

**Rating Package  
XML Developers  
Guide**

**July 09, 2012**



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## Table of Contents

<b>Rating Package XML Developers Guide .....</b>	<b>1</b>
<b>July 09, 2012 .....</b>	<b>1</b>
<b>1.1 Important Information.....</b>	<b>5</b>
<b>1.2 Welcome to the UPS API Developer's Guides.....</b>	<b>6</b>
1.2.1 Release features .....	6
1.2.2 How to Use this Guide .....	8
<b>1.3 Business Processes and Rules.....</b>	<b>8</b>
<b>1.4 Required Steps for Integrating.....</b>	<b>10</b>
<b>1.5 Planning Your Applications for XML .....</b>	<b>10</b>
1.5.1 UPS Developer API Applications .....	10
1.5.2 Licensing the UPS Developer APIs .....	12
1.5.2.1 Branding Requirements .....	12
1.5.3 Developing Client Applications for Developer APIs.....	13
1.5.3.1 Microsoft Visual Studio .....	13
1.5.3.2 Java Standard Edition and Enterprise Edition.....	13
1.5.3.3 Open Source .....	13
1.5.4 Getting Technical Support.....	14
1.5.5 Testing and Deploying Applications.....	17
1.5.6 Keeping Up-to-Date .....	17
<b>1.6 UPS Developer API Technologies for XML .....</b>	<b>17</b>
1.6.1 Hypertext Transfer Protocol and Secure Sockets Layer 3.....	17
1.6.2 Working with HTTP and SSL in Application Programs .....	19
1.6.2.1 Microsoft Visual Studio .....	20
1.6.2.2 Java Standard Edition and Enterprise Edition.....	21
1.6.2.3 Open Source .....	21
1.6.3 Extensible Markup Language (XML).....	23
1.6.4 Working with XML in Application Programs .....	26
1.6.4.1 Microsoft Visual Studio .....	26
1.6.4.2 Java Standard Edition and Enterprise Edition.....	28
1.6.4.3 Open Source .....	29
<b>1.7 Understanding XML Rating Services .....</b>	<b>30</b>
1.7.1 Finding the Rate for a Specific Service.....	30
1.7.2 Comparing Rates for Various Services.....	30
1.7.3 Negotiated Rates.....	30
<b>1.8 The Rating XML Reference.....</b>	<b>31</b>
1.8.1 Authenticating Client Applications .....	31
1.8.2 Rates and Service Selection.....	31
1.8.3 Rate Request.....	34
1.8.4 Rate Response.....	54
<b>1.9 Customer Integration Environment.....</b>	<b>64</b>
1.9.1 Negotiated Rates.....	64
1.9.1.1 Rates & Service Selection .....	64

<i>1.9.1.3 System Availability</i> .....	65
<i>1.9.1.4 Server Availability Check</i> .....	65
<b>Appendix A - Accessing Tech Support (US Site Example)</b> .....	<b>66</b>
<b>Appendix B – Rating Error Codes</b> .....	<b>69</b>
<b>Appendix C - Country Codes</b> .....	<b>87</b>
<b>Appendix D - Currency Codes</b> .....	<b>94</b>
<b>Appendix E - Service Codes</b> .....	<b>101</b>
<b>Appendix F – Valid Origin/Destination Combinations: for DC, DC-SR, and DC-ASR</b>	
<b>Accessorials</b> .....	<b>103</b>
<b>Appendix G - Frequently Asked Questions: Rating Package</b> .....	<b>104</b>

## 1.1 Important Information

### UPS Developer APIs

*Your development of an application using the UPS Web Service APIs are governed by the UPS Technology Agreement or UPS Customer Technology Agreement you entered into with UPS. The following are key legal requirements from these agreements for the UPS Web Service APIs. For more information on all requirements for the UPS Web Service APIs, please refer to the UPS Technology Agreement or the Customer Technology Agreement.*

### Key Legal Requirements for UPS Developer APIs

#### *Permitted Territories*

This document can only be used in the countries listed in Exhibit C of the UPS Technology Agreement or UPS Customer Technology Agreement.

#### *Use*

The application must not be designed to allow distribution of information received through the UPS Web Service APIs to third parties, other than to persons having a bona fide interest in such information (e.g., the shipper, receiver or the third party payer).

#### *Consent to Use of UPS Mark*

- All screens or forms generated by your application including information received through the UPS Web Service APIs must include (1) the UPS Mark positioned in reasonable proximity to the Information and of an appropriate size to readily identify the source of the Information as UPS and (2) the following language at the bottom of every screen that displays the UPS Mark: "UPS, the UPS brand mark, and the Color Brown are trademarks of United Parcel Service of America, Inc. All Rights Reserved". Except as set forth in the preceding sentence, you have no right to use the UPS Mark without the prior written approval of UPS.
- You shall not use the UPS Mark in association with any third party trademarks in a manner that might suggest co-branding or otherwise create potential confusion as to source or sponsorship of the application, or ownership of the UPS Mark.
- The UPS Mark shall be used only as provided by UPS electronically or in hard copy form. The UPS Mark may not be altered in any manner, including proportions, colors, elements, etc., or animated, morphed or otherwise distorted in perspective or dimensional appearance.
- The UPS Mark may not be combined with any other symbols, including words, logos, icons, graphics, photos, slogans, numbers or other design elements. A minimum amount of empty space must surround the UPS Mark separating it from any other object, such as type, photography, borders, edges, etc. The required area of empty space around the UPS Mark must be  $1/3x$ , where  $x$  equals the height of the UPS Mark.

### ***Copyright and Proprietary Notice***

In your application and any POD Letters you prepare you must include a prominent reproduction of UPS's copyright and proprietary notices in a form and format specified by UPS (See Copyright Section of this document).

### ***Display of Information***

The application must not display information concerning any other provider of shipping services or such other shipping services on any page, whether comprising one or more frames, displaying information your application receives from the UPS Web Service APIs. Your application must present all data within each field received through the UPS Web Service APIs without amendment, deletion or modification of any type.

## **1.2 Welcome to the UPS API Developer's Guides**

Welcome to the UPS API Developer's Guides. This guide provides the information you need to begin using UPS Developer APIs.

UPS Developer APIs offer a fast and convenient way to access UPS service information using the Internet. With these Developer APIs, UPS lets you easily incorporate UPS technology in your own applications or your own web site. Your users—running your applications or visiting your web site—can have up-to-the-minute access to UPS services.

### **1.2.1 Release features**

<b>Release</b>	<b>New Features</b>
July 2011	<p><b>Display of Rate Type:</b> Introduction of “RateChartIndicator” element in the request. Response will contain “RateChart” element only when it is explicitly requested by providing “RateChartIndicator” in the request. List of valid values of “RateChart” in response are: { 1, 3, and 4 }. Please refer details of these codes for different regions in XPath column of these elements.</p> <p><b>International Rate, Zone, and Service Updates:</b> Rate, Zone, and Service changes for International include the following updates:</p> <ul style="list-style-type: none"> <li>○ The following currency changes – <ul style="list-style-type: none"> <li>▪ Estonia from Kroon to Euros</li> <li>▪ Cameroon from Franc to US Dollars</li> <li>▪ Ghana from Pesewas to Ghana Cedi</li> </ul> </li> <li>○ New WorldWide Express Plus service</li> <li>○ WorldWide Express destinations will be expanded</li> <li>○ Expansion of 10/25kg boxes to new destinations in Japan</li> </ul>
Jan. 2012	<p><b>New Negotiated Rate / Account Based Rate (ABR) Setup:</b></p> <ul style="list-style-type: none"> <li>● To streamline your ability to view your negotiated rates through the Rating API UPS has implemented a new process that no longer requires you to wait for a UPS Sales Person to activate your account.</li> </ul>

Release	New Features
	<ul style="list-style-type: none"> <li>• Simply add a UPS Account to you're my UPS ID Account Summary as you previously would and your account will be activated automatically for negotiated rates provided you have a contract with UPS.</li> <li>• Remember to select the "Negotiated Rates Indicator" within the XML Request to have your negotiated rates returned within the response.</li> </ul>
July 2012	<p>New Air Freight support for shipping and rating using the Gemini APIs.</p> <ol style="list-style-type: none"> <li>1. Expansion to 14 new Americas countries. <ul style="list-style-type: none"> <li>• Bahamas (BS), Bermuda (BM), Bolivia (BO), Cayman Islands (KY), Columbia (CO), Ecuador (EC), El Salvador (SV), Honduras (HN), Nicaragua (NI), Paraguay (PY), Peru (PE), Uruguay (UY), US Virgin Islands (VI), Venezuela (VE)</li> </ul> <p><b>UPS Label Delivery</b>  Labels and Receipts are supported in local language for the above mentioned countries.  Labels and Receipts are supported in Local languages for Bulgaria, Estonia, Greece, Latvia, Lithuania</p> </li> <li>2. Improved email Technical Support hours and response time as follows: <ol style="list-style-type: none"> <li>a. <i>1<sup>st</sup> Level Email Tech Support</i> - <ul style="list-style-type: none"> <li>• Hours of operation for 1st Level Email Tech Support: 8:00am to 9pm EST Monday through Friday and 9am to 6pm EST Saturday and Sunday. The desk is closed on UPS Holidays.</li> <li>• 1st Level Email Tech Support email response time is planned to be within 4 business hours of the initial request. Business hours are defined as hours of operation of the tech support desks when service technicians are working.</li> </ul> </li> <li>b. <i>Escalation Tech Support</i> -</li> </ol> </li> </ol>

Release	New Features
	<ul style="list-style-type: none"> <li>• If you receive an email that your case log has been escalated the following hours apply</li> <li>• Hours of operation: 8am to 8pm EST Monday through Friday. The desk is closed weekends and on UPS Holidays.</li> <li>• Escalation Support desk response time is planned to be within 24 hours during normal hours of operation.</li> </ul> <p style="text-align: center;">For more details please download and review the latest updated Developer Guides.</p>

### 1.2.2 How to Use this Guide

If you are an experienced developer, you can begin developing applications quickly after reviewing "Required Steps for Integrating."

If you would like a more step-by-step guide to developing and deploying the Developer APIs, "Planning Your Applications" provides advice and describes options for developing and deploying applications and web sites that use UPS Developer APIs.

The "UPS Developer API Technologies" section explains key technologies on which the Developer APIs rely. That section also includes hints for using those technologies in various software development environments.

If you would like to learn more about what the UPS API covered in this guide can do for your applications, refer to the section on understanding the UPS API Services in this guide.

A complete technical reference to the Developer API covered in this guide is found in the API Reference section with details for the programming interfaces.

Additional material, including reference tables and lists, may be found in the appendices.

## 1.3 Business Processes and Rules

- UPS restricts the usage of the Rating API only by users who plan to ship packages manifested, tendered, and delivered by UPS.
- Any customers/developers abusing the Rating API or data mining the API will have their access revoked.

- The user can utilize the Rating API by first registering on UPS.com with a User ID and Password. Once they have registered they would need to obtain an Access Key from UPS.com that provides access to the Rating API. To obtain an Access Key an account number needs to be added or created in their UPS.com profile.
- Account numbers can only be added to UPS.com profiles by providing the following additional information for authentication:
  - Account Number
  - Account Country Code
  - Invoice Level Control ID
  - Plan Level Control ID
  - Amount Due on Invoice
  - Date of Invoice
- Users are provided with both **testing** and **production** access to the Rating API when the Access Key is requested.
- The Rating API provides both Published Rates as well as Negotiated Rates.
- Users who want to obtain their Negotiated Rates or want to see their Account Based Rating (ABR) information via the Rating API first need to have their account numbers set up for ABR by their UPS Account Executive and then authenticate their account
- The following table shows what Rates Charts will be returned by the Rating API based on the combination of CustomerClassification code, PickupType code and Account Number:

Customer Classification	Pickup type	Account Number	Rate Returned
00	Valid/Missing/Invalid	Valid	Rate associated with account number
00	Valid/Missing/Invalid	Missing/Invalid	Retail Rates
01	Valid/Missing/Invalid	Valid/Missing/Invalid	Daily Rates
04	Valid/Missing/Invalid	Valid/Missing/Invalid	Retail Rates
53	Valid/Missing/Invalid	Valid/Missing/Invalid	Standard List Rates
Missing/Invalid	01	Valid/Missing/Invalid	Daily Rates
Missing/Invalid	03/06/07/19/20	Valid/Missing/Invalid	Retail Rates
Missing/Invalid	Missing/Invalid	Valid	Rate associated with account number

Missing/Invalid	Missing/Invalid	Container provided but account number Invalid/Missing	Retail Rates
Missing/Invalid	Missing/Invalid	Not Provided	Daily Rates

## 1.4 Required Steps for Integrating

The required steps for integrating the UPS APIs are listed here for UPS XML Services.

