byte characters maximum.	xs:string	Transaction-specific	No
Amount	Payment amount. Note: You must set the currencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies. See page 31. Important: You cannot mix currencies in a single MassPayRequest. A single request must include items that are of the same currency.	ebl:BasicAmount Type	Transaction-specific	Yes
UniqueId	Transaction-specific identification number for tracking in an accounting system. Character length and limitations: 30 single-byte characters. No whitespace allowed.	xs:string	Transaction-specific	No
Note	Custom note for each recipient. Character length and limitations: 4,000 single-byte alphanumeric characters	xs:string	Transaction-specific	No

MassPayResponse

Response to MassPayRequest.

Fields

The elements returned are the same as for AbstractResponseType. See page 36.

For error codes and messages and their meanings, see Appendix , "Error Codes and Messages for All PayPal APIs."



RefundTransaction API

Use the RefundTransaction API to make either full or partial refunds.

Instant Payment Notification:

Use of the RefundTransaction API triggers the sending of an Instant Payment Notification email to the recipient of the refund.

Diagram of RefundTransaction Types

The following diagram represents the composition of the RefundTransactionRequestType and RefundTransactionResponseType elements.

FIGURE 9.1 RefundTransaction Types

Request

Response

RefundTransactionRequestType

- * TransactionID
- * RefundType

Amount

Memo

RefundTransactionResponseType

RefundTransactionID

FeeRefundAmount

NetRefundAmount

GrossRefundAmount

RefundTransactionRequest

Request to refund a payment.

With RefundTransactionRequest, you must always pass the values of TransactionID and RefundType. If RefundType is set to Full, you must not set Amount; however, if RefundType is Partial, you must set Amount.

RefundTransaction API

Fields

TABLE 9.1 RefundTransactionRequest Fields

Element	Description	Data Type	Possible Values	Required?
TransactionID	Unique identifier of a transaction Character length and limitations: 17 single-byte alphanumeric characters	xs:string	Transaction-specific	Yes
RefundType	Type of refund you are making	ebl:RefundPurpose TypeCodeType xs:token	Other Full Partial	Yes
Amount	Refund amount. Amount is required if RefundType is Partial. NOTE: If RefundType is Full, do not set Amount.	ebl:BasicAmount Type	Transaction-specific	See description
Memo	Custom memo about the refund. Character length and limitations: 255 single-byte alphanumeric characters	xs:string	Transaction-specific	No

Refund Transaction Response

Response to RefundTransactionRequest.

TABLE 9.2 RefundTransactionResponse Fields

Element	Description	Data Type	Value
Refund TransactionID	Unique transaction ID of the refund. Character length and limitations:17 single-byte characters	xs:string	See description.
FeeRefund Amount	Transaction fee refunded to original recipient of payment	ebl:BasicAmount Type	See description.
GrossRefund Amount	Amount of money refunded to original payer	ebl:BasicAmount Type	See description.
NetRefund Amount	Amount subtracted from PayPal balance of original recipient of payment to make this refund	ebl:BasicAmount Type	See description.

10

TransactionSearch API

With TransactionSearchRequest you must always set the StartDate field. Some other behavior:

- Setting TransactionID overrides all other fields (even the required StartDate field).
- The effect of setting other elements is additive or can alter the search criteria.

TransactionSearchResponse returns up to 100 matches. Partial matches are displayed. For example, setting the TransactionSearchRequest FirstName to "Jess" returns results such as "Jessica" and "Jesse".

The most important returned element is TransactionID, which you can pass to GetTransactionDetailsRequest in order to retrieve all available information about a specific transaction.

Diagram of TransactionSearch Types

The following diagram represents the composition of the TransactionSearchRequestType and PaymentTransactionSearchResultsType elements.

FIGURE 10.1 Transaction Search Types

Request Response TransactionSearchRequestType TransactionSearchResponseType * StartDate PaymentTransactions | EndDate Paver PaymentTransactionSearchResultType Receiver Timestamp TransactionID Timezone PayerName Type AuctionItemNumber Payer InvoiceID PayerDisplayName CardNumber TransactionID TransactionClass Status Amount CurrencyCode GrossAmount FeeAmount Status NetAmount

${\bf Transaction Search Request}$

Request to search transaction history.

TABLE 10.1 TransactionSearchRequest Fields

Element	Description	Data Type	Allowable Values	Required?
StartDate	The earliest transaction date at which to start the search.	xs:dateTime	Transaction-specific	Yes
	NOTE: No wildcards are allowed. The value must be in UTC/GMT format.			
EndDate	The latest transaction date to be included in the search	xs:dateTime	Transaction-specific	No
Payer	Search by the buyer's email address Character length and limitations: 127 single-byte alphanumeric characters	ebl:EmailAddress Type xs:string	Transaction-specific	No
Receiver	Search by the receiver's email address. If the merchant account has only one email, this is the primary email. Can also be a non-primary email.	ebl:EmailAddress Type xs:string	Transaction-specific	No
ReceiptID	Search by the PayPal Account Optional receipt ID	xs:string	Transaction-specific	No
TransactionID	Search by the transaction ID.	ebl:TransactionID	Transaction-specific	No
	NOTE: The returned results are from the merchant's transaction records.	xs:string		
	Character length and limitations: 19 single-byte characters maximum			
InvoiceID	Search by invoice identification key, as set by you for the original transaction. InvoiceID searches the records for items sold by the merchant, not the items purchased.	xs:string	Transaction-specific	No
	NOTE: No wildcards are allowed.			
	Character length and limitations: 127 single-byte characters maximum			
CardNumber	Search by credit card number, as set by you for the original transaction. CardNumber searches the records for items sold by the merchant, not the items purchased.	xs:string	Transaction-specific	No
	NOTE: No wildcards are allowed.			
	Character length and limitations: Must be at least 11 and no more than 25 single-byte numeric characters maximum. Special punctuation, such as dashes or spaces, is ignored.			



Element	Description	Data Type	Allowable Values	Required?
PayerName	Search by the buyer's name Salutation: 20 single-byte character limit FirstName: 25 single-byte character limit MiddleName: 25 single-byte character limit LastName: 25 single-byte character limit Suffix: 12 single-byte character limit	ebl:PersonNameType xs:string	Transaction-specific	No
AuctionItem Number	Search by auction item number of the purchased goods.	xs:string	Transaction-specific	No
Transaction	Search by classification of transaction.	ebl:Payment	See description.	No
Class	NOTE: Some kinds of possible classes of transactions are not searchable with TransactionSearchRequest. You cannot search for bank transfer withdrawals, for example.	TransactionClass CodeType xs:token		
	All: all transaction classifications Sent: only payments sent Received: only payments received MassPay: only mass payments MoneyRequest: only money requests FundsAdded: only funds added to balance FundsWithdrawn: only funds withdrawn from balance Referral: only transactions involving referrals Fee: only transactions involving fees Subscription: only transactions involving dividends Billpay: only transactions involving BillPay Transactions Refund: only transactions involving funds CurrencyConversions: only transactions involving currency conversions BalanceTransfer: only transactions involving balance transfers Reversal: only transactions involving BillPay reversals Shipping: only transactions involving UPS shipping fees BalanceAffecting: only transactions that affect the account balance ECheck: only transactions involving eCheck			
Amount	Search by transaction amount	ebl:BasicAmount	Transaction-specific	No
	NOTE: You must set the CurrencyID attribute to one of the three-character currency codes for any of the supported PayPal currencies.	Type xs:string		
CurrencyCode	Search by currency code	xs:token	Transaction-specific	No

TransactionSearch API **TransactionSearchResponse**

TABLE 10.1 TransactionSearchRequest Fields

Element	Description	Data Type	Allowable Values	Required?
Status	Search by transaction status: Pending: The payment is pending. The specific reason the payment is pending is returned by the GetTransactionDetails API PendingReason element. For more information, see "PendingReason" on page 94. Processing: The payment is being processed. Success: The payment has been completed and the funds have been added successfully to your account balance. Denied: You denied the payment. This happens only if the payment was previously pending. Reversed: A payment was reversed due to a chargeback or other type of reversal. The funds have been removed from your account balance and returned to the buyer.	ebl:Payment Transaction StatusCodeType xs:token	Pending Processing Success Denied Reversed	No

TransactionSearchResponse

Response to TransactionSearchRequest.

