



UATP Authorization Specification

Airline UATP Authorization Interface Specification

Document Number: 100003.en_US-201005

© 2010 PayPal, Inc. All rights reserved. PayPal is a registered trademark of PayPal, Inc. The PayPal logo is a trademark of PayPal, Inc. Other trademarks and brands are the property of their respective owners.

The information in this document belongs to PayPal, Inc. It may not be used, reproduced or disclosed without the written approval of PayPal, Inc.

Copyright © PayPal. All rights reserved. PayPal (Europe) S.à r.l. et Cie., S.C.A., Société en Commandite par Actions. Registered office: 22-24 Boulevard Royal, L-2449, Luxembourg, R.C.S. Luxembourg B 118 349.

Consumer advisory: The PayPal™ payment service is regarded as a stored value facility under Singapore law. As such, it does not require the approval of the Monetary Authority of Singapore. You are advised to read the terms and conditions carefully.

Notice of non-liability:

PayPal, Inc. is providing the information in this document to you "AS-IS" with all faults. PayPal, Inc. makes no warranties of any kind (whether express, implied or statutory) with respect to the information contained herein. PayPal, Inc. assumes no liability for damages (whether direct or indirect), caused by errors or omissions, or resulting from the use of this document or the information contained in this document or resulting from the application or use of the product or service described herein. PayPal, Inc. reserves the right to make changes to any information herein without further notice.



Contents

Preface	5
Purpose	5
Audience	5
Chapter 1 Overview to UATP Authorization	7
Chapter 2 PaySOAP API Architecture	9
Services Architecture	9
PayPal WSDL/XSD Schema Definitions	10
API Concepts and Terminology	10
Security	11
SOAP RequesterCredentials: Username, Password, Signature, and Subject	12
SOAP Service Endpoints	13
SOAP Implementation	13
SOAP Message Style: doc-literal	13
SOAP Request Envelope	13
Request Structure	14
Response Structure	15
Error Responses	17
CorrelationID for Reporting Problems to PayPal	18
PayPal SOAP API Definitions	18
Character Encoding, Data Types and Formats, and Currencies	19
Chapter 3 Core eBL Request/Response Structures	21
Diagram of core eBL Types	21
AbstractRequestType	21
Fields	22
AbstractResponseType	22
Fields	22
Chapter 4 UATP API Descriptions	25
UATP Authorization Using the SOAP API	25

UATP Authorization Using the PayPal Name-Value Pair API 27

Chapter 5 Error Codes and Messages 31

 Name-Value Pair Error Response Format 31

 General API Errors. 31

 DoUATPAuthorization Errors. 33

Glossary 37

Index. 39



Preface

This specification details PayPal Universal Air Travel Plan (UATP) Authorization.

Purpose

The purpose of this specification is to define the Authorization interface PayPal is developing for use by the airline industry so that customers can choose PayPal as a payment option for purchasing airline tickets. This particular feature is specific to PayPal's unique partner in the airline industry, Universal Air Travel Plan (UATP). It extends PayPal's Name-Value pair or SOAP API interface to support the UATP number and expiration date as well as the approval code indicating the success of an authorization.

Audience

This specification is for use by UATP's Authorization System.

Revision History

Revision history for *Airline UATP Authorization Interface Specification*.

TABLE P.1 *Revision History*

Date	Description
May 2010	Added error code 10631.
December 2006	Created.



Preface

Revision History

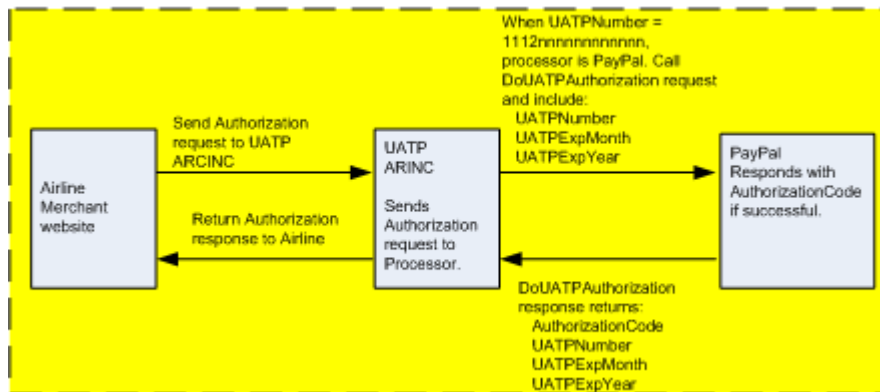
1

Overview to UATP Authorization

PayPal's Airline product offers PayPal as a tender type to customers purchasing tickets from airline merchant websites. The *PayPal Airline UATP Authorization* specification describes the parameters that UATP's Authorization System uses in the call to authorize PayPal transactions. It also describes the response fields and error codes.