### UPS XML Services

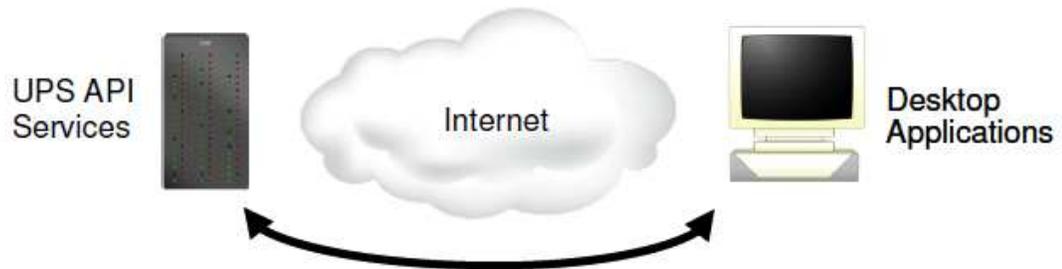
1. Review the UPS Technology Agreement available at [www.ups.com](http://www.ups.com). This agreement requires that you follow certain procedures and practices in using UPS Developer APIs.
2. Develop applications that make use of standard HTTP communications protocols, SSL security, and XML-based document representations.
3. Test your application and/or web site using the designated UPS staging environment.
4. If you are a UPS Ready developer, review your application with UPS.
5. Obtain UPS Label Certification for your application. (If you are a new customer or if you haven't previously certified. Please see the "UPS Label Certification" section for further details.)
6. Deploy your application for your customers.
7. Ensure the UPS Shipper Account number is added to the user's profile. This can be done at [myups.com](http://myups.com).

## 1.5 Planning Your Applications for XML

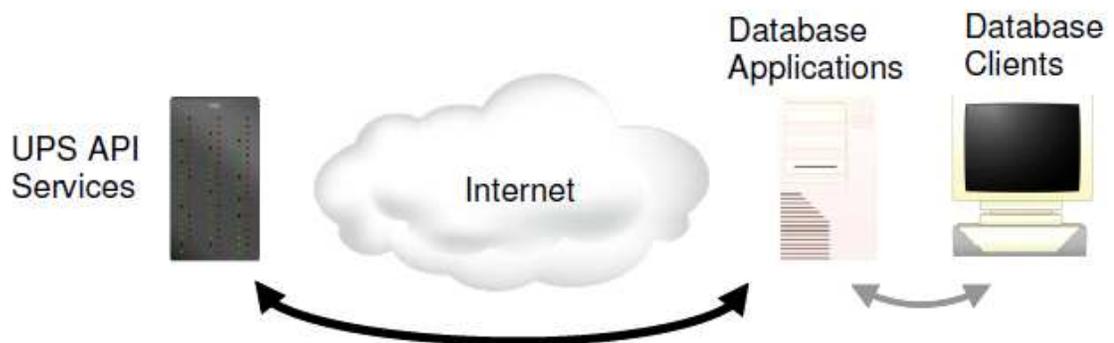
Planning is a key part of any successful development activity, and UPS Developer API applications are no exception. This section helps that planning by describing the important activities of any UPS Developer API application project. It provides an overview of the steps required to develop applications, and it describes key factors and choices necessary to deploy those applications.

### 1.5.1 UPS Developer API Applications

Many different types of applications can take advantage of UPS Developer APIs. Those application types include dedicated desktop applications, databases, web applications, and documents. The following figures illustrate some of the possibilities for applications using UPS Developer APIs. The only essential requirement for all of these applications is that they must have access to the Internet.



**Figure 1: Dedicated applications that users run on their desktops can access UPS Developer APIs.**



**Figure 2: Database applications can access UPS Developer APIs and return information to their clients**

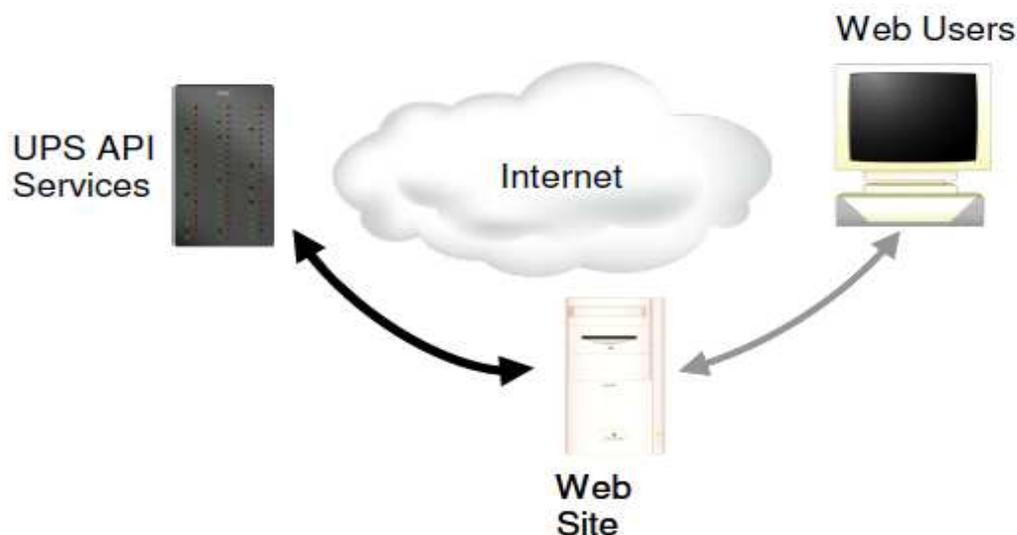


Figure 3: Web sites can access UPS Developer APIs and return information to users' web browsers.



Figure 4: Non-traditional applications such as Microsoft Office or Adobe Acrobat documents can use UPS Developer APIs to automatically update their content.

The UPS Developer APIs can be implemented with all of these types of applications and many others. Virtually any software that needs instant, up-to date access to UPS services can take advantage of UPS Developer APIs.

## 1.5.2 Licensing the UPS Developer APIs

As part of the UPS Technology Agreement, users of the APIs have certain obligations that are spelled out within the service agreement and its exhibits. Regardless of the manner in which the UPS Developer APIs are integrated into your specific e-commerce web site or enterprise application, you must adhere to appropriate usage requirements.

### 1.5.2.1 Branding Requirements

UPS should receive attribution and branding in all applications (including websites and software applications) that use the Developer APIs. No End User, Third Party Developer or Access User should be permitted to use the Developer APIs without providing branded recognition to UPS. Your use of the UPS logo can in no way imply endorsement, sponsorship or certification of your ecommerce web site or enterprise application by UPS. You are not allowed to use or alter the information returned by the UPS Developer APIs in a way that misrepresents the information or the functionality of the service.

### **1.5.3 Developing Client Applications for Developer APIs**

When you develop software that uses the UPS Developer APIs, you are building a client application. Because the UPS Developer APIs rely on standard Internet based technology, you can develop those applications using a wide variety of software development platforms, including Microsoft's Visual Studio, the Java Standard Edition and Enterprise Edition distributions, and many open source projects. This section introduces important technologies available in each of these development environments. Later sections of this document include more details on using each platform. Look for the icons in the left margin, which identify information relevant to a particular development environment.

#### ***1.5.3.1 Microsoft Visual Studio***

Developers using the Microsoft Visual Studio environment can rely on the Microsoft XML Core Services (MSXML) for interacting with UPS Developer APIs. Those services include functions to help applications create requests for and interpret responses, and they include functions to manage the communications between applications and UPS.

#### ***1.5.3.2 Java Standard Edition and Enterprise Edition***

Java developers can find all the classes they need for UPS Developer APIs in the Java Standard Edition and Enterprise Edition distributions. The URL class in the java.net package provides the functions required for communication with UPS servers, and the Java API for XML Processing (JAXP) services let programs create requests and interpret responses from UPS.

#### ***1.5.3.3 Open Source***

There are a number of open source efforts that include technology useful for creating Developer API client applications; open source developers may find two particular projects to be especially helpful. The [libcurl](#) project is a library of functions that can manage the communications with UPS servers. For creating requests and interpreting responses, the [xerces](#) project provides essential functions in a variety of software languages.

## 1.5.4 Getting Technical Support

### Technical Support (U.S.)

There are four channels for obtaining support for the UPS Developer Kit (UDK) APIs all of which are accessed through the **UPS Developer Resource Center** at the following link:

<http://www.ups.com/content/us/en/resources/techsupport/developercenter.html?WT.svl=SubNav>

Or by following these steps:

1. Go to [www.ups.com](http://www.ups.com).
2. Mouse over the Support tab and select Technology Support
3. In the left navigation panel of the page select the link “Developer Resource Center”.

- Email Technical Support – available in the right hand column on the **UPS Developer Resource Center** web page. This is *the* support channel for technical support and questions regarding API integration. It is accessed by logging in to myUPS and attaching your XML Request/Response files and any other pertinent information about your integration [please see Appendix A for detailed instructions and screen shots]. UPS Email Technical Support can only support the XML Request/Response pair. They cannot consult customers and developers on how to integrate the XML into their internal or purchased software.
- UPS Developer Kit Community – available in the right hand column of the **UPS Developer Resource Center** web page. This is a community forum for developers to answer one another’s questions and share information therefore the response times may be slower. If you have an immediate need for technical support contact UPS Email Tech Support above and they will respond within 4 business hours (see hours below). The remainder of the site contains online versions of all API developer guides and FAQs.
- UPS Developer Kit Knowledge Base – available in the right hand column of the **UPS Developer Resource Center** web page. This is a self-service support .pdf document that can be opened or downloaded. It contains over 240 frequently asked questions about every mode and service supported by the UDK APIs. It’s also available in an online version at the UPS Developer Kit Community.
- General Question Phone Support (U.S. only) – available in the right hand column of the **UPS Developer Resource Center** web page. Phone support is the *least comprehensive* support mechanism for the developer. This channel of support addresses questions about the user interface at [ups.com](http://ups.com) and how to gain access to the APIs and navigate the Access Key request process. They do not provide technical support for XML Request/Response issues and questions. Those types of questions must go through Email Technical Support.

### Getting Started with Email Technical Support

1. Got to ups.com and log in to myUPS.
2. Hover over the “Support” tab and select “Technology Support”.
3. On the Technology Support page select the Developer Resource Center link from the left navigation.
4. On the Developer Resource Center page select the “Email UPS” link in the right hand column.
5. Enter all relevant information including name, enter email address, select Support Category “Technical Support”, and select Support Topic “Developer Resource” [which identifies UPS Developer Kit APIs tech support]. Click next.
6. Scroll down to the middle of the email form and complete the fields “Your Telephone”, “Stage of Development”, “Developer Resource” which is which API you are integrating, “Attach File” where you attach your XML Request/Response Pair, and any pertinent description of the issues in the “What is your question or comment?” field.
7. Select “Send Email” button.
8. A response is provided that explains someone from UPS will contact you. Please base the response time on the detailed information listed below about tech support hours of operation and response times.

(For screen shots of this process please see Appendix A at the end of this guide.)

### 1<sup>st</sup> Level Email Technical Support Business Hours and Response Times:

- a. Hours of operation for 1<sup>st</sup> Level Email Tech Support: 7:30am to 9pm EST Monday through Friday and 9am to 6pm EST Saturday and Sunday. The desk is closed on UPS Holidays.
- b. 1<sup>st</sup> Level Email Tech Support email response time is planned to be within 4 business hours of the initial request. Business hours are defined as hours of operation of the tech support desks when service technicians are working.

*This means if you submit an email tech support request after business hours the 4 hour response clock will not begin until the following morning at 7:30am EST M-F and 9am EST Saturday and Sunday (UPS Holidays excluded).*

***PLEASE NOTE:***

***If you are sent an email from 1<sup>st</sup> Level Email Tech Support stating your case log # has been escalated, the 24 hour planned response clock starts from the time you receive the email from 1<sup>st</sup> Level Email Tech Support (provided the Escalation Support desk is open). If not, then the clock will begin when the Escalation Support desk opens.***

### Escalation Support Business Hours and Response Times:

- c. Hours of operation: 8am to 8pm EST Monday through Friday. The desk is closed weekends and on UPS Holidays.