Fields

For error codes and messages and their meanings, see Appendix, "Error Codes and Messages for All PayPal APIs."

TABLE 10.2 PaymentTransactions Fields

Element	Description	Data Type	Possible Values
Timestamp	The date and time (in UTC/GMT format) the transaction occurred	xs:dateTime	Transaction-specific
Timezone	The time zone of the transaction	xs:string	Transaction-specific
Туре	The type of the transaction	xs:string	Transaction-specific
Payer	The email address of either the payer or the payment recipient (the "payee"). If GrossAmount is positive, Payer is recipient of the funds. If GrossAmount is negative, Payer is the paying customer.	ebl:EmailAddress Type xs:string	Transaction-specific
Payer DisplayName	Display name of the payer	xs:string	Transaction-specific
TransactionID	The transaction ID of the seller	xs:string	Transaction-specific
Status	The status of the transaction. For details about statuses, see "PaymentStatus" on page 93.	xs:string	Transaction-specific

TABLE 10.2 PaymentTransactions Fields

Element	Description	Data Type	Possible Values
GrossAmount	The total gross amount charged, including any profile shipping cost and taxes	ebl:BasicAmount Type xs:string	Transaction-specific
FeeAmount	The fee that PayPal charged for the transaction	BasicAmount Type xs:string	Transaction-specific
NetAmount	The net amount of the transaction	BasicAmount Type xs:string	Transaction-specific

TransactionSearch API

TransactionSearchResponse



Error Codes and Messages for All PayPal APIs

General API Errors

TABLE A.1 General API Errors

Error Code	Short Message	Long Message	Correcting This Error
10002	Authentication /Authorization Failed	Username/Password is incorrect	This error can be caused by an incorrect API username, an incorrect API password, or an invalid API signature. Make sure that all three of these values are correct. For your security, PayPal does not report exactly which of these three values might be in error.
10002	Authentication /Authorization Failed	You do not have permissions to make this API call	
10002	Authentication /Authorization Failed	Account is locked or inactive	
10002	Internal Error	Internal Error	
10002	Authentication /Authorization Failed	Internal Error	
10002	Authentication /Authorization Failed	Account is not verified	
10002	Authentication /Authorization Failed	This call is not defined in the database!	
10002	Authentication /Authorization Failed	Token is not valid	

TABLE A.1 General API Errors

Error Code	Short Message	Long Message	Correcting This Error
10002	Restricted account	Account is restricted	
10002	Authentication /Authorization Failed	Token is not valid	
10002	Authentication /Authorization Failed	API access is disabled for this account	
10002	Authentication /Authorization Failed	Client certificate is disabled	
10002	Restricted account	Account is restricted	

Authorization & Capture API Errors

TABLE A.2 Authorization & Capture API Error Messages

Error Code	Short Message	Long Message	Returned By API Call	Correcting This Error
10001	Internal Error	Internal Error		
10001	Internal Error	Transaction failed due to internal error		
10004	Internal Error	Invalid argument		
10007	Permission denied	You do not have permissions to make this API call		
10009	Transaction refused	Account is locked or inactive		Retry the request at a later time or close order.
10010	Transaction refused because of an invalid argument. See additional error messages for details.	Invalid argument		

TABLE A.2 Authorization & Capture API Error Messages

Error Code	Short Message	Long Message	Returned By API Call	Correcting This Error
10600	Authorization voided.	Authorization is voided.	DoAuthorization DoCapture DoReauthorization DoVoid	Close the order or authorization.
10601	Authorization expired.	Authorization has expired.	DoAuthorization DoCapture DoReauthorization DoVoid	Close the order or authorization.
10602	Authorization completed.	Authorization has already been completed.	DoAuthorization DoCapture DoReauthorization DoVoid	Close the order or authorization.
10603	The buyer is restricted.	The buyer account is restricted.	DoAuthorization DoCapture DoReauthorization DoVoid	Contact the buyer.
10604	Authorization must include both buyer and seller.	Authorization transaction cannot be unilateral. It must include both buyer and seller to make an auth.	DoAuthorization	Review the order to ensure customer and seller are both PayPal members.
10605	Unsupported currency.	Currency is not supported.	DoAuthorization DoCapture	Retry the request with a PayPal-supported currency.
10606	Buyer cannot pay.	Transaction rejected, please contact the buyer.	DoAuthorization DoCapture DoReauthorization	Contact the buyer.
10607	Auth&Capture unavailable.	Authorization & Capture feature unavailable.	DoAuthorization DoCapture DoReauthorization DoVoid	Contact PayPal Customer Service
10608	Funding source missing.	The funding source is missing.	DoAuthorization DoCapture DoReauthorization	Contact the buyer.
10609	Invalid transactionID.	Transaction id is invalid.	DoAuthorization DoCapture DoReauthorization DoVoid	Check the validity of the authorization ID and reattempt the request.

Error Codes and Messages for All PayPal APIs

Authorization & Capture API Errors

TABLE A.2 Authorization & Capture API Error Messages

Error Code	Short Message	Long Message	Returned By API Call	Correcting This Error
10610	Amount limit exceeded.	Amount specified exceeds allowable limit.	DoAuthorization DoCapture DoReauthorization	Reattempt the request with a lower amount.
10611	Not enabled.	Authorization & Capture feature is not enabled for the merchant. Contact customer service.	DoAuthorization DoCapture DoReauthorization	Contact PayPal Customer Service.
10612	No more settlement.	Maxmimum number of allowable settlements has been reached. No more settlement for the authorization.	DoCapture	Close the order.
10613	Currency mismatch.	Currency of capture must be the same as currency of authorization.	DoCapture	Ensure that the currencies are the same, and retry the request.
10614	Cannot void reauth.	You can void only the original authorization, not a reauthorization.	DoVoid	Void the authorization.
10615	Cannot reauth reauth.	You can reauthorize only the original authorization, not a reauthorization.	DoReauthorization	Capture the reauthorization.
10616	Maximum number of reauthorization allowed for the auth is reached.	Maximum number of reauthorization allowed for the auth is reached.	DoReauthorization	Capture or close the authorization
10617	Reauthorizatio n not allowed.	Reauthorization is not allowed inside honor period.	DoReauthorization	Capture the authorization ro reauthorize outside of honor period.
10618	Transaction already voided or expired.	Transaction has already been voided or expired.	DoAuthorization DoCapture DoReauthorization DoVoid	Close the orde or authorizationr.
10619	Invoice ID value exceeds maximum allowable length.	Invoice ID value exceeds maximum allowable length.	DoCapture	Check the length of the invoice ID and reattempt the request.