Figure 1.1 summarizes airline UATP authorization.

FIGURE 1.1 Authorization Summary



Authorizations to be processed by PayPal include a UATPNumber in the format 1112nnnnnnnnnn. UATP's Authorization System sends these authorizations to PayPal formatted as described in Chapter 4, "UATP API Descriptions." You can use Name-Value pair or PayPal's SOAP API for sending the authorization request. Upon success, PayPal returns an AuthorizationCode in the response. UATP's Authorization System then sends the response to the airline merchant.

2

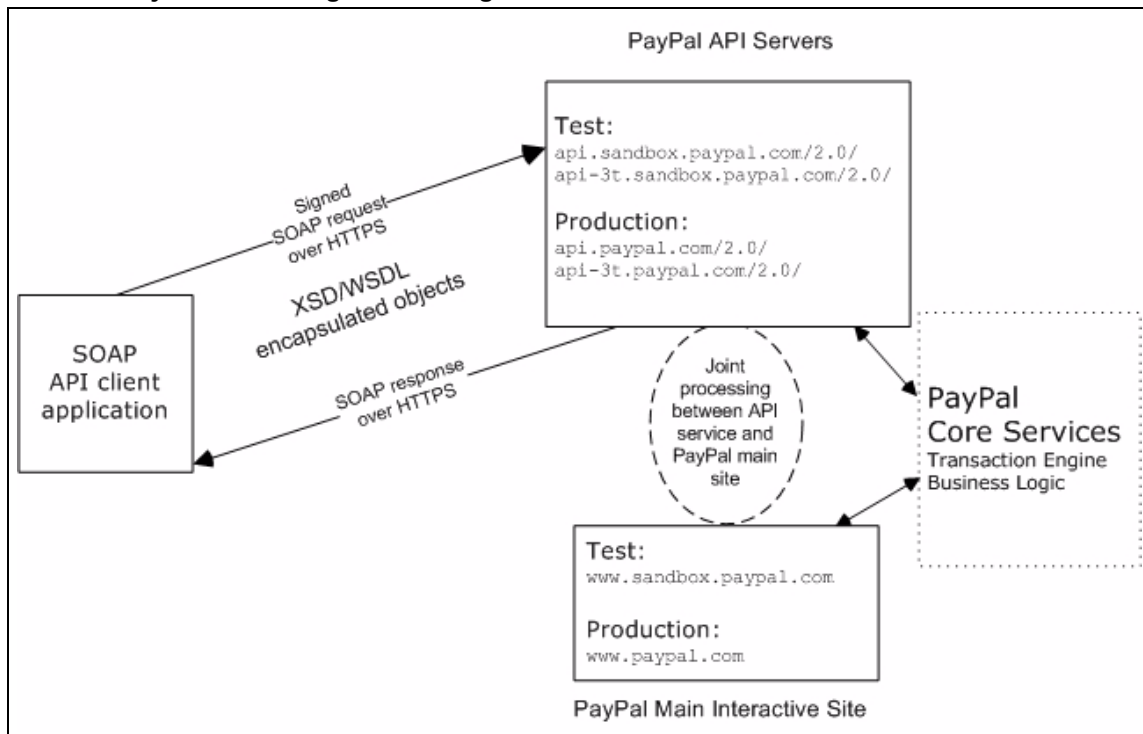
PayPal SOAP API Architecture

The PayPal SOAP 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 SOAP is a combination of client-side and server-side schemas, hardware and software servers, and core services.

FIGURE 2.1 PayPal SOAP 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 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/eBLBaseComponents.xsd
Components and Component Types	https://www.sandbox.paypal.com/wsdl/CoreComponentTypes.xsd
Production with Live PayPal Web Services API Service	
PayPal Schema	https://www.paypal.com/wsdl/PayPalSvc.wsdl
eBL Base	http://www.paypal.com/wsdl/eBLBaseComponents.xsd
Components and Component Types	http://www.paypal.com/wsdl/CoreComponentTypes.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, search transactions, refund payments, view transaction information, and other business functions.
API Certificate	Mutually exclusive with API Signature. 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.

TABLE 2.2 Basic PayPal API Set-up Concepts and Terminology

Term	Definition
API Signature	<p>Mutually exclusive with API Certificate. 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.</p> <p>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 programmatic 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.</p>
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 authorization	An indicator in an API call of the account for whom the call is being made. This is the programmatic aspect of third-party authorization. The value of the Subject field is the third-party's PayPal email address.
First-Party Access	<p>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.</p> <p>Example:</p> <p>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.</p>
Third-Party Access	<p>Another person or company makes API calls on the your behalf. You grant the third-party your permission to make API calls for you.</p> <p>Example:</p> <p>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 PayPal email address in the "Subject" field of an API call.</p>