- d. Escalation Support desk response time is planned to be within 24 hours during normal hours of operation.

*This means if your case log is escalated at 8:30pm on Friday, you will not receive an email response from the Escalation Support desk at the latest until Monday at 8pm (Saturdays, Sundays, and Holidays are excluded). Response times are from the time the case log was escalated plus 24 hours which do NOT include the weekends or UPS holidays.*

There may be some scenarios when the tech support team is meeting planned response times but it appears as if it's taking too long. Below is a brief example where the planned response time is met but nothing happened over the weekend.

Example –

Customer submits tech support email at 7am on Friday. The clock for 4 hour response will not begin until 7:30am EST for the 1<sup>st</sup> level tech support team. They respond within 4 hours at 11:30am EST that same Friday stating the case log has been escalated and providing the case log #.

The escalation desk receives the case log at 11:30am EST. They begin work on evaluating the problem and have planned to either update the customer within 24 hours or solve the problem within 24 hours. Either way, the customer will hear from the escalation desk within 24 hours with some type of disposition on their case log. The escalation desk clock begins when they receive a case log from 1<sup>st</sup> level tech support during business hours, M-F 8am to 8pm EST. In this case, the clock begins at 11:30am EST if the escalation desk does not have an answer by 8pm EST on Friday the desk has until 11:30am EST the following Monday to either provide a resolution or a status update to the customer on the case log. The Escalation Desk continues work on the case log on Monday beginning at 8am EST. They receive resolution at 1030am EST Monday and send the resolution to the customer. The Escalation Desk has met their 24 hour planned response time.

### **Technical Support (Non-U.S.)**

For Non-US countries supported by the UPS Developer Kit follow the instructions in Appendix A. However, to get to the UPS Developer Resource Center page please complete the following steps.

1. Log in to myUPS for the country from which you downloaded the developer guides.
2. Select the Support tab and in the drop-down select Technology Support.
3. Select from the left navigation the “UPS Developer Resource Center” link.
4. Continue with email form as described above.

***Please also note that email response times for non-US requests vary. Translations and escalations may delay the process. If a quicker response is required, please access the US web site directly and complete an email technical support form from the US web site.***

## 1.5.5 Testing and Deploying Applications

UPS maintains a special environment to support testing and staging of applications that rely on UPS Developer APIs. This environment is called the Customer Integration Environment (CIE) and allows developers test and debug their applications by simulating transactions with UPS. The CIE site responds to requests just like the UPS production environment; however, it does not initiate actual UPS business services.

For example, if you send a shipping request to the UPS production site, a UPS driver may show up at your location expecting to pick up a package (and expecting payment for the service.) Sending the shipping request to CIE will avoid this problem.

## 1.5.6 Keeping Up-to-Date

As UPS adds new services and features, Developer APIs will evolve, offering more features and service benefits. Once you register to use UPS Developer APIs, UPS will notify you by e-mail of updates and changes to the Developer APIs. You can return to the UPS Support area of ups.com for the latest updated information about UPS Developer APIs.

- It is essential that an accurate e-mail address for your company be maintained.
- In addition, UPS recommends that you complete the secondary contact information to ensure that your organization receives the latest updates.
- You should update your profile when changes or responsibilities for the UPS Developer APIs change within your company.

To change your profile information, go to UPS.com and log in using your MyUPS.com User ID.

## 1.6 UPS Developer API Technologies for XML

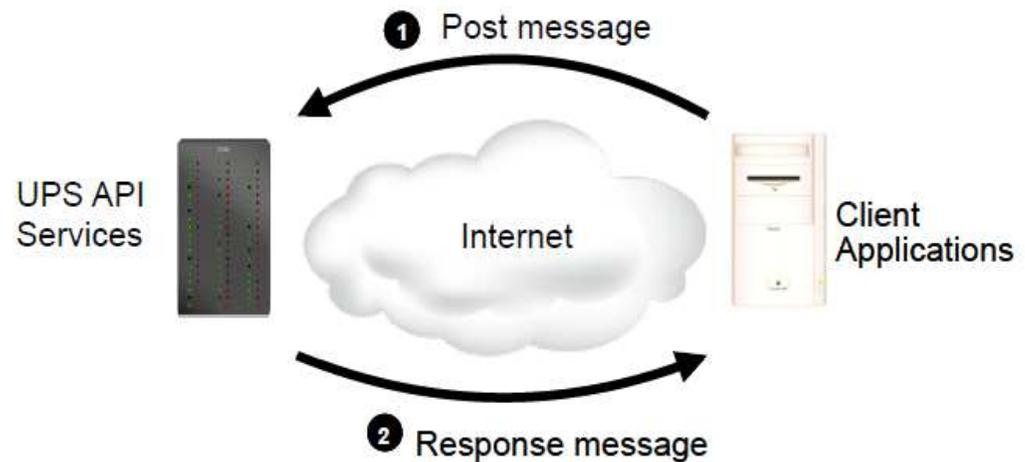
The foundation technologies for UPS Developer APIs are the same underlying technologies in use on the Internet today. They include the Hypertext Transfer Protocol (HTTP) with Secure Sockets Layer 3 (SSL3) security and the Extensible Markup Language (XML). Because these technologies are critical to the Internet, most software development API provide many powerful features that make it easy for application programs to use them. This section provides a quick introduction to the technologies and to the API that can support them.

### 1.6.1 Hypertext Transfer Protocol and Secure Sockets Layer 3

Today's Internet supports a wide variety of applications including email, instant messaging, web browsing, and voice communications. All of these applications have a well-defined set of rules that determines how they communicate. Those rules are known as *protocols*. As an Internet application themselves, the UPS Developer APIs also rely on protocols to set the

rules for their communications. The primary protocol for UPS Developer APIs is the hypertext transfer protocol, or HTTP.

HTTP is a relatively simple protocol. An application that wants to use a Developer API acts as an HTTP client. It sends its request to UPS as part of an HTTP POST message. UPS servers reply to each request using an HTTP response message.



**Figure 1. UPS Developer APIs accept requests from client applications in HTTP POST messages and reply to the requests with HTTP responses.**

As part of the POST message, client applications indicate the type of content the message contains using an HTTP Content-Type header. For UPS Developer APIs, that content type should be `application/x-www-form-urlencoded`. (Presently, Version 1.1 is supported)

In many cases the UPS Developer APIs exchange information that should be kept private. To protect confidential information, the Developer APIs rely on the Secure Sockets Layer 3 (SSL3) protocol in addition to HTTP. When two systems communicate using SSL, the protocol creates a secure channel between them, and it encrypts all information that they exchange using this channel. The SSL protocol that Developer APIs use is the same protocol used to secure millions of on-line purchases on the web.

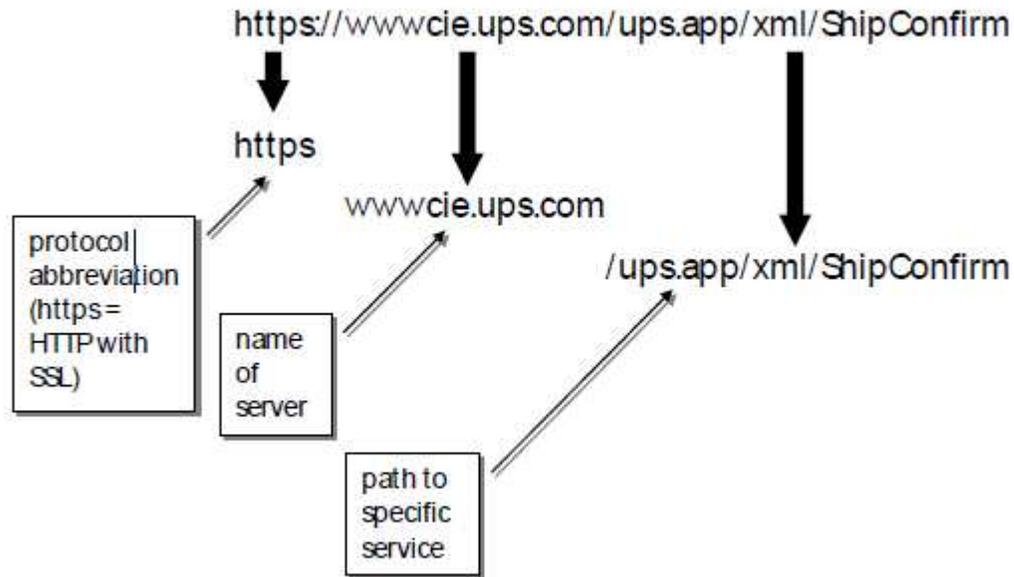


**Figure 2: SSL creates a secure channel across a network and protects confidential communications using that channel.**

## 1.6.2 Working with HTTP and SSL in Application Programs

UPS Developer APIs are not the only Internet services that rely on the HTTP and SSL protocols. Both protocols, in fact, were originally developed for web browsing, and they provide the foundation for the majority of Internet applications. Because HTTP and SSL are so common, software development API make using these protocols very simple.

Because HTTP and SSL are commonly used for web browsing, software development API often rely on the same notation and abbreviations as standard web browsers. In particular, most API identify a specific service (such as a UPS Developer API) using a Uniform Resource Locator (URL). URLs begin with an abbreviation of the communication protocol. For UPS Developer APIs that abbreviation will always be "https" to indicate HTTP and SSL. The protocol abbreviation is followed by a colon, two slashes, and the name of a server. Additional information about the specific service can follow the server name; it is written like the path to a file in a directory, with slashes separating individual folders. Figure 3 shows how a URL combines these individual components.



**Figure 3. URLs identify communication protocols, servers, and specific services.**

The subsections that follow provide brief introductions to using HTTP and SSL with various software development API, including Microsoft Visual Studio, Java Standard and Enterprise Edition, and popular open source environments.

### ***1.6.2.1 Microsoft Visual Studio***

The Microsoft Visual Studio environment includes many API, classes, and libraries that simplify the use of HTTP and SSL protocols. A very convenient set of API are included in the Microsoft XML Core Services (MSXML). The following code fragment shows how a Visual Basic program can send a request and retrieve the response. To keep the example as simple as possible, no exception handling is included in the figure. Production software should, of course, appropriately handle all exceptions

```
' create the object that manages the communication
Dim oXMLHttp As XMLHTTP
Set oXMLHttp = New XMLHTTP
' prepare the HTTP POST request
oXMLHttp.open "POST", "https://www.server.com/path", False
oXMLHttp.setRequestHeader "Content-Type", _
    "application/x-www-form-urlencoded"
' send the request
oXMLHttp.send requestString
' server's response will be available in oXMLHttp.responseXML
```

**Figure 4. Visual Basic programs can use features of the MSXML tools to send and receive messages using HTTP and SSL.**

### *1.6.2.2 Java Standard Edition and Enterprise Edition*

In a Java SE or EE environment, the URL class in the java.net package provides a convenient way to manage HTTP and SSL communications. Figure 5 contains a small code fragment that demonstrates the use of this class. As above, the fragment doesn't include exception handling that should be inherent in any production software.

```
import java.io.*;
import java.net.*;
URL url = new URL("https://www.server.com/path");
URLConnection conn = (URLConnection) url.openConnection();
conn.setRequestMethod("POST");
conn.setRequestProperty("Content-Type", "application/x-www-form-urlencoded");
conn.setDoOutput(true);
PrintWriter out = new PrintWriter(conn.getOutputStream());
out.println(requestString);
out.close();
BufferedReader in = new BufferedReader( new
InputStreamReader(conn.getInputStream()));
/* server response is available by reading the in object */
```

**Figure 5. The URL class from the java.net package is a convenient way for Java programs to use HTTP and SSL**

### *1.6.2.3 Open Source*

The libcurl project is an open source project that includes support for using HTTP and SSL protocols. The fragment in Figure 6 shows how to set up libcurl to send a request using HTTP and SSL. It relies on a callback function to accept the server's response.

```
CURL *curl;
CURLcode res;
/* prepare to send the request */
curl = curl_easy_init();
curl_easy_setopt(curl, CURLOPT_URL, https://www.server.com/path");
curl_easy_setopt(curl, CURLOPT_POSTFIELDS, requestString);
curl_easy_setopt(curl, CURLOPT_WRITEFUNCTION, fnCallback);
res = curl_easy_perform(curl);
```

**Figure 6. The open source libcurl library simplifies the use of HTTP and SSL**

**1.6.2.4 SSL Certificate Changes and Renewals:**

UPS has migrated from Unchained to Chained Digital Certificates to improve security for UPS servers. Chained Digital Certificates requires the use of SSL 3.0. Our migration from SSL 2.0 to 3.0 was completed between 6/15/2008 and 3/3/2009.