TABLE A.2 Authorization & Capture API Error Messages

Error Code	Short Message	Long Message	Returned By API Call	Correcting This Error
10620	Order has already been voided, expired or completed.	Order has already been voided, expired or completed.	DoAuthorization DoCapture DoVoid	Close this order.
10621	Order has expired.	Order has expired.	DoAuthorization DoCapture DoVoid	Close this order.
10622	Order is voided.	Order is voided.	DoAuthorization DoCapture DoVoid	Close this order.
10623	Maximum number of authorization allowed for the order is reached.	Maximum number of authorization allowed for the order is reached.	DoAuthorization DoCapture DoReauthorization DoVoid	Capture this order.
10624	Duplicate invoice	Payment has already been made for this InvoiceID.	DoAuthorization	Review the invoice ID and reattempt the request.
10625	Transaction refused because of an invalid argument. See additional error messages for details.	The amount exceeds the maximum amount for a single transaction.	DoAuthorization DoCapture DoReauthorization	Reattempt the request with a lower amount.
10626	Risk	Transaction refused due to risk model	DoAuthorization DoCapture DoReauthorization	Contact the buyer.
10627	Transaction refused because of an invalid argument. See additional error messages for details.	The invoice ID field is not supported for basic authorizations	DoAuthorization DoReauthorization DoVoid	The Invoice ID field can only be used with DoCapture.

TABLE A.2 Authorization & Capture API Error Messages

Error Code	Short Message	Long Message	Returned By API Call	Correcting This Error
10628	This transaction cannot be processed at this time. Please try again later.	This transaction cannot be processed at this time. Please try again later.	DoAuthorization DoCapture DoReauthorization DoVoid	Retry the request at a later time.
10629	Reauthorizatio n not allowed.	Reauthorization is not allowed for this type of authorization.	DoReauthorization	Use DoAuthorization to authorize the an order.
10630	Item amount is invalid.	Item amount is invalid.	DoAuthorization DoCapture	Check the item amount to ensure that it is not zero or negative.
11094	This authorization cannot be voided, reauthorized, or captured against.	This authorization can only be handled through the marketplace which created it. It cannot directly be voided, reauthorized, or captured against.		

Direct Payments API Errors

TABLE A.3 Direct Payment API Errors

Error Code	Short Message	Long Message	Corrective Action
10500	Invalid Configuration	This transaction cannot be processed due to an invalid merchant configuration.	Occurs when you have not agreed to the billing agreement
10501	Invalid Configuration	This transaction cannot be processed due to an invalid merchant configuration.	Occurs when the billing agreement is disabled or inactive.
10502	Invalid Data	This transaction cannot be processed. Please use a valid credit card.	The credit card used is expired

TABLE A.3 Direct Payment API Errors

Error Code	Short Message	Long Message	Corrective Action
10504	Invalid Data	This transaction cannot be processed. Please enter a valid Credit Card Verification Number.	The CVV provide is invalid. The CVV is between 3-4 digits long
10505	Gateway Decline	This transaction cannot be processed.	The transaction was refused because the AVS response returned the value of N, and the merchant account is not able to accept such transactions.
10507	Invalid Configuration	This transaction cannot be processed. Please contact PayPal Customer Service.	Your PayPal account is restricted - contact PayPal for more information
10508	Invalid Data	This transaction cannot be processed. Please enter a valid credit card expiration date.	The expiration date must be a two-digit month and four-digit year.
10509	Invalid Data	This transaction cannot be processed.	You must submit an IP address of the buyer with each API call
10510	Invalid Data	The credit card type is not supported. Try another card type.	The credit card type entered is not currently supported by PayPal
10511	Invalid Data	This transaction cannot be processed.	The merchant selected an value for the PaymentAction field that is not supported
10512	Invalid Data	This transaction cannot be processed. Please enter a first name.	The first name of the buyer is required for this merchant
10513	Invalid Data	This transaction cannot be processed. Please enter a last name.	The last name of the buyer is required for this merchant
10519	Invalid Data	Please enter a credit card.	The credit card field was blank
10520	Invalid Data	This transaction cannot be processed.	The total amount and item amounts do not match
10521	Invalid Data	This transaction cannot be processed. Please enter a valid credit card.	The credit card entered is invalid
10523	Internal Error	This transaction cannot be processed.	None - this is a PayPal internal error
10525	Invalid Data	This transaction cannot be processed. The amount to be charged is zero.	The merchant entered a amount of zero
10526	Invalid Data	This transaction cannot be processed. The currency is not supported at this time.	The currency code entered is not supported

Direct Payments API Errors

TABLE A.3 Direct Payment API Errors

Error Code	Short Message	Long Message	Corrective Action
10527	Invalid Data	This transaction cannot be processed. Please enter a valid credit card number and type.	The credit card entered is invalid
10534	Gateway Decline	This transaction cannot be processed. Please enter a valid credit card number and type.	The credit card entered is currently restricted by PayPal. Contact PayPal for more information
10535	Gateway Decline	This transaction cannot be processed. Please enter a valid credit card number and type.	The credit card entered is invalid
10536	Invalid Data	This transaction cannot be processed.	The merchant entered an invoice ID that is already associated with a transaction by the same merchant. By default, the invoice ID must be unique for all transactions. To change this setting, log into PayPal or contact customer service
10537	Filter Decline	This transaction cannot be processed.	The transaction was declined by the country filter managed by the merchant. To accept this transaction, change your risk settings on PayPal.
10538	Filter Decline	This transaction cannot be processed.	The transaction was declined by the maximum amount filter managed by the merchant. To accept this transaction, change your risk settings on PayPal.
10539	Filter Decline	This transaction cannot be processed.	The transaction was declined by PayPal. Contact PayPal for more information
10540	Invalid Data	The transaction cannot be processed due to an invalid address.	The transaction was declined by PayPal because of an invalid address.
10541	Gateway Decline	This transaction cannot be processed. Please enter a valid credit card number and type.	The credit card entered is currently restricted by PayPal. Contact PayPal for more information
10542	Invalid Data	This transaction cannot be processed. Please enter a valid email address.	The email address provided by the buyer is in an invalid format
10544	Gateway Decline	This transaction cannot be processed.	The transaction was declined by PayPal. Contact PayPal for more information
10545	Gateway Decline	This transaction cannot be processed.	The transaction was declined by PayPal because of possible fraudulent activity. Contact PayPal for more information