Security

The PayPal SOAP API service is protected to ensure that only authorized PayPal members use it. There are four levels of security:

1. A required API username (Username field) and API password (Password field)
2. A third required authentication mechanism, which is either one of the following:
 - Client-side request signing via a PayPal-issues API Certificate
 - Request authentication via an an API Signature included in the request (Signature field)
3. An optional third-party authorization to make the API call on some other account's behalf (the optional Subject field).
4. Secure Sockets Layer (SSL) data transport

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

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 13.

```
<SOAP-ENV:Header>
  <RequesterCredentials xmlns="urn:ebay:api:PayPalAPI"
xsi:type="ebl:CustomSecurityHeaderType">
    <Credentials xmlns="urn:ebay:apis:eBLBaseComponents"
xsi:type="ebl:UserIdPasswordType">
      <Username>api_username</Username>
      <Password>api_password</Password>
      <Signature>api_signature</Signature>
      <Subject>authorizing_account_emailaddress</Subject>
    </Credentials>
  </RequesterCredentials>
</SOAP-ENV:Header>
```

where:

TABLE 2.3 RequesterCredentials Authentication Elements in SOAP Header

Element	Value	Description
<Username>	api_username	Your API username, which is auto-generated by PayPal when you apply for a digital certificate to use the PayPal SOAP API. You can see this value on https://www.paypal.com/ in your Profile under API Access > API Certificate Information .
<Password>	api_password	Your API password, which you specify when you apply for a digital certificate to use the PayPal SOAP API.
<Signature>	api_signature	Your API signature, if you use one instead of an API Certificate.

TABLE 2.3 RequesterCredentials Authentication Elements in SOAP Header

Element	Value	Description
<Subject>	authorizing_account_emailaddress	The email address of a third-party for whom you are sending requests to the PayPal SOAP API. Your API username must have been granted permission by this third-party to make any particular PayPal API request.

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-3t.sandbox.paypal.com/2.0/
API Certificate	https://api.paypal.com/2.0/	https://api.sandbox.paypal.com/2.0/

SOAP Implementation

This section contains information about the PayPal SOAP implementation.

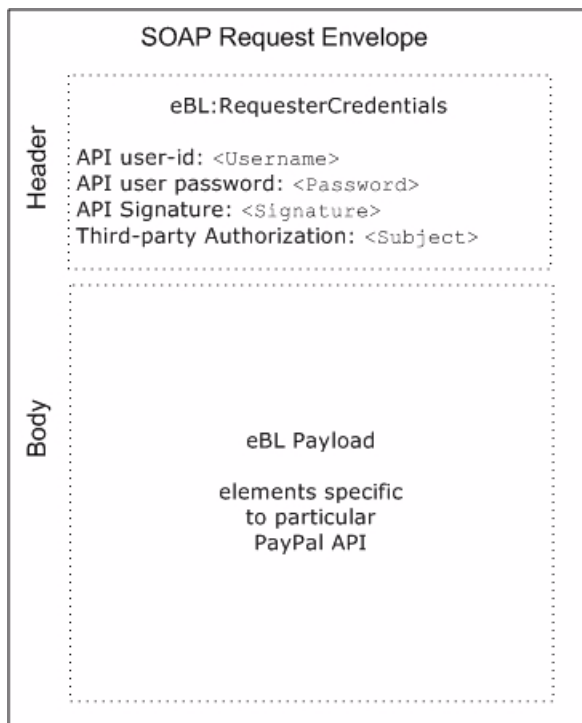
SOAP Message Style: doc-literal

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: `AbstractRequestType` and `AbstractResponseType`.

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 SOAP API.

General Structure of PayPal API SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
><SOAP-ENV:Header>
  <RequesterCredentials xmlns="urn:ebay:api:PayPalAPI">
    <Credentials xmlns="urn:ebay:apis:eBLBaseComponents">
      <Username>api_username</Username>
      <Password>api_password</Password>
      <Signature/>
      <Subject/>
    </Credentials>
  </RequesterCredentials>
</SOAP-ENV:Header>
<SOAP-ENV:Body>
  <specific_api_name_Req xmlns="urn:ebay:api:PayPalAPI">
```

```

        <specific_api_name_Request>
            <Version xmlns=urn:ebay:apis:eBLBaseComponents">service_version
            </Version>
            <required_or_optional_fields xsi:type="some_type_here">data
            </required_or_optional_fields>
        </specific_api_name_Request>
    </specific_api_name_Req>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
    