**Renewal of UPS.com SSL Certificates are coordinated by UPS Security Services every two years.**

There is a concern that some UPS Developer Kit users who store UPS Certificates internally may have issues when SSL Certificates are renewed. It is recommended that UPS Developer Kit users not store UPS Certificates internally; however if a customer finds this necessary due to specific needs within their company, they may need to add renewed certificates to the their trust store.

There are a number of ways one can add a certificate to the application. One way to obtain the proper certificate is by placing a UPS Developer Kit URL, <https://onlinetools.ups.com/ups.app/xml/Rate>, for example, in a browser, connect to the URL, and double-click on the "lock" on the bottom right of the window (using Internet Explorer 7). After that the steps can be followed to install the certificate.

Also, in the event that the aforementioned solution does not work successfully for you we have been provided with the following certificate which should allow you to connect once it has been successfully added. You should be able to paste the following string into Notepad and save the file locally. Then, it will be necessary to have the client application reference the file so that it will know that this is the trusted certificate for making a connection to UPS.

This is the Verisign Class 3 Secure Server CA - G2 certificate that the client must trust:

-----BEGIN CERTIFICATE-----  
MIIGLDCCBZWgAwIBAgIQbk/6s8XmacTRZ8mSq+hYxDANBgkqhkiG9w0BAQUFADCB  
wTElMAkGA1UEBhMCVVMxZmZAVBgNVBAoTDIzlcm1TaWduLCBJbmMuMTwwOgYDVQQL  
EzNDbGFzcyAzIFB1Ym9yYyBQcmltYXJ5IENlcnRzZmljYXRpb24gQXV0aG9yaXR5  
IC0gRzIxOjA4BgNVBAsTMSHjKSAxOTk4IFZlcm1TaWduLCBJbmMuIC0gRm9yIGF1  
dGhvcml6ZWQgdXNIIG9ubHkxHzAdBgNVBAsTFiZlcm1TaWduIFRydXN0IE5ldHdv  
cm5wHhcNMDkwMzI1MDAwMDAwWhcNMTkwMzI0MjM1OTU5WjCBTELMAkGA1UEBhMC  
VVMxZmZAVBgNVBAoTDIzlcm1TaWduLCBJbmMuMR8wHQYDVQQLExZWZXJpU2lnbiBU  
cnVzdCBOZXR3b3JrMTswOQYDVQQLExJUZXXJtcyBvZiB1c2UgYXQgaHR0cHM6Ly93  
d3cudmVyaXNpZ24uY29tL3JwYSAoYykwOTEvMC0GGA1UEAxMmVmVyaVNpZ24gQ2xh  
c3MgMyBTZW51cmUgU2VydmVyeiENBIC0gRzIwggEiMA0GCSqGSIb3DQEBAQUAA4IB  
DwAwggEKAoIBAQUdUvo9XOzcopkBJ0pXVBXTatRlqItZxVy/iwDSMoJWzjOE3JPMu  
7UNFBY6J1/raSrX4Po1Ox/IJUEU3QJ90qqBRVWHxYISJpZ6AjS+wIapFgsTPtBR/  
RxUgKIKwaBLArLwH1/ZZzMtiVlxNSf8miKtUUTovStoOmOKJcrn892g8xB85essX  
gfMMrQ/cYWIEAsEHikYcV5iy0PevjG6cQIZTiapUdqMZGkD3pz9ff17Ybz8hHyI  
XLTDe+1fK0YS8f0AAZqLW+mjBS6PLlve8xt4+GaRCMBeztWwNsrUqHugffkwer/4  
3RIRKyC6/qfPoU6wZ/WAqiuDLtKOVIImOHikLAgMBAAGjggKpMIICpTA0BggrBgEF  
BQcBAQQoMCYwJAYIKwYBBQUHMAGGGGh0dHA6Ly9vY3NwLnZlcm1zaWduLmNvbTAS  
BgNVHRMBAf8ECDAGAQH/AgEAMHAGA1UdIARpMGcwZQYLYIZIAyB4RQEHFwMwVjAo  
BggrBgEFBQcCARYcaHR0cHM6Ly93d3cudmVyaXNpZ24uY29tL2NwczAqBggrBgEF  
BQcCAjAeGh0dHRwczovL3d3dy52ZXJpc2lnbi5jb20vcnBhMDQGA1UdHwQtMCsw  
KaAnoCWGI2h0dHA6Ly9jcmwudmVyaXNpZ24uY29tL3BjYTMtZzluY3JsMA4GA1Ud  
DwEB/wQEAwIBBjBtBggrBgEFBQcBDARhMF+hXaBbMFkwVzBVFglpbWFnZS9naWYw

ITAfMAcGBSsOAwIaBBSP5dMahqyNjmvDz4Bq1EgYlHsZLjAlFiNodHRwOi8vbG9n  
by52ZXJpc2lnbi5jb20vdnNsb2dvLmdpZjApBgNVHREEIjAgpB4wHDEaMBgGA1UE  
AxMRQ2xhc3MzQ0EyMDQ4LTEtNTIwHQYDVIR0OBByEFKXvCwH0wEEDo0plkEiyHOBX  
LX1HMIHnBgNVHSMEd8wgdyhgcekgcQwgcExCzAJBgNVBAYTAIVTMRCwFQYDVQK  
Ew5WZXJpU2lnbiwgSW5jLjE8MDoGA1UECXMzQ2xhc3MgMyBQdWJsaWMgUHJpbWFy  
eSBDZXJ0aWZpY2F0aW9uIEF1dGhvcml0eSAiIEcyMTowOAYDVQQLZS0yYkgMTk5  
OCBWXZJpU2lnbiwgSW5jLiAtIEZvciBhdXRob3JpemVkIHVzZSBvbm5MR8wHQYD  
VQQLExZWZXJpU2lnbiBUcnVzdCBOZXR3b3JrghB92f4Hz6getxB5Z/uniTTGMA0G  
CSqGSIb3DQEBBQUAA4GBAGN0Lz1Tqi+X7CYRZhr+8d5BJxnSf9jBHPniOFY6H5Cu  
OcUgdav4bC1nHynCIdcUiGNLsJsnY5H48KMBJLb7j+M9AgtvVP7UzNvWhb98IR5e  
YhHB2QmcQrmy1KotmDojYMyimvFu6M+O0Ro8XhnF15s1sAljJOUFuNWI4+D6ufRf  
-----END CERTIFICATE-----

Finally, for more information on installing the latest VeriSign CA Root Certificate, please click on the links below:

[https://knowledge.verisign.com/support/ssl-certificates-support/index?page=content&id=SO7154&actp=search&viewlocale=en\\_US&searchid=1308235124970](https://knowledge.verisign.com/support/ssl-certificates-support/index?page=content&id=SO7154&actp=search&viewlocale=en_US&searchid=1308235124970)  
<https://knowledge.verisign.com/support/ssl-certificates-support/index?page=content&actp=CROSSLINK&id=AR1553>  
<https://knowledge.verisign.com/support/ssl-certificates-support/index?page=content&id=SO4785&actp=LIST>

### 1.6.3 Extensible Markup Language (XML)

The Extensible Markup Language (XML) is an international standard developed by the World Wide Web Consortium, the governing body for web standards and guidelines. XML provides a way to identify the structure of content within a document or, in the case of UPS Developer APIs, a message. Figure 7 shows how a simple XML message could describe a book.

```
<?xml version="1.0" encoding="UTF-8" ?>
<book>
  <title>
    HTTP Essentials: Protocols for Secure, Scaleable Web Sites
  </title>
  <author>
    <firstname>
      Stephen
    </firstname>
    <lastname>
      Thomas
    </lastname>
  </author>
  <publisher>
    John Wiley and Sons
  </publisher>
  <year>
    2001
  </year>
  <isbn>
    0-471-398233
  </isbn>
</book>
```

**Figure 7: XML identifies the structure of documents, as in this document describing a book.**

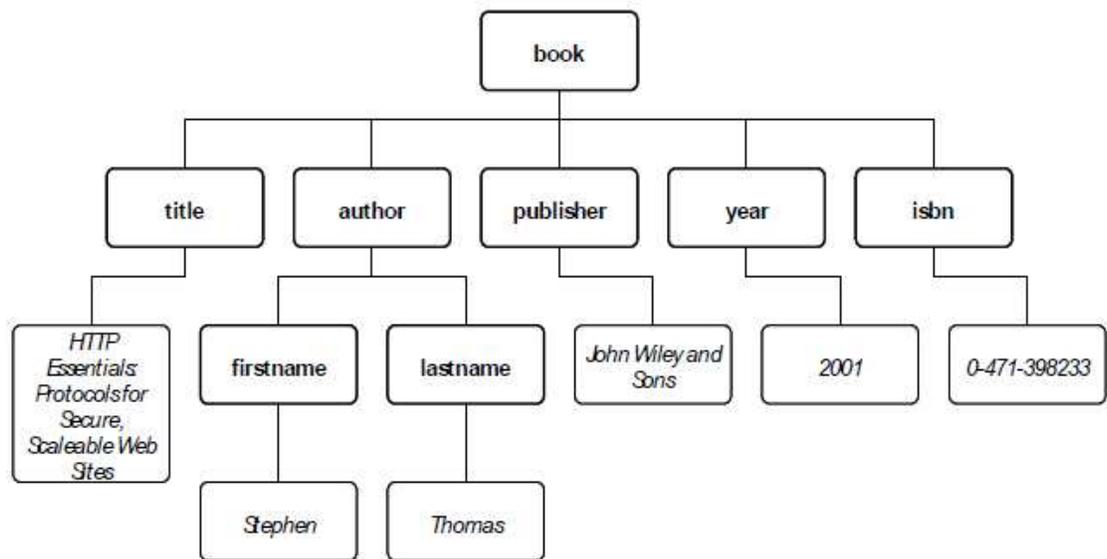
As the figure illustrates, XML is a text-based format. XML messages contain regular text, though that text follows specific rules that XML defines. XML distinguishes different parts of a message with a label known as a *tag*. Tags in the example include `<book>`, `<title>`, `<author>`, `<firstname>`, etc. A tag can indicate the start of information if it begins with an angle bracket (`<`), and a tag can indicate the end of information if it begins with an angle bracket and a slash (`</`). A beginning tag, ending tag, and the information between the two make up an *element*. In this example the publisher element tells us that the publisher for the book is "John Wiley and Sons." The figure also shows how an XML message follows a defined structure. Elements can be contained within other elements, as `<firstname>` and `<lastname>` are included within the `<author>` element. This structure indicates that `firstname` and `lastname` are "children" of the author "parent."

Although XML elements can contain almost any text, there are two special characters that cannot appear within an element. Those characters are the less-than sign (`<`) and the ampersand (`&`). Elements that include these contents must replace the special characters with `&lt;` or `&amp;` respectively. The name of a large telecommunications company, for example, would appear as `AT& T` within an XML message.

Because XML is a text-based format, software has to take extra steps to use XML with binary data. For example, some UPS services return binary image data such as the image of

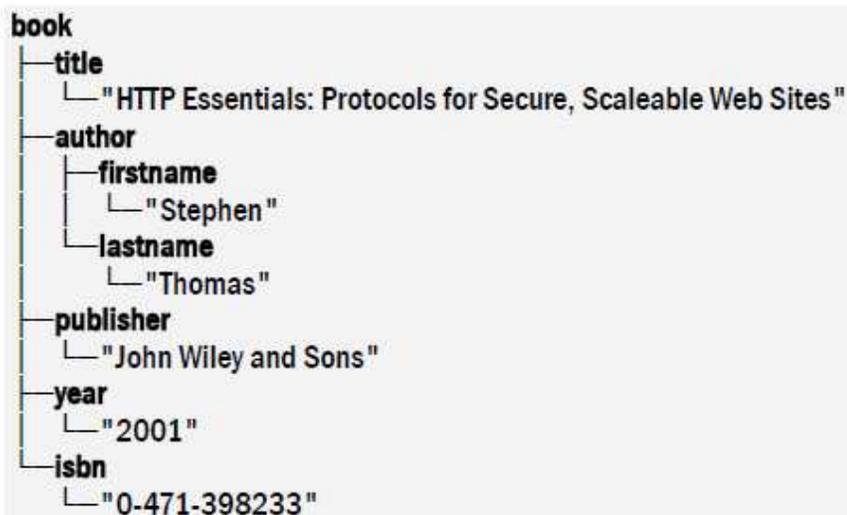
a shipping label. To include this data in an XML message, UPS converts it from binary to text format using an algorithm known as *Base64 encoding*. The "The Base16, Base32, and Base64 Data Encodings" standard, also known as [RFC 3548](#), defines that algorithm.