TABLE A.3 Direct Payment API Errors

Error Code	Short Message	Long Message	Corrective Action
10546	Gateway Decline	This transaction cannot be processed.	The transaction was declined by PayPal because of possible fraudulent activity on the IP address. Contact PayPal for more information
10547	Internal Error	This transaction cannot be processed.	None - this is a PayPal internal error
10548	Invalid Configuration	This transaction cannot be processed. The merchant's account is not able to process transactions.	The merchant account attempting the transaction is not a business account at PayPal. Check your account settings
10549	Invalid Configuration	This transaction cannot be processed. The merchant's account is not able to process transactions.	The merchant account attempting the transaction is not able to process Direct Payment transactions. Contact PayPal for more information.
10550	Invalid Configuration	This transaction cannot be processed.	Access to Direct Payment was disabled for your account. Contact PayPal for more information.
10552	Invalid Configuration	This transaction cannot be processed.	The merchant account attempting the transaction does not have a confirmed email address with PayPal. Check your account settings
10553	Gateway Decline	This transaction cannot be processed.	The merchant attempted a transaction where the amount exceeded the upper limit for that merchant
10554	Filter Decline	This transaction cannot be processed.	The transaction was declined because of a merchant risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS returned a no match (AVS = N)
10555	Filter Decline	This transaction cannot be processed.	The transaction was declined because of a merchant risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS returned a partial match
10556	Filter Decline	This transaction cannot be processed.	The transaction was declined because of a merchant risk filter for AVS. Specifically, the merchant has set to decline transaction when the AVS was unsupported
10701	Invalid Data	There's an error with this transaction. Please enter a valid billing address.	The billing address entered is invalid.
10702	Invalid Data	There's an error with this transaction. Please enter a valid address1 in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid

Direct Payments API Errors

TABLE A.3 Direct Payment API Errors

Error Code	Short Message	Long Message	Corrective Action
10703	Invalid Data	There's an error with this transaction. Please enter a valid address2 in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10704	Invalid Data	There's an error with this transaction. Please enter a valid city in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10705	Invalid Data	There's an error with this transaction. Please enter a valid state in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10706	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10707	Invalid Data	There's an error with this transaction. Please enter a valid country in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10708	Invalid Data	There's an error with this transaction. Please enter a complete billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10709	Invalid Data	There's an error with this transaction. Please enter an address1 in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10709	Invalid Data	There's an error with this transaction. Please enter an address1 in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10710	Invalid Data	There's an error with this transaction. Please enter a city in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10710	Invalid Data	There's an error with this transaction. Please enter a city in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10711	Invalid Data	There's an error with this transaction. Please enter your state in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10712	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid

TABLE A.3 Direct Payment API Errors

Error Code	Short Message	Long Message	Corrective Action
10713	Invalid Data	There's an error with this transaction. Please enter a country in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10713	Invalid Data	There's an error with this transaction. Please enter a country in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10714	Invalid Data	There's an error with this transaction. Please enter a valid billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10715	Invalid Data	There's an error with this transaction. Please enter a valid state in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10716	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10717	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10718	Invalid Data	There's an error with this transaction. Please enter a valid city and state in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10719	Invalid Data	There's an error with this transaction. Please enter a valid shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10720	Invalid Data	There's an error with this transaction. Please enter a valid address1 in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10721	Invalid Data	There's an error with this transaction. Please enter a valid address2 in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10722	Invalid Data	There's an error with this transaction. Please enter a valid city in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10723	Invalid Data	There's an error with this transaction. Please enter a valid state in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid

TABLE A.3 Direct Payment API Errors

Error Code	Short Message	Long Message	Corrective Action
10724	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10725	Invalid Data	There's an error with this transaction. Please enter a valid country in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10726	Invalid Data	There's an error with this transaction. Please enter a complete shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10726	Invalid Data	There's an error with this transaction. Please enter a complete shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10727	Invalid Data	There's an error with this transaction. Please enter an address1 in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10727	Invalid Data	There's an error with this transaction. Please enter an address1 in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10728	Invalid Data	There's an error with this transaction. Please enter a city in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10728	Invalid Data	There's an error with this transaction. Please enter a city in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10729	Invalid Data	There's an error with this transaction. Please enter your state in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10730	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10731	Invalid Data	There's an error with this transaction. Please enter a country in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10731	Invalid Data	There's an error with this transaction. Please enter a country in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid

TABLE A.3 Direct Payment API Errors

Error Code	Short Message	Long Message	Corrective Action
10732	Invalid Data	There's an error with this transaction. Please enter a valid shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10733	Invalid Data	There's an error with this transaction. Please enter a valid state in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10734	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10735	Invalid Data	There's an error with this transaction. Please enter your five digit postal code in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10736	Invalid Data	There's an error with this transaction. Please enter a valid city and state in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10744	Invalid Data	This transaction cannot be processed. Please enter a valid country code in the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10745	Invalid Data	This transaction cannot be processed. Please enter a valid country code in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10746	Invalid Data	This transaction cannot be processed. Please use a valid country on the billing address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid
10747	Invalid Data	This transaction cannot be processed.	The merchant entered an IP address that was in an invalid format. The IP address must be in a format such as 123.456.123.456
10748	Invalid Data	This transaction cannot be processed without a Credit Card Verification number.	The merchant's configuration requires a CVV to be entered, but no CVV was provided with this transaction. Contact PayPal if you wish to change this setting
10750	Invalid Data	There's an error with this transaction. Please enter a valid state in the shipping address.	There was a problem with a particular field in the address. The long error message will tell you what field is invalid

TABLE A.3 Direct Payment API Errors

Error Code	Short Message	Long Message	Corrective Action
10751	Invalid Data	There's an error with this transaction. Please enter a valid state in the billing address.	The merchant provided an address either in the United States or Canada, but the state provided is not a valid state in either country
10752	Gateway Decline	This transaction cannot be processed.	The transaction was declined by the issuing bank, not PayPal. The merchant should attempt another card
10754	Gateway Decline	This transaction cannot be processed.	The transaction was declined by PayPal. Contact PayPal for more information
10755	Invalid Data	This transaction cannot be processed due to an unsupported currency.	The currency code entered by the merchant is not supported
10756	Gateway Decline	The transaction cannot be processed. The country and billing address associated with this credit card do not match.	None - this is a PayPal internal error
10758	Invalid Configuration	There's been an error due to invalid API username and/or password.	The API username or password is incorrect for this merchant
10759	Gateway Decline	This transaction cannot be processed. Please enter a valid credit card number and type.	The transaction was declined by PayPal. Contact PayPal for more information
10760	Invalid Configuration	This transaction cannot be processed. The country listed for your business address is not currently supported.	The merchant's country of residence listed in their PayPal account is not currently supported to allow Direct Payment transactions
10761	Gateway Decline	This transaction cannot be processed. Please check the status of your first transaction before placing another order.	The transaction was declined because PayPal is currently processing a transaction by the same buyer for the same amount. Can occur when a buyer submits multiple, identical transactions in quick succession
10762	Gateway Decline	This transaction cannot be processed.	The CVV provide is invalid. The CVV is between 3-4 digits long
10763	Invalid Data	This transaction cannot be processed.	None - this is a PayPal internal error
15001	Gateway Decline	This transaction cannot be processed.	The transaction was rejected by PayPal because of excessive failures over a short period of time for this credit card. Contact PayPal for more information