```

TABLE 2.5 Annotation of Generic SOAP Request

Lines	Comment
12, 13	The <Username> and <Password> fields are part of the PayPal SOAP API <RequesterCredentials> security authentication mechanism you must construct for every SOAP request header. For details, see “SOAP RequesterCredentials: Username, Password, Signature, and Subject” on page 12.
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 Table 2.3, “RequesterCredentials Authentication Elements in SOAP Header,” on page 12.
15	The <Subject> element can specify a third-party PayPal account by whom you are authorized to make this request. For more details, see Table 2.3, “RequesterCredentials Authentication Elements in SOAP Header,” on page 12.
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.
22	The number of the PayPal SOAP API version is required on each SOAP request. This version number is the value of ns:version in https://www.paypal.com/wsdl/PalPalSvc.wsdl
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 API where response is Success:

```

<?xml version="1.0"?>
<SOAP-ENV:Envelope
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  xmlns:cc="urn:ebay:apis:CoreComponentTypes"
  xmlns:wsu="http://schemas.xmlsoap.org/ws/2002/07/utility"
  xmlns:saml="urn:oasis:names:tc:SAML:1.0:assertion"
  xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
  xmlns:wsse="http://schemas.xmlsoap.org/ws/2002/12/secext"
  xmlns:ebl="urn:ebay:apis:eBLBaseComponents"
  xmlns:ns="urn:ebay:api:PayPalAPI">
  <SOAP-ENV:Header>
    <Security
      xmlns="http://schemas.xmlsoap.org/ws/2002/12/secext"
      xsi:type="wsse:SecurityType"
    />
    <RequesterCredentials xmlns="urn:ebay:api:PayPalAPI"
      xsi:type="ebl:CustomSecurityHeaderType">
      <Credentials
        xmlns="urn:ebay:apis:eBLBaseComponents"
        xsi:type="ebl:UserIdPasswordType"
      />
    </RequesterCredentials>
  </SOAP-ENV:Header>
  <SOAP-ENV:Body id="_0">
    <specific_api_name_Response xmlns="urn:ebay:api:PayPalAPI">
      <Timestamp xmlns="urn:ebay:api:PayPalAPI">
        dateTime_in_UTC/GMT
      </TIMESTAMP>
      <Ack xmlns="urn:ebay:apis:eBLBaseComponents">Success</Ack>
      <Version xmlns="urn:ebay:apis:eBLBaseComponents">
        serviceVersion
      </Version>
      <CorrelationId xmlns="urn:ebay:apis:eBLBaseComponents">
        applicationCorrelation
      </CorrelationID>
      <Build xmlns="urn:ebay:apis:eBLBaseComponents">
        api_build_number
      </Build>
      <elements_for_specific_api_response>
        data
      </elements_for_specific_api_response>
    </specific_api_name_Response>
  </SOAP-ENV:Body>

```


</SOAP-ENV:Envelope>

TABLE 2.6 Annotation of Generic SOAP Response

Lines	Comment
22 and 31	The <code>specific_api_name_Response</code> start and end elements.
23	Each API response contains a timestamp with its date and time in UTC/GMT.
24	The <code><Ack></code> element contains the string <code>Success</code> after the corresponding request has been successfully processed. (For a complete list of possible returned strings, see “AbstractResponseType” on page 22.) In the case of errors, <code>Ack</code> is set to a value other than <code>Success</code> , and the response body contains an <code><Errors></code> element with information to help you troubleshoot the cause of the error. See “Error Responses” on page 17.
26	The <code><CorrelationID></code> element contains information about the PayPal application that processed the request. Use the value of this element if you need to troubleshoot a problem with one of your requests.
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 [“Error Codes and Messages” on page 31.](#)”

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 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">
    <GetTransactionDetailsResponse xmlns="urn:ebay:api:PayPalAPI">
```

```

    <Timestamp 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
      </SeverityCode>
    </Errors>
    <CorrelationID xmlns="urn:ebay:apis:eBLBaseComponents">
      debugging_info
    </CorrelationID>
    <Version xmlns="urn:ebay:apis:eBLBaseComponents">
      1.000000
    </Version>
    <Build 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. If you have to troubleshoot a problem with your requests, we suggest that you capture the value of `CorrelationID` so you can report it to PayPal.

PayPal SOAP API Definitions

The PayPal SOAP 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 SOAP schema includes these definitions to maintain compatibility with eBay's SOAP and for possible future joint use of SOAP across both eBay and PayPal. The material in this book focuses only on those SOAP definitions pertinent to use of the PayPal SOAP 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 SOAP 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.

Date/Time Formats

The PayPal SOAP API schema defines date/time values as Coordinated Universal Time (UTC/GMT), using ISO 8601 format, and of type `ns:dateTime`. An example date/time stamp is 2006-08-24T05:38:48Z

Core Currency Amount Data Type

The core currency amount data type is called `BasicAmountType` and is derived from string, and all currency amount fields have the following structure:

1. The `currencyID` attribute is required.
2. The amount must have two decimal places.
3. The decimal separator must be a period (“.”).
4. You must not use any thousands separator.
5. `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 “[Core Currency Amount Data Type](#)” on page 19. Some APIs support only a subset of these currencies.

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