Although XML messages consist of a series of text characters, most software development API represent XML messages in a tree-like data structure. That representation clarifies the structure of the message. Figure 8 shows the same XML message as Figure 7, but it uses a more visual representation to highlight the message's structure.



**Figure 8.** It is often convenient to show XML messages in a tree-like graph to highlight their structure.

The example of Figure 7 and Figure 8 is a relatively simple XML message with just a few elements. UPS Developer APIs rely on XML messages that are larger than this simple example, and it is difficult to show them in a pure graph like Figure 8 without losing legibility. Figure 9 shows an alternate way of depicting the tree-like structure of XML messages; it uses the same example as before.



**Figure 9.** It is possible to show the tree-like structure of XML messages using text.

A great deal of information on XML is available on the Internet. A good starting point for further research is the World Wide Web Consortium's main page on XML at <http://www.w3.org/XML/>.

## 1.6.4 Working with XML in Application Programs

The popularity of Extensible Markup Language means that nearly all development environments include sophisticated support for creating and interpreting XML messages. This subsection provides a brief introduction to working with XML in Microsoft, Java, and Open Source environments. The examples it contains are only representative approaches; many other approaches are possible.

### 1.6.4.1 Microsoft Visual Studio

The Microsoft XML Core Services (MSXML) offers one way to work with XML documents in Visual Studio applications. Figure 10 shows one approach for creating an XML message in Visual Basic, and Figure 11 demonstrates how Visual Basic programs can interpret XML responses. To remain as simple as possible, the examples do not include any exception handling. Production software should, of course, provide full exception handling.

```

' Define a variable and initialize it to a new XML message
Dim dom
Set dom = New XmlDocument30
' Set properties of the variable
dom.async = False
dom.validateOnParse = False
dom.resolveExternals = False
dom.preserveWhiteSpace = True
' Identify the message as XML version 1.0
Set node = dom.createProcessingInstruction("xml", "version='1.0'")
dom.appendChild node
Set node = Nothing
' Create the root (book) element and add it to the message
Dim root
Set root = dom.createElement("book")
dom.appendChild root
' Create child elements and add them to the root
Dim node
Set node = dom.createElement("title")
node.text = "HTTP Essentials: ..."
root.appendChild node
Set node = Nothing
Set node = dom.createElement("author")
Dim child
Set child = dom.createElement("firstname")
child.text = "Stephen"
node.appendChild child
Set child = Nothing
Set child = dom.createElement("lastname")
child.text = "Thomas"
node.appendChild child
root.appendChild node
' And so on

```

Figure 10. Visual Basic can create XML messages through the XmlDocument object.

```

' Define a variable to hold the parsed message
Dim dom As New XmlDocument30
dom.async = False
dom.validateOnParse = False
dom.resolveExternals = False
dom.preserveWhiteSpace = True
' Try to parse the message
If dom.loadXML(messageText) = False Then
' The text did not contain valid XML
End If
' Get the title information from the message
Dim node As IXMLDOMNode
Set node = dom.selectSingleNode("/title")
If node Is Nothing Then
' The message did not contain title information

```

```
Else
' Do something with node.text
End If
```

**Figure 11. Visual Basic can read the contents of XML messages after parsing them with the DOMDocument object.**

Visual Basic also has built-in classes to interpret Base64-encoded values. The `Convert.FromBase64String ()` function converts from a Base64-encoded string to an array of 8-bit unsigned integers

#### 1.6.4.2 Java Standard Edition and Enterprise Edition

The [Java API for XML Processing \(JAXP\)](#) is the preferred approach for working with XML messages in Java. Figure 12 shows how a `BookClass` object can be converted into an XML message, a process that JAXP calls *marshalling*. Similarly, Figure 13 shows the reverse process, where an XML message is converted into a `BookClass` object. This reverse process is *unmarshalling*. As above, exception handling code is omitted from these examples to make them as clear as possible.

```
import javax.xml.bind.JAXBContext;
import javax.xml.bind.Marshaller;
import java.io.StringWriter;
/* create the book object */
BookClass book = new BookClass("HTTP Essentials...", new
AuthorClass("Stephen", "Thomas"),
"John Wiley and Sons", "2001", "0-471-398233");
/* convert it to an XML string */
StringWriter writer = new StringWriter();
JAXBContext context = JAXBContext.newInstance(book.class);
Marshaller m = context.createMarshaller();
m.marshal(book, writer);
```

**Figure 12. JAXP provides a convenient way for Java applications to create XML messages from Java objects.**

```
import javax.xml.bind.JAXBContext;
import javax.xml.bind.Marshaller;
import java.io.StringReader;
/* xmlMessage contains the XML message */
StringReader reader = new StringReader(xmlMessage);
JAXBContext context = JAXBContext.newInstance(Book.class);
Unmarshaller u = context.createUnmarshaller();
BookClass book = (BookClass) u.unmarshal(reader);
/* access properties of the book */
System.out.println(book.getAuthor().getFirstname());
```

**Figure 13. JAXP also gives Java applications a convenient way to retrieve elements from an XML message**

### 1.6.4.3 Open Source

As of this writing, the most popular open source tool for working with XML is the [xerces](#) project. That project includes C++, Java, and Perl implementations of an XML library. The xerces distribution includes extensive sample applications. The code fragment in Figure 14 demonstrates creating an XML message in C++ with the xerces library. Figure 15 shows sample code for accessing an element within an XML message. In both cases exception handling is not shown in order to keep the examples as simple as possible. Production software should always contain full exception handling.

```
DOMImplementation* impl =
DOMImplementationRegistry::getDOMImplementation(X("Core"));
DOMDocument* doc = impl->createDocument(0, X("book"), 0);
DOMElement* rootElem = doc->getDocumentElement();
DOMElement* titleElem = doc->createElement(X("title"));
rootElem->appendChild(titleElem);
DOMText* titleVal = doc->createTextNode(X("HTTP Essentials..."));
titleElem->appendChild(titleVal);
```

Figure 14. The Xerces C++ library includes

```
XMLCh* TAG_book;
XMLCh* TAG_title;
xercesc::XercesDOMParser *parser;
XMLPlatformUtils::Initialize();
TAG_book = XMLString::transcode("book");
TAG_title = XMLString::transcode("title");
parser = new XercesDOMParser;
parser->parse(inputText);
DOMDocument* xmlDoc = parser->getDocument();
DOMElement* elementRoot = xmlDoc->getDocumentElement();
DOMNodeList* children = elementRoot->getChildNodes();
const XMLSize_t nodeCount = children->getLength();
for (XMLSize_t cnt = 0; cnt < nodeCount; ++cnt ) {
DOMNode* currentNode = children->item(cnt);
if( currentNode->getNodeType() && currentNode->getNodeType() ==
DOMNode::ELEMENT_NODE ) {
DOMElement* currentElement =
dynamic_cast<xercesc::DOMElement*>( currentNode );
if( XMLString::equals(currentElement->getTagName(), TAG_title) ) {
/* do something with the title */
}
}
}
```

**Figure 15. The Xerces C++ library also supports parsing XML messages to find individual elements.**

## 1.7 Understanding XML Rating Services

The Rating API gives applications the ability to look up rates for UPS services and compare the cost of service alternatives. This section describes how these two options work. It also explains negotiated rates.

### 1.7.1 Finding the Rate for a Specific Service

If an application knows the specific UPS service desired (such as UPS Next Day Air, or UPS Ground), the Rating API lets the application find the cost of using that service for a specific shipment or package. The application sends UPS a request indicating the desired service and details about the shipment or package. UPS returns the cost of that service for that shipment or package.

NOTE: This is the “rate” option: To use this option, Client input must include the string value “Rate” in the Request/RequestOption element.

### 1.7.2 Comparing Rates for Various Services

An application may also compare the rates available for various services. In this case the application only provides details about the shipment or package and it indicates that it wishes all rates available for that shipment or package. UPS determines which UPS services are available for that shipment or package and returns the cost of all of those services.

NOTE: This is the “shop” option: To use this option, Client input must include the string value “Shop” in the Request/RequestOption element.

### 1.7.3 Negotiated Rates

UPS customers that require a high volume of shipments may have negotiated special rates for their shipments that differ from the UPS published rates. When such a customer uses the Rating API, they must include a NegotiatedRatesIndicator tag in their request to get negotiated rates in the UPS response. If the customer is authorized for negotiated rates, and if negotiated rates apply to the particular service, UPS returns those rates along with the published rates in its response.

For more information on negotiated rates, including authorization to receive them, please check with your UPS account representative.

There is a 1% discount that is available in CIE for Negotiated Rates. During testing the user will not see the rates available to them in actual production.

## 1.8 The Rating XML Reference

This section documents the details of the Rating API messages, including the requests that clients send to UPS and the responses that UPS returns.

### 1.8.1 Authenticating Client Applications

UPS Developer APIs are only available for authorized UPS customers. To enforce this policy, UPS requires that every message that a client application sends include important authentication information. That information is contained in an AccessRequest XML document that must begin each message.

#### AccessRequest



Each AccessRequest contains three child elements: an AccessLicenseNumber, a UserId, and a Password. The following figure shows an example AccessRequest document.

```
<?xml version="1.0" ?>
<AccessRequest xml:lang='en-US'>
  <AccessLicenseNumber>
    YOURACCESSLICENSENUMBER
  </AccessLicenseNumber>
  <UserId>
    YOURUSERID
  </UserId>
  <Password>
    YOURPASSWORD
  </Password>
</AccessRequest>
```

### 1.8.2 Rates and Service Selection

The Rating API relies on a single request and response. Client applications request rating information by sending a RatingServiceSelectionRequest message to UPS. UPS replies with a RatingServiceSelectionResponse message.

#### Example RatingServiceSelectionRequest Message

```

<?xml version="1.0" ?>
<AccessRequest xml:lang='en-US'>
  <AccessLicenseNumber>YOURACCESSLICENSENUMBER</AccessLicenseNumber>
  <UserId>YOURUSERID</UserId>
  <Password>YOURPASSWORD</Password>
</AccessRequest>
<?xml version="1.0" ?>
<RatingServiceSelectionRequest>
  <Request>
    <TransactionReference>
      <CustomerContext>Rating and Service</CustomerContext>
      <XpciVersion>1.0</XpciVersion>
    </TransactionReference>
    <RequestAction>Rate</RequestAction>
    <RequestOption>Rate</RequestOption>
  </Request>
  <PickupType>
    <Code>01</Code>
    <Description>Daily Pickup</Description>
  </PickupType>
  <Shipment>
    <Description>Rate Shopping - Domestic</Description>
    <Shipper>
      <ShipperNumber>ISGB01</ShipperNumber>
      <Address>
        <AddressLine1>Southam Rd</AddressLine1>
        <AddressLine2 />
        <AddressLine3 />
        <City>Dunchurch</City>
        <StateProvinceCode>Warwickshire</StateProvinceCode>
        <PostalCode>CV226PD</PostalCode>
        <CountryCode>GB</CountryCode>
      </Address>
    </Shipper>
    <ShipTo>
      <CompanyName>Belgium</CompanyName>
      <AttentionName>nanananan</AttentionName>
      <PhoneNumber>7777778978</PhoneNumber>
      <Address>
        <AddressLine1>5, rue de la Bataille</AddressLine1>
        <AddressLine2 />
        <AddressLine3 />
        <City>Neufchateau</City>
        <PostalCode>6840</PostalCode>
        <CountryCode>BE</CountryCode>
      </Address>
    </ShipTo>
    <ShipFrom>
      <CompanyName>Imani's Imaginarium</CompanyName>
      <AttentionName>AT:United Kingdom</AttentionName>
      <PhoneNumber>3057449002</PhoneNumber>
      <FaxNumber>3054439293</FaxNumber>
      <Address>