TABLE A.3 Direct Payment API Errors

Error Code	Short Message	Long Message	Corrective Action
15002	Gateway Decline	This transaction cannot be processed.	The transaction was declined by PayPal. Contact PayPal for more information
15003	Invalid Configuration	This transaction cannot be processed.	The transaction was declined because the merchant does not have a valid commercial entity agreement on file with PayPal. Contact PayPal for more information.
15004	Gateway Decline	This transaction cannot be processed. Please enter a valid Credit Card Verification Number.	The transaction was declined because the CVV entered does not match the credit card.
15005	Processor Decline	This transaction cannot be processed.	The transaction was declined by the issuing bank, not PayPal. The merchant should attempt another card
15006	Processor Decline	This transaction cannot be processed. Please enter a valid credit card number and type.	The transaction was declined by the issuing bank, not PayPal. The merchant should attempt another card
15007	Processor Decline	This transaction cannot be processed. Please use a valid credit card.	The transaction was declined by the issuing bank because of an expired credit card. The merchant should attempt another card

TABLE A.4 SetExpressCheckout API Errors

Error Code	Short Message	Long Message	Correcting This Error
10001	Internal Error	Internal Error	
10001	Internal Error	Transaction failed due to internal error	
10001	ButtonSource value truncated.	The transaction could not be loaded	
10001	Internal Error	Internal Error	

TABLE A.4 SetExpressCheckout API Errors

Error Code	Short Message	Long Message	Correcting This Error
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Transaction refused because of an invalid argument. See additional error messages for details.	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction id is not valid	
10007	Permission denied	You do not have permissions to make this API call	
10102	PaymentActio n of Order Temporarily Unavailable	PaymentAction of Order is temporarily unavailable. Please try later or use other PaymentAction.	
10402	Authorization only is not allowed for merchant.	This merchant account is not permitted to set PaymentAction to Authorization. Please contact Customer Service.	
10404	Transaction refused because of an invalid argument. See additional error messages for details.	ReturnURL is missing.	
10405	Transaction refused because of an invalid argument. See additional error messages for details.	CancelURL is missing.	

TABLE A.4 SetExpressCheckout API Errors

Error Code	Short Message	Long Message	Correcting This Error
10407	Transaction refused because of an invalid argument. See additional error messages for details.	Invalid buyer email address (BuyerEmail).	
10409	You're not authorized to access this info.	Express Checkout token was issued for a merchant account other than yours.	
10410	Invalid token	Invalid token.	
10411	This Express Checkout session has expired.	This Express Checkout session has expired. Token value is no longer valid.	The token returned by SetExpressCheckoutResponse expires after three hours. If you attempt to send the DoExpressCheckoutPaymentRequest after that time, you will receive error code 10411 in DoExpressCheckoutPaymentResponse. If you receive this error, you must return your customer to PayPal to approve the use of PayPal again. Display an error message to inform the customer that the transaction expired, and provide a button to return to PayPal. In this situation, you are effectively restarting the entire checkout process. (Do not reuse the expired token value on SetExpressCheckoutRequest.) However, because you already know the final OrderTotal, be sure to update the value for that element if appropriate. You might also want to update the values for ReturnURL and CancelURL, if necessary.
10412	Duplicate invoice	Payment has already been made for this InvoiceID.	PayPal checks that InvoiceID values are unique for any particular merchant. If you send an InvoiceID value already associated with another transaction in the PayPal system, PayPal returns error code 10412. You might not be able to correct this error during an actual checkout. If you get this error, research why might occur and modify your implementation of Express Checkout to ensure that you generate unique invoice identification numbers.

TABLE A.4 SetExpressCheckout API Errors

Error Code	Short Message	Long Message	Correcting This Error
10415	Transaction refused because of an invalid argument. See additional error messages for details.	A successful transaction has already been completed for this token.	PayPal allows a token only once for a successful transaction. Handling this error If you determine that your customers are clicking your "Place Order" button twice, PayPal recommends that you disable the button after your customer has clicked it.
10425	Express Checkout has been disabled for this merchant.	Express Checkout has been disabled for this merchant. Please contact Customer Service.	
10432	Transaction refused because of an invalid argument. See additional error messages for details.	Invoice ID value exceeds maximum allowable length.	
10433	Transaction refused because of an invalid argument. See additional error messages for details.	Value of OrderDescription element has been truncated.	
10434	Transaction refused because of an invalid argument. See additional error messages for details.	Value of Custom element has been truncated.	

TABLE A.4 SetExpressCheckout API Errors

Error Code	Short Message	Long Message	Correcting This Error
10436	Transaction refused because of an invalid argument. See additional error messages for details.	PageStyle value exceeds maximum allowable length.	
10437	Transaction refused because of an invalid argument. See additional error messages for details.	cpp-header-image value exceeds maximum allowable length.	
10438	Transaction refused because of an invalid argument. See additional error messages for details.	cpp-header-image value exceeds maximum allowable length.	
10439	Transaction refused because of an invalid argument. See additional error messages for details.	cpp-header-image value exceeds maximum allowable length.	
10440	Transaction refused because of an invalid argument. See additional error messages for details.	cpp-header-image value exceeds maximum allowable length.	

TABLE A.4 SetExpressCheckout API Errors

Error Code	Short Message	Long Message	Correcting This Error
10537	Risk Control Country Filter Failure	The transaction was refused because the country was prohibited as a result of your Country Monitor Risk Control Settings.	
10538	Risk Control Max Amount Failure	The transaction was refused because the maximum amount was exceeded as a result of your Maximum Amount Risk Control Settings.	
10539	Payment declined by your Risk Controls settings: PayPal Risk Model.	Payment declined by your Risk Controls settings: PayPal Risk Model.	
10725	Shipping Address Country Error	There was an error in the Shipping Address Country field	
10727	Shipping Address1 Empty	The field Shipping Address1 is required	
10728	Shipping Address City Empty	The field Shipping Address City is required	
10729	Shipping Address State Empty	The field Shipping Address State is required	
10730	Shipping Address Postal Code Empty	The field Shipping Address Postal Code is required	
10731	Shipping Address Country Empty	The field Shipping Address Country is required	
10736	Shipping Address Invalid City State Postal Code	A match of the Shipping Address City, State, and Postal Code failed.	

TABLE A.5 GetExpressCheckoutDetails API Errors

Error Code	Short Message	Long Message	Correcting This Error
10001	Internal Error	Internal Error	
10001	Internal Error	Transaction failed due to internal error	
10001	ButtonSource value truncated.	The transaction could not be loaded	
10001	ButtonSource value truncated.	The transaction could not be loaded	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Transaction refused because of an invalid argument. See additional error messages for details.	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction id is not valid	
10004	Invalid transaction type	You can not get the details for this type of transaction	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction could not be loaded	

TABLE A.5 GetExpressCheckoutDetails API Errors

Error Code	Short Message	Long Message	Correcting This Error
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction id is not valid	
10007	Permission denied	You do not have permissions to make this API call	
10007	Permission denied	You do not have permission to get the details of this transaction	
10007	Permission denied	You do not have permissions to make this API call	
10408	Express Checkout token is missing.	Express Checkout token is missing.	
10409	You're not authorized to access this info.	Express Checkout token was issued for a merchant account other than yours.	
10410	Invalid token	Invalid token.	
10411	This Express Checkout session has expired.	This Express Checkout session has expired. Token value is no longer valid.	