```
<Amount currencyID="currencyCode">3.00</Amount>
```



3

Core eBL Request/Response Structures

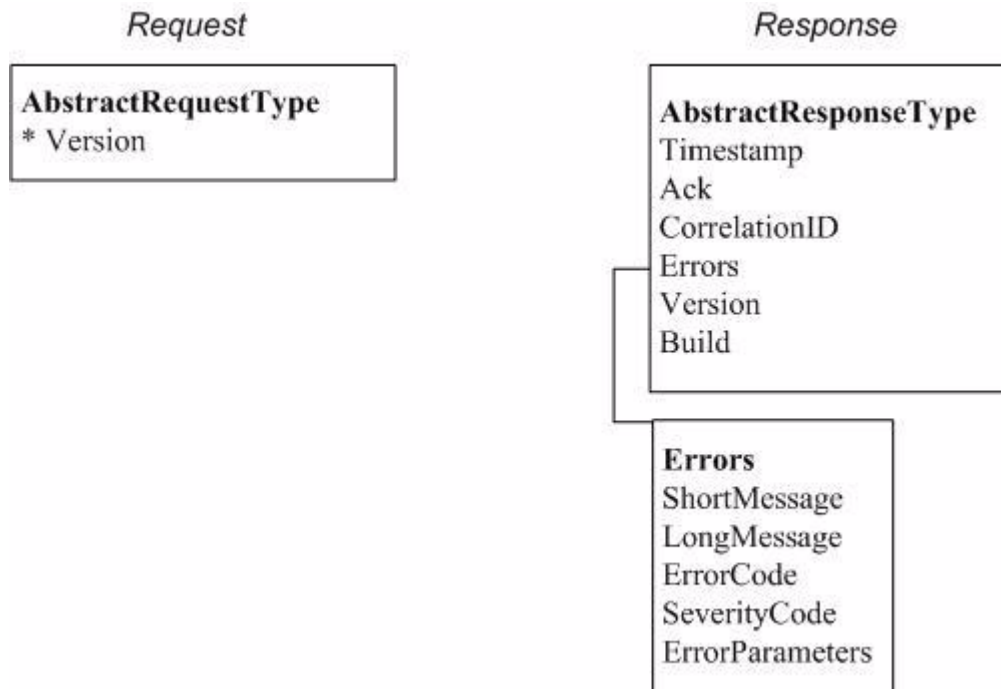
The PayPal SOAP API is built on core structures from the eBL schema that define required elements in all SOAP requests and responses:

- 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



AbstractRequestType

AbstractRequestType is the base type definition of all PayPal SOAP requests.

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

Fields

TABLE 3.1 AbstractRequestType Fields

Element	Description	Data Type	Allowable Values	Required ?
Version	A string representing the version of the PayPal Schema., specifically, the value the version attribute of the wsd:definitions element . For the location of the PayPal Schema, see “PayPal WSDL/XSD Schema Definitions” on page 10.	xs:string	See the the PayPal Schema.	Yes

AbstractResponseType

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

Fields

For error codes and messages and their meanings, see [“Error Codes and Messages”](#) on page 31.”

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 SOAP service as a result of processing a request.	xs:dateTime	Transaction-specific

TABLE 3.2 AbstractResponseType Fields

Element	Description	Data Type	Possible Values
Ack	<p>A token representing the application-level acknowledgement code. Contains one of the following enumerated values:</p> <ul style="list-style-type: none"> • Success: Request processing succeeded • Failure: Request processing failed • SuccessWithWarning: Request processing completed successfully but with some warning information in Errors 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
Correlation ID	<p>A string that identifies the exact API request that produced this response</p> <p>Character length: 41 characters maximum.</p>	xs:string	Transaction-specific
Errors	<p>Error code and messages for debugging a response.</p> <ul style="list-style-type: none"> • ErrorCode: token defining the error code number • ShortMessage: string containing the error message • LongMessage: string describing the error message • ErrorParameters: error parameters from the credit card processor. Returned only with DoDirectPaymentResponse. • SeverityCode: returns Error or Warning. 	ns:ErrorType xs:token xs:string xs:string ns:SeverityCodeType	Transaction-specific
Version	<p>A string representing the version of the PayPal Schema, specifically, the value of the version attribute of the wsdl:definitions element .</p> <p>For the location of the PayPal Schema, see “PayPal WSDL/XSD Schema Definitions” on page 10.</p>	xs:string	See the the PayPal Schema.
Build	<p>A string representing the specific software build that processes the request and generates the response</p>	xs:string	

4

UATP API Descriptions

The airline merchant obtains the UATP number and expiration date from PayPal and passes these to UATP's Authorization System. UATP's Authorization System calls `DoUATPAuthorizationRequest` with the `UATPNumber`, `UATPExpMonth`, and `UATPExpYear`.

UATP's Authorization System receives the `DoUATPAuthorizationResponse` and returns it to the airline merchant. A successful authorization includes the `AuthorizationCode`.

UATP Authorization Using the SOAP API

The following table represents the composition of the SOAP API `DoUATPAuthorizationRequestType` and `DoUATPAuthorizationResponseType` elements. Elements required in the request are marked with an asterisk.

TABLE 4.1 SOAP `DoUATPAuthorizationTypes`

<code>DoUATPAuthorizationRequestType</code>	<code>DoUATPAuthorizationResponseType</code>
*Amount	TransactionID
*UATPNumber	Amount
*UATPExpMonth	AuthorizationCode
*UATPExpYear	InvoiceID
InvoiceID	UATPNumber
	UATPExpMonth
	UATPExpYear

Table 4.2 describes the DoUATPAuthorizationRequest parameters for the PayPal SOAP API.

TABLE 4.2 DoUATPAuthorizationRequest Parameters for PayPal SOAP API

Field	Description	Data Type	Allowable Values	Required?
Amount	Amount to authorize. Limitations: Value is a positive number which cannot exceed \$10,000 USD in any currency. No currency symbol. Must have two decimal places, decimal separator must be a period (.), and the optional thousands separator must be a comma (,).	ebl:BasicAmountType	See description.	Yes