```

```

        <AddressLine1>Southam Rd</AddressLine1>
        <AddressLine2 />
        <AddressLine3 />
        <City>Dunchurch</City>
        <StateProvinceCode>Warwickshire</StateProvinceCode>
        <PostalCode>CV226PD</PostalCode>
        <CountryCode>GB</CountryCode>
    </Address>
</ShipFrom>
<Service><Code>65</Code></Service>
<Package>
    <PackagingType>
        <Code>04</Code>
        <Description>UPS 25KG Box</Description>
    </PackagingType>
    <Description>Rate</Description>
    <PackageWeight>
        <UnitOfMeasurement>
            <Code>KGS</Code>
        </UnitOfMeasurement>
        <Weight>23</Weight>
    </PackageWeight>
</Package>
    <ShipmentServiceOptions />
</Shipment>
</RatingServiceSelectionRequest>

```

### Example RatingServiceSelectionResponse Message

```

<?xml version="1.0" ?>
<RatingServiceSelectionResponse>
    <Response>
        <TransactionReference>
            <CustomerContext>Rating and Service</CustomerContext>
            <XpciVersion>1.0</XpciVersion>
        </TransactionReference>
        <ResponseStatusCode>1</ResponseStatusCode>
        <ResponseStatusDescription>Success</ResponseStatusDescription>
    </Response>
    <RatedShipment>
        <Service>
            <Code>65</Code></Service>
        <BillingWeight>
            <UnitOfMeasurement><Code>KGS</Code></UnitOfMeasurement>
            <Weight>23.0</Weight>
        </BillingWeight>
        <TransportationCharges>
            <CurrencyCode>UKL</CurrencyCode>
            <MonetaryValue>73.65</MonetaryValue>
        </TransportationCharges>
        <ServiceOptionsCharges>

```

```

    <CurrencyCode>UKL</CurrencyCode>
    <MonetaryValue>0.00</MonetaryValue>
  </ServiceOptionsCharges>
</TotalCharges>
  <CurrencyCode>UKL</CurrencyCode>
  <MonetaryValue>73.65</MonetaryValue>
</TotalCharges>
<GuaranteedDaysToDelivery>0</GuaranteedDaysToDelivery>
<RatedPackage>
  <TransportationCharges>
    <CurrencyCode>UKL</CurrencyCode>
    <MonetaryValue>0.00</MonetaryValue>
  </TransportationCharges>
  <ServiceOptionsCharges>
    <CurrencyCode>UKL</CurrencyCode>
    <MonetaryValue>0.00</MonetaryValue>
  </ServiceOptionsCharges>
  <TotalCharges>
    <CurrencyCode>UKL</CurrencyCode>
    <MonetaryValue>0.00</MonetaryValue>
  </TotalCharges>
  <Weight>23.0</Weight>
  <BillingWeight>
    <UnitOfMeasurement>
      <Code>KGS</Code>
    </UnitOfMeasurement>
    <Weight>0.0</Weight>
  </BillingWeight>
</RatedPackage>
</RatedShipment>
</RatingServiceSelectionResponse>

```

### 1.8.3 Rate Request

The RatingServiceSelectionRequest message consists of two complete XML documents. The first document is an AccessRequest. It is immediately followed by (concatenated to) a RatingServiceSelectionRequest. When a client application is undergoing testing and integration, the document combination should be sent to the URL: <https://wwwcie.ups.com/ups.app/xml/Rate> . The RatingService Selection Request document in the request must conform to the following XML structure.

#### RatingServiceSelectionRequest XML Details

Note: The “Required” Column has four potential values:  
 Yes: *Always* required  
 No: *Always* optional  
 Yes\*: *Conditionally* required  
 Cond: Conditional

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
RatingServiceSelectionRequest	/RatingServiceSelectionRequest	Yes	One	Container	N/A	Request Container	N/A
Request	/RatingServiceSelectionRequest/Request	Yes	One	Container	N/A	Request Container	N/A
RequestAction	/RatingServiceSelectionRequest/Request/RequestAction	Yes	One	String	15	The action to be taken by the Rating and Service Selection tool	Must contain Rate to execute rating and service selection.
RequestOption	/RatingServiceSelectionRequest/Request/RequestOption	No	One	String	15	The server switches between rating and shopping using the RequestOption tag	Rate = The server rates (The default rates if an option is not provided).  Shop = The server validates the shipment, and return rates for all UPS products from the ShipFrom to the ShipTo addresses.  Note: The Valid request option for FRS rating request is Rate.
TransactionReference	/RatingServiceSelectionRequest/Request/TransactionReference	No	One	Container	N/A	TransactionReference identifies transactions between client and server	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
CustomerContext	/RatingServiceSelectionRequest/Request/TransactionReference/CustomerContext	No	One	String	1..512	The requester uses CustomerContext to synchronize request/response pairs. The client establishes CustomerContext, which can contain any information the client wishes to have, as long as it is valid XML; it is echoed back to the requester	
PickupType	/RatingServiceSelectionRequest/PickupType	No	One	Container	N/A	Pickup Type container tag	
Code	/RatingServiceSelectionRequest/PickupType/Code	Yes*	One	String	2	Pickup Type Code	Default value is 01. Valid values are: 01- Daily Pickup; 03 - Customer Counter; 06 - One Time Pickup; 07 - On Call Air; 19 - Letter Center; 20 - Air Service Center. Refer to the Rate Chart table in Appendix C for rate type based on Pickup Type and Customer Classification Code
CustomerClassification	/RatingServiceSelectionRequest/CustomerClassification	No	One	Container	N/A	Customer classification container. Valid if ShipFrom country is US	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
Code	/RatingServiceSelectionRequest/CustomerClassification/Code	Yes*	One	String	2	Customer classification code	Valid values are: 00- Rates Associated with Shipper Number; 01- Daily Rates; 04- Retail Rates; 53- Standard List Rates;  The default value is 01 (Daily Rates) when the Pickup Type code is 01 (Daily pickup).  The default value is 04 (Retail Rates) when the Pickup Type code is: 06 -One Time Pickup, 07 - On Call Air, 19 - Letter Center, or 20 - Air Service Center
Shipment	/RatingServiceSelectionRequest/Shipment	Yes	One	Container	N/A	N/A	
Shipper	/RatingServiceSelectionRequest/Shipment/Shipper	Yes	One	Container	N/A	Shipper's details are included in this container	N/A
Name	/RatingServiceSelectionRequest/Shipment/Shipper/Name	No	One	String	35	Shipper's name or company name	N/A
ShipperNumber	/RatingServiceSelectionRequest/Shipment/Shipper/ShipperNumber	Cond	One	String	6	Shipper's UPS account number. Note: A shipper number is required when requesting to receive the negotiated rates. The shipper number is optional when requesting to receive the published rates	Value must match a commissioned shipper number

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
Address	/RatingServiceSelectionRequest/Shipment/Shipper/Addresses	Yes	One	Container	N/A	Contains the address details of shipper	If the ShipFrom container is not present then this address will be used as the ShipFrom. If this address is used as the ShipFrom the shipment will be rated from this origin address
AddressLine1	/RatingServiceSelectionRequest/Shipment/Shipper/Addresses/AddressLine1	No	One	String	35	Shipper's street address, including name and number (when applicable)	N/A
AddressLine2	/RatingServiceSelectionRequest/Shipment/Shipper/Addresses/AddressLine2	No	One	String	35	Additional shipper's address information, preferably room or floor	N/A
AddressLine3	/RatingServiceSelectionRequest/Shipment/Shipper/Addresses/AddressLine3	No	One	String	35	Additional shipper's address information, preferably department name	N/A
City	/RatingServiceSelectionRequest/Shipment/Shipper/Addresses/City	Cond	One	String	30	Shipper's City	Required if country does not utilize postal codes
StateProvinceCode	/RatingServiceSelectionRequest/Shipment/Shipper/Addresses/StateProvinceCode	No	One	String	2	Shipper's state code	Refer to the Supported Country Tables located in Appendix A.

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
PostalCode	/RatingServiceSelectionRequest/Shipment/Shipper/Addresses/PostalCode	Cond	One	String	9	Shipper's postal code	Required if country utilizes postal codes(i.e. us and pr)
CountryCode	/RatingServiceSelectionRequest/Shipment/Shipper/Addresses/CountryCode	Yes	One	String	2	Shipper's CountryCode.	Required, but default to US. Refer to the Supported Country Tables located in Appendix B
ResidentialAddressIndicator	/RatingServiceSelectionRequest/Shipment/Shipper/Addresses/ResidentialAddressIndicator	No	One	Empty	N/A	This field is a flag to indicate if the receiver is a residential location. True if ResidentialAddressIndicator tag exists; false otherwise	Empty Tag
ShipTo	/RatingServiceSelectionRequest/Shipment/ShipTo	Yes	One	Container	N/A	Container stores the details of ShipTo	N/A
CompanyName	/RatingServiceSelectionRequest/Shipment/ShipTo/CompanyName	No	One	String	35	Receiver's name or Company Name. When using the Rating API in conjunction with the Shipping API, this field should be the same as the Ship To name of the Shipping API request.	N/A
Address	/RatingServiceSelectionRequest/Shipment/ShipTo/Addresses	Yes	One	Container	N/A	ShipTo Address container contains the details of ShipTo address	N/A
AddressLine1	/RatingServiceSelectionRequest/Shipment/ShipTo/Addresses/AddressLine1	No	One	String	35	Receiver's street address including name and number (when applicable).	N/A

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
AddressLine2	/RatingServiceSelectionRequest/Shipment/ShipTo/Addresses/AddressLine2	No	One	String	35	Additional receiver's address information, preferably room or floor	N/A
AddressLine3	/RatingServiceSelectionRequest/Shipment/ShipTo/Addresses/AddressLine3	No	One	String	35	Additional receiver's address information, preferably department name	N/A
City	/RatingServiceSelectionRequest/Shipment/ShipTo/Addresses/City	Cond	One	String	30	Receiver's city	Required if country does not utilize postal codes
StateProvinceCode	/RatingServiceSelectionRequest/Shipment/ShipTo/Addresses/StateProvinceCode	Cond	One	String	2	Receiver's state code. Note: A State/Province Code is required when requesting to receive the negotiated rates. The State/Province code is optional when requesting to receive the published rates	
PostalCode	/RatingServiceSelectionRequest/Shipment/ShipTo/Addresses/PostalCode	Cond	One	String	9	Receiver's postal code	Required if country utilizes postal codes(i.e. us and pr)
CountryCode	/RatingServiceSelectionRequest/Shipment/ShipTo/Addresses/CountryCode	Yes	One	String	2	IATA OR UPS BILLING code representing the receiver's country	Required, but default to US. Refer to the Supported Country Tables located in Appendix A.
ResidentialAddressIndicator	/RatingServiceSelectionRequest/Shipment/ShipTo/Addresses/ResidentialAddressIndicator	No	One	Empty	N/A	A flag indicating if the shipper's address is a residential location. True if tag exists; false otherwise	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
ShipFrom	/RatingServiceSelectionRequest/Shipment/ShipFrom	No	One	Container	N/A	ShipFrom Container.	N/A
CompanyName	/RatingServiceSelectionRequest/Shipment/ShipFrom/CompanyName	No	One	String	35	ShipFrom location name or company name	N/A
Address	/RatingServiceSelectionRequest/Shipment/ShipFrom/Address	Cond	One	Container	N/A	Contains ShipFrom address elements	The shipment will be rated from this origin address to the destination ShipTo address
AddressLine1	/RatingServiceSelectionRequest/Shipment/ShipFrom/Address/AddressLine1	No	One	String	35	ShipFrom locations street address including name and number (when applicable)	N/A
AddressLine2	/RatingServiceSelectionRequest/Shipment/ShipFrom/Address/AddressLine2	No	One	String	35	Additional ShipFrom location's address information, preferably room or floor	N/A
AddressLine3	/RatingServiceSelectionRequest/Shipment/ShipFrom/Address/AddressLine3	No	One	String	35	Additional ShipFrom location's address information, preferably department name	N/A
City	/RatingServiceSelectionRequest/Shipment/ShipFrom/Address/City	Yes	One	String	30	ShipFrom locations city.	Required if country does not utilize postal codes