TABLE A.6 DoExpressCheckoutPayment API Errors

Error Code	Short Message	Long Message	Correcting This Error
10001	Internal Error	Transaction failed due to internal error	
10001	Internal Error	Warning an internal error has occurred. The transaction id may not be correct	

TABLE A.6 DoExpressCheckoutPayment API Errors

Error Code	Short Message	Long Message	Correcting This Error
10001	ButtonSource value truncated.	The transaction could not be loaded	
10001	Internal Error	Internal Error	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Transaction refused because of an invalid argument. See additional error messages for details.	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction id is not valid	
10007	Permission denied	You do not have permissions to make this API call	
10406	Transaction refused because of an invalid argument. See additional error messages for details.	The PayerID value is invalid.	
10408	Express Checkout token is missing.	Express Checkout token is missing.	
10409	You're not authorized to access this info.	Express Checkout token was issued for a merchant account other than yours.	
10410	Invalid token	Invalid token.	

TABLE A.6 DoExpressCheckoutPayment API Errors

Error Code	Short Message	Long Message	Correcting This Error
10411	This Express Checkout session has expired.	This Express Checkout session has expired. Token value is no longer valid.	
10412	Duplicate invoice	Payment has already been made for this InvoiceID.	
10413	Transaction refused because of an invalid argument. See additional error messages for details.	The totals of the cart item amounts do not match order amounts.	If you include any of the following element values with DoExpressCheckoutPayment, the sum of their values must equal the value of OrderTotal. • ItemTotal • ShippingTotal • HandlingTotal • TaxTotal If you get this error, research why it might have occurred and modify your implementation of Express Checkout to ensure proper addition of the values.
10414	Transaction refused because of an invalid argument. See additional error messages for details.	The amount exceeds the maximum amount for a single transaction.	
10415	Transaction A successful transaction has refused already been completed for the token. Transaction A successful transaction has already been completed for the token.		
10416	Transaction refused because of an invalid argument. See additional error messages for details.	You have exceeded the maximum number of payment attempts for this token.	You can send a maximum of 10 DoExpressCheckoutPayment API calls for any single token value, after which the token becomes invalid.

TABLE A.6 DoExpressCheckoutPayment API Errors

Error Code	Short Message	Long Message	Correcting This Error
10417	Transaction cannot complete.	The transaction cannot complete successfully. Instruct the customer to use an alternative payment method.	It is possible that the payment method the customer chooses on PayPal might not succeed when you send DoExpressCheckoutPayment. The most likely cause is that the customer's credit card failed bank authorization. Another possible, though rare, cause is that the final OrderTotal is significantly higher than the original estimated OrderTotal you sent with SetExpressCheckout at Integration Point 1, and the final OrderTotal does not pass PayPal's risk model analysis. If the customer has no other PayPal funding source that is likely to succeed, DoExpressCheckoutPaymentResponse returns error code 10417. Instruct the customer that PayPal is unable to process the payment and redisplay alternative payment methods with which the customer can pay.
10418	Transaction refused because of an invalid argument. See additional error messages for details.	The currencies of the shopping cart amounts must be the same.	
10419	Express Checkout PayerID is missing.	Express Checkout PayerID is missing.	
10420	Transaction refused because of an invalid argument. See additional error messages for details.	Express Checkout PaymentAction is missing.	

TABLE A.6 DoExpressCheckoutPayment API Errors

Error Code	Short Message	Long Message	Correcting This Error
10421	This Express Checkout session belongs to a different customer.	This Express Checkout session belongs to a different customer. Token value mismatch.	When your customer logs into PayPal, the PayPal PayerID is associated with the Express Checkout token. This error is caused by mixing tokens for two different PayerIDs. The Token and PayerID returned for any particular customer by GetExpressCheckoutDetailsResponse must be the same ones you send with DoExpressCheckoutPayment. Verify that your programs are properly associating the Tokens and PayerIDs.
10422	Customer must choose new funding sources.	The customer must return to PayPal to select new funding sources.	It is possible that the payment method the customer chooses on PayPal might not succeed when you send DoExpressCheckoutPaymentRequest. If the customer has a different PayPal funding source that is likely to succeed, DoExpressCheckoutPaymentResponse returns error code 10422 so you can redirect the customer back to PayPal.
10423	Transaction refused because of an invalid argument. See additional error messages for details.	This transaction cannot be completed with PaymentAction of Authorization.	This error occurs if at Integration Point 1, you set PaymentAction to Sale with SetExpressCheckoutRequest but at Integration Point 3, you set PaymentAction to Authorization with DoExpressCheckoutPayment. PayPal does not allow this switch from Sale to Authorization in a single checkout session. PayPal does allow the reverse, however. You can set PaymentAction to Authorization with SetExpressCheckout at Integration Point 1 and switch PaymentAction to Sale with DoExpressCheckoutPayment at Integration Point 3.
10424	Transaction refused because of an invalid argument. See additional error messages for details.	Shipping address is invalid.	If you receive this error message, PayPal recommends that you return your customer to PayPal to review and approve new valid funding sources. Although this error is rare, you should consider trapping the error to display a message to the customer describing what happened, along with a button or hyperlink to return to PayPal. the chapter about best practices in
10431	Item amount is invalid.	Item amount is invalid.	

TABLE A.6 DoExpressCheckoutPayment API Errors

Error Code	Short Message	Long Message	Correcting This Error
10432	Transaction refused because of an invalid argument. See additional error messages for details.	Invoice ID value exceeds maximum allowable length.	
10433	Transaction refused because of an invalid argument. See additional error messages for details.	ransaction Value of OrderDescription efused element has been truncated. ecause of an evalid regument. See elditional error lessages for	
10434	Transaction refused because of an invalid argument. See additional error messages for details.	Value of Custom element has been truncated.	
10435	Transaction refused because of an invalid argument. See additional error messages for details.	The customer has not yet confirmed payment for this Express Checkout session.	
10441	Transaction refused because of an invalid argument. See additional error messages for details.	The NotifyURL element value exceeds maximum allowable length.	
10442	ButtonSource value truncated.	The ButtonSource element value exceeds maximum allowable length.	

TABLE A.6 DoExpressCheckoutPayment API Errors

Error Code	Short Message	Long Message	Correcting This Error
10443	Transaction refused because of an invalid argument. See additional error messages for details.	This transaction cannot be completed with PaymentAction of Order.	
10444	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction currency specified must be the same as previously specified.	
10445	This transaction cannot be processed at this time. Please try again later.	This transaction cannot be processed at this time. Please try again later.	
10446	Unconfirmed email	A confirmed email is required to make this API call.	
10537	Risk Control Country Filter Failure	rol The transaction was refused	
10538	Risk Control Max Amount Failure	The transaction was refused because the maximum amount was exceeded as a result of your Maximum Amount Risk Control Settings.	
10539	Payment declined by your Risk Controls settings: PayPal Risk Model.	Payment declined by your Risk Controls settings: PayPal Risk Model.	

TABLE A.6 DoExpressCheckoutPayment API Errors

Error Code	Short Message	Long Message	Correcting This Error
10725	Shipping Address Country Error	There was an error in the Shipping Address Country field	
10727	Shipping Address1 Empty	The field Shipping Address1 is required	
10728	Shipping Address City Empty	The field Shipping Address City is required	
10729	Shipping Address State Empty	The field Shipping Address State is required	
10730	Shipping Address Postal Code Empty	The field Shipping Address Postal Code is required	
10731	Shipping Address Country Empty	The field Shipping Address Country is required	
10736	Shipping Address Invalid City State Postal Code	A match of the Shipping Address City, State, and Postal Code failed.	