UATPNumber	Character length and limits: An alphanumeric string of 15 digits. The first 4 digits are the PayPal reserved bin 1112;	xs:string	See description.	Yes
UATPExpMonth	The month in which the UATP number expires. Character length and limits: Integer between 1 and 12 inclusive.	xs:int	See description.	Yes
UATPExpYear	The year in which the UATP number expires. Character length and limits: 4 numerical digits (2XXX).	xs:int	See description.	Yes
InvoiceID	An identifier used to query the TransactionSearch API about successful authorizations. It is replaced by the Ticket Document Number at the time of the Batch capture. Character length and limits: 127 single-byte alphanumeric characters.	xs:string	See description.	No

Table 4.3 describes the DoUATPAuthorizationResponse fields for the PayPal SOAP API.

TABLE 4.3 DoUATPAuthorizationResponse fields for PayPal SOAP API

Field	Description	Data Type	Allowable Values
TransactionID	An authorization identification number. Character length and limits: 19 single-byte characters.	xs:string	See description.
Amount	Amount specified in the request.	ebl:BasicAmountType	See description.

TABLE 4.3 DoUATPAuthorizationResponse fields for PayPal SOAP API

Field	Description	Data Type	Allowable Values
AuthorizationCode	Value that represents a unique authorization. This code should be used along with the UATPNumber, UATPExpMonth, and UATPExpYear to capture against this authorization. Character length and limits: 4 numeric digits.	xs:string	See description.
InvoiceID	The identifier sent in the call to DoUATPAuthorizationRequest. See InvoiceID description in Table 4.2 .	xs:string	See description.
UATPNumber	Character length and limits: An alphanumeric string of 15 digits. The first 4 digits are the PayPal reserved bin 1112.	xs:string	See description.
UATPExpMonth	The month in which the UATP number expires. Character length and limits: Integer between 1 and 12 inclusive.	xs:int	See description.
UATPExpYear	The year in which the UATP number expires. Character length and limits: 4 numerical digits (2XXX).	xs:int	See description.

UATP Authorization Using the PayPal Name-Value Pair API

The following table represents the composition of the SOAP API DoUATPAuthorizationRequestType and DoUATPAuthorizationResponseType elements. Elements required in the request are marked with an asterisk.

TABLE 4.4 Name-Value Pair DoUATPAuthorizationTypes

DoUATPAuthorizationRequestType	DoUATPAuthorizationResponseType
*AMT	TRANSACTIONID
*UATPNUMBER	AMT
*UATPEXPMONTH	AUTHORIZATIONCODE
*UATPEXPYEAR	INVOICEID
INVOICEID	UATPNUMBER
CURRENCYCODE	UATPEXPMONTH
	UATPEXPYEAR

Table 4.5 describes the `DoUATPAuthorizationRequest` fields for the PayPal Name-Value Pair API.

TABLE 4.5 *DoUATPAuthorizationRequest Parameters for the PayPal Name-Value Pair API*

Parameter	Description	Required?
AMT	Amount to authorize. Limitations: Value is a positive number which cannot exceed \$10,000 USD in any currency. No currency symbol. Must have two decimal places, decimal separator must be a period (.), and the optional thousands separator must be a comma (,).	Yes
UATPNUMBER	Character length and limits: An alphanumeric string of 15 digits. The first 4 digits are the PayPal reserved bin 1112.	Yes
UATPEXPMONTH	The month in which the UATP number expires. Character length and limits: Integer between 1 and 12 inclusive.	Yes
UATPEXPYEAR	The year in which the UATP number expires. Character length and limits: 4 numerical digits (2XXX).	Yes
INVOICEID	An identifier used to query the TransactionSearch API about successful authorizations. It is replaced by the Ticket Document Number at the time of the Batch capture. Character length and limits: 127 single-byte alphanumeric characters.	Yes
CURRENCYCODE	A three-character currency code. Currently only USD is supported. Default: USD.	No

Table 4.6 describes the `DoUATPAuthorizationResponse` fields for the PayPal Name-Value Pair API

TABLE 4.6 *DoUATPAuthorizationResponse Fields for the PayPal Name-Value Pair API*

Field	Description
TRANSACTIONID	An authorization identification number. Character length and limits: 19 single-byte characters.
AMT	Amount specified in the request.
AUTHORIZATIONCODE	Value that represents a unique authorization. This code should be used along with the UATPNUMBER, UATPEXPMONTH, and UATPEXPYEAR to capture against this authorization. Character length and limits: 4 numeric digits.