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
StateProvinceCode	/RatingServiceSelectionRequest/Shipment/ShipFrom/Address/StateProvinceCode	Cond	One	String	2	ShipFrom locations state code. Note: A State/Province Code is required when requesting to receive the negotiated rates. The State/Province code is optional when requesting to receive the published rates.	
PostalCode	/RatingServiceSelectionRequest/Shipment/ShipFrom/Address/PostalCode	Yes	One	String	9	ShipFrom locations postal code	Required if country utilizes postal codes(i.e. us and pr)
CountryCode	/RatingServiceSelectionRequest/Shipment/ShipFrom/Address/CountryCode	No	One	String	2	ShipFrom CountryCode	Required, but default to US. Refer to the Supported Country Tables located in Appendix B.
ResidentialAddressIndicator	/RatingServiceSelectionRequest/Shipment/ShipFrom/Address/ResidentialAddressIndicator	No	One	Empty	N/A	Not Used	
Service	/RatingServiceSelectionRequest/Shipment/Service	No	One	Container	N/A	N/A	N/A

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
Code	/RatingServiceSelectionRequest/Shipment/Service/Code	Cond	One	String	2	Code for the UPS Service associated with the shipment	<p>Valid domestic values:                      14 = Next Day Air Early AM,                      01 = Next Day Air,                      13 = Next Day Air Saver,                      59 = 2nd Day Air AM,                      02 = 2nd Day Air,                      12 = 3 Day Select,                      03 = Ground.</p> <p>Valid international values:                      11= Standard,                      07 = Worldwide Express,                      54 = Worldwide Express Plus,                      08 = Worldwide Expedited,                      65 = Saver. Required for Rating and Ignored for Shopping.</p> <p>Valid Poland to Poland Same Day values:                      82 = UPS Today Standard,                      83 = UPS Today Dedicated Courier,                      84 = UPS Today Intercity,                      85 = UPS Today Express,                      86 = UPS Today Express Saver</p>
Description	/RatingServiceSelectionRequest/Shipment/Service/Description	No	One	String	35	Text description of the UPS Service associated with the shipment	N/A
DocumentsOnly	/RatingServiceSelectionRequest/Shipment/DocumentsOnly	No	One	Empty	N/A	Indicates that the shipment contains only documents.	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
Package	/RatingServiceSelectionRequest/Shipment/Package	No	200	Container	N/A	N/A	N/A
PackagingType	/RatingServiceSelectionRequest/Shipment/Package/PackagingType	Cond	One	Container	N/A	N/A	If no container is specified, RAVE assumes UPS Package, i.e., type 02
Code	/RatingServiceSelectionRequest/Shipment/Package/PackagingType/Code	Yes	One	String	2	Code for the UPS packaging type associated with the package	Valid values: 00 = UNKNOWN; 01 = UPS Letter; 02 = Package; 03 = Tube; 04 = Pak; 21 = Express Box; 24 = 25KG Box; 25 = 10KG Box; 30 = Pallet; 2a = Small Express Box; 22b = Medium Express Box; 2c = Large Express Box
Description	/RatingServiceSelectionRequest/Shipment/Package/PackagingType/Description	No	One	String	35	Text description of the code for the UPS packaging type associated with the shipment	N/A
Dimensions	/RatingServiceSelectionRequest/Shipment/Package/Dimensions	Cond	One	Container	N/A	N/A	N/A

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
UnitOfMeasurement	/RatingServiceSelectionRequest/Shipment/Package/Dimensions/UnitOfMeasurement	Cond	One	Container	N/A	N/A	Required if Packaging Type in not Letter, Express Tube, or Express Box; Required for GB to GB and Poland to Poland shipments
Code	/RatingServiceSelectionRequest/Shipment/Package/Dimensions/UnitOfMeasurement/Code	No	One	String	2	Package dimensions unit of measurement code. Codes are: IN = Inches, CM = Centimeters	Valid codes are: IN, CM
Description	/RatingServiceSelectionRequest/Shipment/Package/Dimensions/UnitOfMeasurement/Description	No	One	String	35	Text description of the code for the unit of measure associated with the package dimensions	N/A
Length	/RatingServiceSelectionRequest/Shipment/Package/Dimensions/Length	Cond	One	String	6.2	Length of the package used to determine dimensional weight	Required if Packaging Type in not Letter, Express Tube, or Express Box; Required for GB to GB and Poland to Poland shipments
Width	/RatingServiceSelectionRequest/Shipment/Package/Dimensions/Width	Cond	One	String	6.2	Width of the package used to determine dimensional weight	Required if Packaging Type in not Letter, Express Tube, or Express Box; Required for GB to GB and Poland to Poland shipments
Height	/RatingServiceSelectionRequest/Shipment/Package/Dimensions/Height	Cond	One	String	6.2	Height of the package used to determine dimensional weight	Required if Packaging Type is not Letter, Express Tube, or Express Box; Required for GB to GB and Poland to Poland shipments
PackageWeight	/RatingServiceSelectionRequest/Shipment/Package/PackageWeight	Cond	One	Container	N/A	N/A	Weight allowed for letters/envelopes.

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
UnitOfMeasurement	/RatingServiceSelectionRequest/Shipment/Package/PackageWeight/UnitOfMeasurement	Cond	One	Container	N/A	N/A	N/A
Code	/RatingServiceSelectionRequest/Shipment/Package/PackageWeight/UnitOfMeasurement/Code	No	One	String	3	Code representing the unit of measure associated with the package weight. Codes are: LBS = Pounds, KGS = Kilograms	Valid values: LBS = Pounds (default) KGS = Kilograms
Description	/RatingServiceSelectionRequest/Shipment/Package/PackageWeight/UnitOfMeasurement/Description	No	One	String	35	Text description of the code representing the unit of measure associated with the package weight	N/A
Weight	/RatingServiceSelectionRequest/Shipment/Package/PackageWeight/Weight	Yes	One	String	6.1	Value of the package weight	Valid values: 0.1 - 150.0
LargePackageIndicator	/RatingServiceSelectionRequest/Shipment/Package/LargePackageIndicator	No	One	String	0	Presence of LargePackageIndicator specifies that the package is a Large package	
PackageServiceOptions	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions	No	One	Container	N/A	N/A	N/A
InsuredValue	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/InsuredValue	No	One	Container	N/A	Container for Insured Value Type	N/A

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
CurrencyCode	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/InsuredValue/CurrencyCode	No	One	String	3	Declared value amount currency type. IATA currency code associated with the declared value amount for the package	Code must represent a currency that is a valid for Shipper country
MonetaryValue	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/InsuredValue/MonetaryValue	Yes*	One	String	1..19	Declared value amount	Declared value amount
COD	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/COD	No	One	Container	1	COD container	Indicates COD is requested. Package level COD is available for US/PR to US/PR, CA to CA, and CA to US. CA to US COD is not allowed for package Letter/ Envelope
CODFundsCode	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/COD/CODFundsCode	Cond	One	String	1	Code that indicates the type of funds that will be used for the COD payment.	DeliveryConfirmation and COD cannot coexist on a single Package. Values are: 0 = check, cashiers check or money order - no cash allowed 8 = cashiers check or money order - no cash allowed.
CODAmount	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/COD/CODAmount	Cond	One	Container	N/A	N/A	N/A
CurrencyCode	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/COD/CODAmount/CurrencyCode	Cond	One	String	3	IATA currency code associated with the COD amount for the package.	Required if a value for the COD amount exists in the MonetaryValue tag. Must match one of the IATA currency codes.

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
MonetaryValue	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/COD/CODAmount/MonetaryValue	Cond	One	String	8.2	COD value for the package.	Required if COD option is present.
DeliveryConfirmation	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/DeliveryConfirmation	No	One	Container	N/A	N/A	For list of allowed origin/destinations please refer to Appendix D. DeliveryConfirmation and COD cannot coexist on a single Package.
DCISType	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/DeliveryConfirmation/DCISType	Yes*	One	String	1	Type of delivery confirmation	Valid values are: 1 - Delivery Confirmation; 2 - Delivery Confirmation Signature Required; 3 - Delivery Confirmation Adult Signature Required
VerbalConfirmation	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/VerbalConfirmation	No	One	Container	N/A	N/A	N/A
Name	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/VerbalConfirmation/Name	No	One	String	35	The name of the person that will provide verbal confirmation for the package.	
PhoneNumber	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/VerbalConfirmation/PhoneNumber	No	One	Container	15	Shipper's Phone Number	If Shipper country is US 10 digits allowed, otherwise 1...15 digits allowed. A phone number is required if destination is international.
StructuredPhoneNumber	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/VerbalConfirmation/PhoneNumber/StructuredPhoneNumber	No	One	Container	N/A	N/A	Required if parent element, PhoneNumber, is required and a phone number is not provide at the parent node.

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
PhoneCountryCode	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/VerbalConfirmation/PhoneNumber/StructuredPhoneNumber/PhoneCountryCode	No	One	String	3	The Country Code portion of the phone number.	Not valid for US phone numbers.
PhoneDialPlanNumber	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/VerbalConfirmation/PhoneNumber/StructuredPhoneNumber/PhoneDialPlanNumber	No	One	String	15	Dial plan number portion of the phone number.	
PhoneLineNumber	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/VerbalConfirmation/PhoneNumber/StructuredPhoneNumber/PhoneLineNumber	No	One	String	15	Line number portion of the phone number.	
PhoneExtension	/RatingServiceSelectionRequest/Shipment/Package/PackageServiceOptions/VerbalConfirmation/PhoneNumber/StructuredPhoneNumber/PhoneExtension	No	One	String	4	Shipper's phone extension.	
AdditionalHandling	/RatingServiceSelectionRequest/Shipment/Package/AdditionalHandling	No	One	Empty	1	A flag indicating if the packages require additional handling. True if tag exists; false otherwise	N/A
ShipmentServiceOptions	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions	No	One	Container	N/A	N/A	N/A
SaturdayPickup	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/SaturdayPickup	No	One	Empty	1	A flag indicating if the shipment requires a Saturday pickup. True if tag exists; false otherwise	N/A

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
SaturdayDelivery	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/SaturdayDelivery	No	One	Empty	1	A flag indicating if a shipment must be delivered on a Saturday. True if tag exists; false otherwise	N/A
OnCallAir	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/OnCallAir	No	One	Container	N/A	Optional, if not provided the default values for scheduled Pickup Day will be the current day. The default schedule method will be Internet	
Schedule	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/OnCallAir/Schedule	No	One	Container	N/A	Container may be used to further clarify the customer's ground pickup details. Optional, if not provided the default values for scheduled Pickup Day will be the current day. The default schedule method will be Internet	
PickupDay	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/OnCallAir/Schedule/PickupDay	No	One	String	2	Date the user wishes UPS to pickup the package	Valid Values: 01 = Same Day; 02 = Future Day. Default Value = 01
Method	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/OnCallAir/Schedule/Method	No	One	String	2	Method by which the user schedules the pickup	Valid Values: 01 = Internet; 02 = Phone. Default Value = 01
COD	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/COD	No	One	Container	N/A	COD container	Indicates COD is requested. Shipment COD is only available for EU origin countries and for shipper's account type Daily Pickup and Drop Shipping
CODFundsCode	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/COD/CODFundsCode	No	One	String	1	Values is: 9 = check, cashiers check or money order - no cash allowed	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
CODAmount	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/COD/CODAmount	Yes	One	Container	N/A	N/A	N/A
CurrencyCode	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/COD/CODAmount/CurrencyCode	No	One	String	3	COD amount currency code type. Defaults to the currency used in the destination country.	
MonetaryValue	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/COD/CODAmount/MonetaryValue	Yes	One	String	1..8	COD Amount.	See Table Shipment COD for maximum amounts of COD by destination country
ReturnOfDocumentIndicator	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/ReturnOfDocumentIndicator	No	One	Empty	N/A	Return of Documents Indicator If the flag is present, the shipper has requested the ReturnOfDocument accessorial be added to the shipment	Valid For Poland to Poland shipment only.
DeliveryConfirmation	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/DeliveryConfirmation	No	One	Container	N/A	N/A	For list of allowed origin/destinations please refer to Appendix.
DCISType	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/DeliveryConfirmation/DCISType	Yes*	One	String	1	Type of delivery confirmation	Valid values are: 1 - Delivery Confirmation Signature Required; 2 - Delivery Confirmation Adult Signature Required
UPScarbonneutralIndicator	/RatingServiceSelectionRequest/Shipment/ShipmentServiceOptions/UPScarbonneutralIndicator	No	One	String	0	UPS carbon neutral indicator - Required to rate carbon neutral shipments at the shipment level	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
RateInformation	/RatingServiceSelectionRequest/Shipment/RateInformation	No	One	Container	N/A	Rate Information	
NegotiatedRatesIndicator	/RatingServiceSelectionRequest/Shipment/RateInformation/NegotiatedRatesIndicator	No	One	String	0	NegotiatedRatesIndicator is required to display two types of discounts: 1) Bids or Account Based Rates 2) Web/Promotional Discounts Bids or Account Based Rates: If the indicator is present in the XML Request the response will contain negotiated rates for an authorized account. Web/Promotional Discounts: If the indicator is present, the Web/Promotional Discounts will be reflected in the negotiated rates returned in the XML response for an authorized account.	
RateChartIndicator	/RatingServiceSelectionRequest/Shipment/RateInformation/RateChartIndicator	No	One	String		RateChartIndicator, if present in request, response will contain RateChart element	
InvoiceLineTotal	/RatingServiceSelectionRequest/Shipment/InvoiceLineTotal	Cond	One	Container	N/A	Container to hold Invoice Line Total Information.	Required if the shipment is from US/PR Outbound to non US/PR destination and the PackagingType is UPS PAK(04)
CurrencyCode	/RatingServiceSelectionRequest/Shipment/InvoiceLineTotal/CurrencyCode	No	One	String	3	Invoice Line Total currency type. Defaults to the rating currency used in the shipper's country. If entered, the Currency code should match the origin country's currency code, otherwise the currency code entered will be ignored	Note: UPS doesn't support all international currency codes. Please check the developer guides for Supported Currency codes.