GetTransactionDetails API Errors

TABLE A.7 GetTransactionDetails API Errors

Error Code	Short Message	Long Message
10001	Internal Error	Internal Error

MassPay API Errors

TABLE A.8 MassPay API Errors

Error Code	Short Message	Long Message
10001	Invalid account number.	The transaction failed as a result of an invalid credit card number. Check the number or attempt with another card.
10001	Internal Error	Internal Error
10001	Internal Error	The transaction could not be loaded
10001	ButtonSource value truncated.	The transaction could not be loaded
10001	Transaction refused because of an invalid argument. See additional error messages for details.	The masspay receiver_type is not a recognizable type
10002	Account locked	The user account is locked
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The number of input records is greater than maximum allowed

TABLE A.8 MassPay API Errors

Error Code	Short Message	Long Message
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The number of input records is less than or equal to zero
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The note string length exceeds the maximum limit of 4000 characters
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The amount is missing
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The currency is missing

TABLE A.8 MassPay API Errors

Error Code	Short Message	Long Message
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Currency is not supported
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The amount is not a valid number
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The amount exceeds the max limit of a single mass pay item ~1
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The amount is less than or equal to zero
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The unique id string length exceeds the maximum limit of 30 characters

TABLE A.8 MassPay API Errors

Error Code	Short Message	Long Message	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The unique id string contains a space as a character	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction id is not valid	
10007	Permission denied	You do not have permissions to make this API call	
10301	User not allowed	The user is not allowed to send money through Mass Pay	
10303	Restricted account	Account is restricted	
10304	Unconfirmed email	The user account has unconfirmed email	
10305	Limit Exceeded	The user account needs to have its sending limit removed in order to make a mass payment.	
10306	Limit Exceeded	The user's international account needs to have its sending limit removed in order to make a mass payment	
10307	Receive only account	The user account is receive only and therefore cannot send payments out	
10308	Masspay server configuration error	There is some configuration error	

TABLE A.8 MassPay API Errors

Error Code	Short Message	Long Message	
10309	Masspay server unavailable	The mass pay server is unavailable	
10310	Unable to create payment	Unable to create payments for masspay	
10311	Unable to submit payment	Unable to submit payments for masspay	
10312	Masspay server error	The masspay server has reported errors	
10313	Masspay Invalid Data	The masspay input file includes invalid data	
10314	Masspay input parse error	The input to the masspay server is incorrect. Please make sure that you are using a correctly formatted input.	
10317	Masspay Invalid Email	The masspay input file includes invalid Email	
10320	Internal Error	Internal Error	
10321	Insufficient funds	The account does not have sufficient funds to do this masspay	
10327	Masspay Invalid UserID	The masspay input file includes invalid UserID	

RefundTransaction API Errors

TABLE A.9 RefundTransaction API Errors

Error Code	Short Message	Long Message	Correcting This Error
10001	Internal Error	Internal Error	
10001	Internal Error	Warning an internal error has occurred. The transaction id may not be correct	
10001	ButtonSource value truncated.	The transaction could not be loaded	
10001	Internal Error	Internal Error	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The partial refund amount must be a positive amount	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	You can not specify a partial amount with a full refund	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	A transaction id is required	

RefundTransaction API Errors

TABLE A.9 RefundTransaction API Errors

Error Code	Short Message	Long Message	Correcting This Error
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The partial refund amount must be a positive amount	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	You can not specify a partial amount with a full refund	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	A transaction id is required	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Transaction class is not supported	
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction id is not valid	
10007	Permission denied	You do not have permission to refund this transaction	

TABLE A.9 RefundTransaction API Errors

Error Code	Short Message	Long Message	Correcting This Error
10007	Permission denied	You do not have permissions to make this API call	
10009	Transaction refused	You do not have a verified ACH	This error can be caused by insufficient funds in your PayPal balance to cover the amount of the refund and either your not having yet verified the bank account associated with your PayPal account or your not having any bank account associated with your PayPal account at all. Ensure that you have sufficient funds in your PayPal balance and that you have verified the associated bank account.
10009	Transaction refused	The partial refund amount must be less than or equal to the original transaction amount	
10009	Transaction refused	The partial refund amount must be less than or equal to the remaining amount	
10009	Transaction refused	The partial refund amount is not valid	
10009	Transaction refused	Because a complaint case exists on this transaction, only a refund of the full or full remaining amount of the transaction can be issued	
10009	Transaction refused	You are over the time limit to perform a refund on this transaction	
10009	Transaction refused	Can not do a full refund after a partial refund	
10009	Transaction refused	Account is locked or inactive	
10009	Transaction refused	The partial refund must be the same currency as the original transaction	
10009	Transaction refused	This transaction has already been fully refunded	
10009	Transaction refused	Account is restricted	
10009	Transaction refused	You can not refund this type of transaction	

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TABLE A.9 RefundTransaction API Errors

Error Code	Short Message	Long Message	Correcting This Error
10009	Transaction refused	You can not do a partial refund on this transaction	
10009	Transaction refused	The account for the counterparty is locked or inactive	
10009	Transaction refused	You can not refund this type of transaction	
10011	Invalid transaction id value	Transaction refused because of an invalid transaction id value	
11001	Transaction refused because of an invalid argument. See additional error messages for details.	Transaction class is not supported	

TransactionSearch API Errors

TABLE A.10 TransactionSearch API Errors

Error Code	Short Message	Long Message
10001	Internal Error	Internal Error
10001	ButtonSource value truncated.	The transaction could not be loaded
10003	Transaction refused because of an invalid argument. See additional error messages for details.	Start date is a required parameter
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Start date is invalid

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TABLE A.10 TransactionSearch API Errors

Error Code	Short Message	Long Message
10004	Transaction refused because of an invalid argument. See additional error messages for details.	End date is invalid
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Currency is not supported
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Transaction class is not supported
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Receipt id is not valid
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Payer email is invalid
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Auction item id is not valid
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Receiver email is invalid
10004	Transaction refused because of an invalid argument. See additional error messages for details.	You can not search for a transaction id and a receipt id
10004	Transaction refused because of an invalid argument. See additional error messages for details.	Receiver can only be specified for payments you've received
10004	Transaction refused because of an invalid argument. See additional error messages for details.	The transaction id is not valid

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Error Codes and Messages for All PayPal APIs

TransactionSearch API Errors

TABLE A.10 TransactionSearch API Errors

Error Code	Short Message	Long Message
10007	Permission denied	You do not have permissions to search for this transaction
10007	Permission denied	You do not have permissions to make this API call
11002	Search warning	The number of results were truncated. Please change your search parameters if you wish to see all your results.