TABLE 4.6 *DoUATPAuthorizationResponse Fields for the PayPal Name-Value Pair API*

Field	Description
INVOICEID	The identifier sent in the call to DoUATPAuthorizationRequest. See the InvoiceID description in Table 4.5 .
UATPNUMBER	Character length and limits: An alphanumeric string of 15 digits. The first 4 digits are the PayPal reserved bin 1112.
UATPEXPMONTH	The month in which the UATP number expires. Character length and limits: Integer between 1 and 12 inclusive.
UATPEXPYEAR	The year in which the UATP number expires. Character length and limits: 4 numerical digits (2XXX).

5

Error Codes and Messages

The errors described in this chapter are returned by the PayPal SOAP and Name-Value Pair APIs. The chapter consists of the following sections:

- “Name-Value Pair Error Response Format” on page 31
- “General API Errors” on page 31
- “DoUATPAuthorization Errors” on page 33

Name-Value Pair Error Response Format

Name-value pair API error responses has the following general format. If the ACK value is Error or Warning, specific API response fields are not returned.

TABLE 3.1 *Format of an Error Response*

Response Fields on Error	ACK=Error&TIMESTAMP=date/timeOfResponse &CORRELATIONID=debuggingToken&VERSION=2.300000 &BUILD=buildNumber&L_ERRORCODE0=errorCode& L_SHORTMESSAGE0=shortMessage &L_LONGMESSAGE0=longMessage&L_SEVERITYCODE0=severityCode	Multiple errors can be returned. Each set of errors has a different numeric suffix, starting with 0 and incremented by one for each error.
--------------------------	---	--

General API Errors

TABLE 3.2 *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.

TABLE 3.2 General API Errors

Error Code	Short Message	Long Message	Correcting This 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	
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	

DoUATPAuthorization Errors

TABLE 3.3 DoUATPAuthorization 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		
10600	Authorization voided.	Authorization is voided.	DoUATPAuthorization	Close the order or authorization.
10601	Authorization expired.	Authorization has expired.	DoUATPAuthorization	Close the order or authorization.
10602	Authorization completed.	Authorization has already been completed.	DoUATPAuthorization	Close the order or authorization.
10603	The buyer is restricted.	The buyer account is restricted.	DoUATPAuthorization	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.	DoUATPAuthorization	Review the order to ensure customer and seller are both PayPal members.
10605	Unsupported currency.	Currency is not supported.	DoUATPAuthorization	Retry the request with a PayPal-supported currency.
10606	Buyer cannot pay.	Transaction rejected, please contact the buyer.	DoUATPAuthorization	Contact the buyer.
10607	Auth&Capture unavailable.	Authorization & Capture feature unavailable.	DoUATPAuthorization	Contact PayPal Customer Service

TABLE 3.3 DoUATPAuthorization Error Messages

Error Code	Short Message	Long Message	Returned By API Call...	Correcting This Error...
10608	Funding source missing.	The funding source is missing.	DoUATPAuthorization	Contact the buyer.
10609	Invalid transactionID.	Transaction id is invalid.	DoUATPAuthorization	Check the validity of the authorization ID and reattempt the request.
10610	Amount limit exceeded.	Amount specified exceeds allowable limit.	DoUATPAuthorization	Reattempt the request with a lower amount.
10611	Not enabled.	Authorization & Capture feature is not enabled for the merchant. Contact customer service.	DoUATPAuthorization	Contact PayPal Customer Service.
10618	Transaction already voided or expired.	Transaction has already been voided or expired.	DoUATPAuthorization	Close the order or authorization.
10620	Order has already been voided, expired or completed.	Order has already been voided, expired or completed.	DoUATPAuthorization	Close this order.
10621	Order has expired.	Order has expired.	DoUATPAuthorization	Close this order.
10622	Order is voided.	Order is voided.	DoUATPAuthorization	Close this order.
10623	Maximum number of authorization allowed for the order is reached.	Maximum number of authorization allowed for the order is reached.	DoUATPAuthorization	Capture this order.
10624	Duplicate invoice	Payment has already been made for this InvoiceID.	DoUATPAuthorization	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.	DoUATPAuthorization	Reattempt the request with a lower amount.

TABLE 3.3 DoUATPAuthorization Error Messages

Error Code	Short Message	Long Message	Returned By API Call...	Correcting This Error...
10626	Risk	Transaction refused due to risk model	DoUATPAuthorization	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	DoUATPAuthorization	The Invoice ID field can only be used with DoCapture.
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.	DoUATPAuthorization	Retry the request at a later time.
10630	Item amount is invalid.	Item amount is invalid.	DoUATPAuthorization	Check the item amount to ensure that it is not zero or negative.
10631	Processor Warning	The authorization is being processed	DoUATPAuthorization	
11402	Invalid UATP Card number.	This transaction cannot be processed. UATP Card number validation failed.	DoUATPAuthorization	
11403	UATP Card Expired.	This transaction cannot be processed. UATP Card expired.	DoUATPAuthorization	
11404	Invalid UATP Card.	This transaction cannot be processed. No UATP card exist in the system for given card number and expiration.	DoUATPAuthorization	
11405	Invalid Authorization code.	This transaction cannot be processed. No Authorization exists in the system for given UATP card and authorization code.	DoUATPAuthorization	

TABLE 3.3 *DoUATPAuthorization Error Messages*

Error Code	Short Message	Long Message	Returned By API Call...	Correcting This Error...
11406	Ineligible Merchant Account.	The transaction cannot complete successfully due to a failure in UATP number generation.	DoUATPAuthorization	



Glossary

Authorization Code

Four-digit authorization code.

Airline

Refers to a carrier selling travel-related items on its own website.

Channel Partner

Term used synonymously with Partner for gateways, processors, and shopping carts who are directly involved in the boarding of new PayPal accounts or directing transaction volume to PayPal. The account that will be submitting batch files to create, manage, and report on other accounts.

itinerary data

Itinerary data which is received through the Batch Capture interface.

Partner

See Channel Partner.

UATP

United Air Travel Plan, the travel association that functions similarly to VISA.

UATP BIN

First four digits of the PayPal/UATP card number (1112) that determine how the card is going to be processed by UATP.

UATP card

A credit card that airlines issue to corporations for corporate travel.



Index

A

- AbstractRequestType 21
- AbstractResponseType 21, 22
- ACK 31
- Ack 16, 23
 - success response 17
- Amount 26
- AMT 28
- API Certificate 10
- API password 12
- API Signature 11
- API username 12
- authentication for all SOAP requests 12
- AUTHORIZATIONCODE 28
- AuthorizationCode 27

B

- BasicAmountType 19
- Batch capture 26, 28
- BUILD 31
- Build 23

C

- Certificate 11, 13
- character encoding and character set
 - UTF-8 19
- CoreComponentTypes.xsd 10
- CORRELATIONID 31
- CorrelationID 17, 18, 23
- CorrelationId 16
- currency amount data type 19
- CURRENCYCODE 28
- currencyID required attribute 19
- CustomCode 23

D

- dateTime data type 19

- doc-literal SOAP messaging 13

E

- eBL 18
- ErrorCode 17
- Errors 17, 23

F

- Failure 23
- FailureWithWarning 23
- First-Party Access 11

I

- INVOICEID 28, 29
- InvoiceID 26, 27

L

- LongMessage 17

P

- Password 11, 12, 14, 15
- PayPalSvc.wsdl 10

R

- RequesterCredentials 12, 14, 15
- rpc-encoding not supported 13

S

- security
 - API password 12
 - API username 12
 - third-party authorization 13
- ShortMessage 17
- Signature 11, 12, 14, 15

- endpoint sfor 13
- SOAP request authentication 12
- Subject 11, 12, 13, 14, 15
- Success 17, 23
- SuccessWithWarning 23

T

- Third-Party Access 11
- third-party authorization 12, 13
- Timestamp 16, 22
- TRANSACTIONID 28
- TransactionID 26
- TransactionSearch API 26, 28

U

- UATPEXPMONTH 29
- UATPExpMonth 26, 27, 28
- UATPEXPYEAR 29
- UATPExpYear 26, 27, 28
- UATPNUMBER 28, 29
- UATPNumber 26, 27
- Unicode 19
- Username 11, 12, 14, 15
- UTC/GMT 17, 19, 22

V

- VERSION 31
- Version 15, 22, 23

W

- Web Services 9
- WSDL 9, 10
 - location of PayPal WSDL configuration file 10

X

- XSD 9
 - location for PayPal Web Services 10