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Country Codes

		Country	Code
Country	Code	BERMUDA	BM
AFGHANISTAN	AF	BHUTAN	BT
ÅLAND ISLANDS	AX	BOLIVIA	ВО
ALBANIA	AL	BOSNIA AND HERZEGOVINA	BA
ALGERIA	DZ	BOTSWANA	BW
AMERICAN SAMOA	AS	BOUVET ISLAND	BV
ANDORRA	AD	BRAZIL	BR
ANGOLA	AO	BRITISH INDIAN OCEAN	IO
ANGUILLA	AI	TERRITORY	Ю
ANTARCTICA	AQ	BRUNEI DARUSSALAM	BN
ANTIGUA AND BARBUDA	AG	BULGARIA	BG
ARGENTINA	AR	BURKINA FASO	BF
ARMENIA	AM	BURUNDI	BI
ARUBA	AW	CAMBODIA	KH
AUSTRALIA	AU	CAMEROON	CM
AUSTRIA	AT	CANADA	CA
AZERBAIJAN	AZ	CAPE VERDE	CV
BAHAMAS	BS	CAYMAN ISLANDS	KY
BAHRAIN	ВН	CENTRAL AFRICAN	CF
BANGLADESH	BD	REPUBLIC	
BARBADOS	BB	CHAD	TD
BELARUS	BY	CHILE	CL
BELGIUM	BE	CHINA	CN
BELIZE	BZ	CHRISTMAS ISLAND	CX
BENIN	ВЈ	COCOS (KEELING) ISLANDS	CC
		COLOMBIA	CO

Country	Code	Country	
OMOROS	KM	FRENCH SOUTHERN	
ONGO	CG	TERRITORIES	
ONGO, THE DEMOCRATIC EPUBLIC OF THE	CD	GABON GAMBIA	
COOK ISLANDS	CK	GEORGIA	
COSTA RICA	CR	GERMANY	
COTE D'IVOIRE	CI	GHANA	
CROATIA	HR	GIBRALTAR	
CUBA	CU	GREECE	
CYPRUS	CY	GREENLAND	
CZECH REPUBLIC	CZ	GRENADA	
DENMARK	DK	GUADELOUPE	
DJIBOUTI	DJ	GUAM	
OOMINICA	DM	GUATEMALA	
OOMINICAN REPUBLIC	DO	GUERNSEY	
CCUADOR	EC	GUINEA	
EGYPT	EG	GUINEA-BISSAU	
L SALVADOR	SV	GUYANA	
QUATORIAL GUINEA	GQ	HAITI	
RITREA	ER	HEARD ISLAND AND	
ESTONIA	EE	MCDONALD ISLANDS	
ЕТНІОРІА	ET	HOLY SEE (VATICAN CITY STATE)	
ALKLAND ISLANDS MALVINAS)	FK	HONDURAS	
FAROE ISLANDS	FO	HONG KONG	
IJI	FJ	HUNGARY	
INLAND	FI	ICELAND	
TRANCE	FR	INDIA	
RENCH GUIANA	GF	INDONESIA	
RENCH POLYNESIA	PF	IRAN, ISLAMIC REPUBLIC OF	

Country	Code	Country	Code
IRAQ	IQ	MADAGASCAR	MG
IRELAND	IE	MALAWI	MW
ISLE OF MAN	IM	MALAYSIA	MY
ISRAEL	IL	MALDIVES	MV
ITALY	IT	MALI	ML
JAMAICA	JM	MALTA	MT
JAPAN	JP	MARSHALL ISLANDS	MH
JERSEY	JE	MARTINIQUE	MQ
JORDAN	JO	MAURITANIA	MR
KAZAKHSTAN	KZ	MAURITIUS	MU
KENYA	KE	MAYOTTE	YT
KIRIBATI	KI	MEXICO	MX
KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF	KP	MICRONESIA, FEDERATED STATES OF	FM
KOREA, REPUBLIC OF	KR	MOLDOVA, REPUBLIC OF	MD
KUWAIT	KW	MONACO	MC
KYRGYZSTAN	KG	MONGOLIA	MN
LAO PEOPLE'S DEMOCRATIC REPUBLIC	LA	MONTSERRAT	MS
LATVIA	LV	MOROCCO	MA
LEBANON	LB	MOZAMBIQUE	MZ
LESOTHO	LS	MYANMAR	MM
LIBERIA	LR	NAMIBIA	NA
LIBYAN ARAB JAMAHIRIYA	LY	NAURU	NR
LIECHTENSTEIN	LI	NEPAL	NP
LITHUANIA	LT	NETHERLANDS	NL
LUXEMBOURG	LU	NETHERLANDS ANTILLES	AN
MACAO	MO	NEW CALEDONIA	NC
MACEDONIA, THE FORMER	MK	NEW ZEALAND	NZ
YUGOSLAV REPUBLIC OF		NICARAGUA	NI
		NIGER	NE

Country	Code	Country	Code
NIGERIA	NG	SAINT VINCENT AND THE	VC
NIUE	NU	GRENADINES	
NORFOLK ISLAND	NF	SAMOA	WS
NORTHERN MARIANA	MP	SAN MARINO	SM
ISLANDS		SAO TOME AND PRINCIPE	ST
NORWAY	NO	SAUDI ARABIA	SA
OMAN	OM	SENEGAL	SN
PAKISTAN	PK	SERBIA AND MONTENEGRO	CS
PALAU	PW	SEYCHELLES	SC
PALESTINIAN TERRITORY,	PS	SIERRA LEONE	SL
OCCUPIED	D.	SINGAPORE	SG
PANAMA	PA	SLOVAKIA	SK
PAPUA NEW GUINEA	PG	SLOVENIA	SI
PARAGUAY	PY	SOLOMON ISLANDS	SB
PERU	PE	SOMALIA	SO
PHILIPPINES	PH	SOUTH AFRICA	ZA
PITCAIRN	PN	SOUTH GEORGIA AND THE	GS
POLAND	PL	SOUTH SANDWICH ISLANDS	
PORTUGAL	PT	SPAIN	ES
PUERTO RICO	PR	SRI LANKA	LK
QATAR	QA	SUDAN	SD
REUNION	RE	SURINAME	SR
ROMANIA	RO	SVALBARD AND JAN	SJ
RUSSIAN FEDERATION	RU	MAYEN	
RWANDA	RW	SWAZILAND	SZ
SAINT HELENA	SH	SWEDEN	SE
SAINT KITTS AND NEVIS	KN	SWITZERLAND	СН
SAINT LUCIA	LC	SYRIAN ARAB REPUBLIC	SY
SAINT PIERRE AND MIQUELON	PM	TAIWAN, PROVINCE OF CHINA	TW
MIZOLLON		TAJIKISTAN	TJ

Country	Code
TANZANIA, UNITED REPUBLIC OF	TZ
THAILAND	TH
TIMOR-LESTE	TL
TOGO	TG
TOKELAU	TK
TONGA	TO
TRINIDAD AND TOBAGO	TT
TUNISIA	TN
TURKEY	TR
TURKMENISTAN	TM
TURKS AND CAICOS ISLANDS	TC
TUVALU	TV
UGANDA	UG
UKRAINE	UA
UNITED ARAB EMIRATES	AE
UNITED KINGDOM	GB
UNITED STATES	US
UNITED STATES MINOR OUTLYING ISLANDS	UM
URUGUAY	UY
UZBEKISTAN	UZ
VANUATU	VU
VENEZUELA	VE
VIET NAM	VN
VIRGIN ISLANDS, BRITISH	VG
VIRGIN ISLANDS, U.S.	VI
WALLIS AND FUTUNA	WF
WESTERN SAHARA	EH

Country	Code
YEMEN	YE
ZAMBIA	ZM
ZIMBABWE	ZW

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