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
MonetaryValue	/RatingServiceSelectionRequest/Shipment/InvoiceLineTotal/MonetaryValue	Yes*	One	String	1..19	Invoice Line Total amount for the shipment.	Valid values are from 1 to 99999999

## 1.8.4 Rate Response

### Rate Response

The RatingServiceSelectionResponse message contains a single XML document that conforms to the following XML structure.

Note: The “Required” Column has four potential values:

Yes: *Always* required

No: *Always* optional

Yes\*: *Conditionally* required

Cond: Conditional

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
RatingServiceSelectionResponse	/RatingServiceSelectionResponse	Yes	One	Container	N/A	N/A	
Response	/RatingServiceSelectionResponse/Response	Yes	One	Container	N/A	N/A	
TransactionReference	/RatingServiceSelectionResponse/Response/TransactionReference	No	One	Container	N/A	N/A	
CustomerContext	/RatingServiceSelectionResponse/Response/TransactionReference/CustomerContext	No	One	String	0..512	Customer provided data. If this data is present in the request, it is echoed back to the customer	
ResponseStatusCode	/RatingServiceSelectionResponse/Response/ResponseStatusCode	Yes	One	String	1	Identifies the success or failure of the interchange. 1 = Success; 0 = Failure	
ResponseStatusDescription	/RatingServiceSelectionResponse/Response/ResponseStatusDescription	No	One	String	1..15	Describes the Response Status Code	
Error	/RatingServiceSelectionResponse/Response/Error	No	Many	Container	N/A	If an error is encountered during the interchange, the Response contains an error. If the error is present, then the ErrorSeverity and ErrorCode are required	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
ErrorSeverity	/RatingServiceSelectionResponse/Response/Error/ErrorSeverity	Yes	One	String	1...15	Describes the severity of the error. (Hard or Transient)	
ErrorCode	/RatingServiceSelectionResponse/Response/Error/ErrorCode	Yes	One	String	1...15	A numeric value that describes the error. Each tool defines a range of error codes. Based on the current functionality only the first error is returned and processing terminates	
ErrorDescription	/RatingServiceSelectionResponse/Response/Error/ErrorDescription	No	One	String	1...50	Describes the error code	
ErrorLocation	/RatingServiceSelectionResponse/Response/Error/ErrorLocation	No	Many	Container	N/A	Identifies the element in error	
ErrorLocationElementName	/RatingServiceSelectionResponse/Response/Error/ErrorLocation/ErrorLocationElementName	No	One	String	1...512	The Xpath name of the element in error. This is a valid Xpath pointing to an element in the request document	
RatedShipment	/RatingServiceSelectionResponse/RatedShipment	Yes	One	Container	N/A	N/A	
Service	/RatingServiceSelectionResponse/RatedShipment/Service	Yes	One	Container	N/A	N/A	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
Code	/RatingServiceSelectionResponse/RatedShipment/Service/Code	Yes	One	String	2	Rated shipment's UPS service	
Description	/RatingServiceSelectionResponse/RatedShipment/Service/Description	No	One	String	35	Rated shipment's UPS service Description	
RateChart	/RatingServiceSelectionResponse/RatedShipment/RateChart	Cond	One	String	1	Rate Type With which Shipment is rated. Possible RateChart values for different regions will be:  US 48 origin: 1 – Daily Rates, 3 – Standard List Rates, 4 – Retail Rates  Alaska/Hawaii origin: 1 – Daily Rates, 3 – Daily Rates, 4 – Retail Rates  All Other origins: 1 – Rates 3 and 4 do not apply	
RatedShipmentWarning	/RatingServiceSelectionResponse/RatedShipment/RatedShipmentWarning	No	One	String	150	Location of warning messages	
BillingWeight	/RatingServiceSelectionResponse/RatedShipment/BillingWeight	Yes	One	Container	N/A	N/A	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
UnitOfMeasurement	/RatingServiceSelectionResponse/RatedShipment/BillingWeight/UnitOfMeasurement	Yes	One	Container	N/A	N/A	
Code	/RatingServiceSelectionResponse/RatedShipment/BillingWeight/UnitOfMeasurement/Code	Yes	One	String	3	Code associated with the unit of measure for the billable weight of a shipment	
Description	/RatingServiceSelectionResponse/RatedShipment/BillingWeight/UnitOfMeasurement/Description	No	One	String	35	Description for the billable weight associated with the shipment	
Weight	/RatingServiceSelectionResponse/RatedShipment/BillingWeight/Weight	Yes	One	String	5.1	Value for the billable weight associated with the shipment	
TransportationCharges	/RatingServiceSelectionResponse/RatedShipment/TransportationCharges	Yes	One	Container	N/A	N/A	
CurrencyCode	/RatingServiceSelectionResponse/RatedShipment/TransportationCharges/CurrencyCode	No	One	String	3	IATA currency code associated with the transportation costs for the shipment	
MonetaryValue	/RatingServiceSelectionResponse/RatedShipment/TransportationCharges/MonetaryValue	Yes	One	String	16.2	Value for the transportation costs associated with the shipment	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
ServiceOptionsCharges	/RatingServiceSelectionResponse/RatedShipment/ServiceOptionsCharges	Yes	One	Container	N/A	N/A	
CurrencyCode	/RatingServiceSelectionResponse/RatedShipment/ServiceOptionsCharges/CurrencyCode	No	One	String	3	IATA currency code associated with the accessorial charges for the shipment	
MonetaryValue	/RatingServiceSelectionResponse/RatedShipment/ServiceOptionsCharges/MonetaryValue	Yes	One	String	16.2	The value for the accessorial charges associated with the shipment	
TotalCharges	/RatingServiceSelectionResponse/RatedShipment/TotalCharges	Yes	One	Container	N/A	N/A	
CurrencyCode	/RatingServiceSelectionResponse/RatedShipment/TotalCharges/CurrencyCode	No	One	String	3	IATA currency code associated with the total charges for the shipment	
MonetaryValue	/RatingServiceSelectionResponse/RatedShipment/TotalCharges/MonetaryValue	Yes	One	String	16.2	Value for the total charges associated with the shipment	
GuaranteedDaysToDelivery	/RatingServiceSelectionResponse/RatedShipment/GuaranteedDaysToDelivery	Yes	One	String	8	Rated shipment's guaranteed delivery date. Denotes UPS published guarantee times. (i.e., 3 Day Select = 3)	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
ScheduledDeliveryTime	/RatingServiceSelectionResponse/RatedShipment/ScheduledDeliveryTime	Yes	One	String	6	Rated shipment's committed delivery time	
RatedPackage	/RatingServiceSelectionResponse/RatedShipment/RatedPackage	Yes	200	Container	N/A	N/A	
TransportationCharges	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/TransportationCharges	No	One	Container	N/A	N/A	
CurrencyCode	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/TransportationCharges/CurrencyCode	No	One	String	3	IATA currency code associated with the transportation costs for the package	
MonetaryValue	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/TransportationCharges/MonetaryValue	Yes	One	String	16.2	Value for the transportation costs associated with the package.	
ServiceOptionsCharges	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/ServiceOptionsCharges	No	One	Container	N/A	N/A	
CurrencyCode	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/ServiceOptionsCharges/CurrencyCode	No	One	String	3	IATA currency code associated with the accessorial charges for the package	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
MonetaryValue	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/ServiceOptionsCharges/MonetaryValue	Yes	One	String	16.2	Value for the accessorial charges associated with the package	
TotalCharges	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/TotalCharges	No	One	Container	N/A	N/A	
CurrencyCode	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/TotalCharges/CurrencyCode	Yes	One	String	3	IATA currency code associated with the total charges for the package	
MonetaryValue	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/TotalCharges/MonetaryValue	Yes	One	String	16.2	Value for the total charges associated with the package	
Weight	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/Weight	No	One	String	5.1	Weight of the package in the rated shipment.	
BillingWeight	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/BillingWeight	No	One	Container	N/A	N/A	
UnitOfMeasurement	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/BillingWeight/UnitOfMeasurement	Yes	One	Container	N/A	N/A	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
Code	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/BillingWeight/UnitOfMeasurement/Code	Yes	One	String	3	Code associated with the unit of measure for the billable weight of a package	
Description	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/BillingWeight/UnitOfMeasurement/Description	Yes	One	String	1..35	Description associated with the unit of measure for the billable weight of a package	
Weight	/RatingServiceSelectionResponse/RatedShipment/RatedPackage/BillingWeight/Weight	Yes	One	String	5.1	Value for the billable weight associated with the package	
NegotiatedRates	/RatingServiceSelectionResponse/RatedShipment/NegotiatedRates	Cond	One	Container	N/A		
NetSummaryCharges	/RatingServiceSelectionResponse/RatedShipment/NegotiatedRates/NetSummaryCharges	Cond	One	Container	N/A		
GrandTotal	/RatingServiceSelectionResponse/RatedShipment/NegotiatedRates/NetSummaryCharges/GrandTotal	Cond	One	Container	N/A		
CurrencyCode	/RatingServiceSelectionResponse/RatedShipment/NegotiatedRates/NetSummaryCharges/GrandTotal/CurrencyCode	Yes	One	String	3	Net Summary charges currency code type	

Name	XPath	Required	Max Allowed	Type	Length	Description	Validation Rules
MonetaryValue	/RatingServiceSelectionResponse/RatedShipment/NegotiatedRates/NetSummaryCharges/GrandTotal/MonetaryValue	Yes	One	String	1..19	Net Summary Grand Total Charges for Account Based Rating.	

## 1.9 Customer Integration Environment

The Customer Integration Environment allows customers to test their application prior to launch. This environment is intended for integration testing of customer applications with the UPS servers. No stress testing should ever be performed by customers against any UPS systems. Once your application has been thoroughly tested, you should redirect the application to the UPS Production Environment. Please note that while the Customer Integration Environment maintains system availability 24 hours, 7 days each week, there are occasional system down times to allow for server maintenance.

### 1.9.1 Negotiated Rates

Negotiated Rates are available in the UPS Customer Integration Environment and are returned when the `NegotiatedRateIndicator` tag is provided in the rate request. The Negotiated Rates returned *do not reflect the contractual rate and may vary*. (A flat 1% discount is returned)

Also in the Customer Integration Environment the shipper eligibility for Negotiated Rates is not fully verified. For shipper eligibility requirements refer to Negotiated Rates section within the UPS Rates & Service Selection section.

#### *1.9.1.1 Rates & Service Selection*

Test your Rates & Service application using valid and invalid date elements including postal codes, weights and package types. This will ensure that your application has the ability to process success and error responses correctly.

#### *1.9.1.2 Verifying Shipping Rates*

Shipping rates quoted are estimates based on the information supplied. Other shipping charges may apply and the final shipping charge may differ depending upon UPS Account Number and how the package is tendered to UPS. Please see the applicable UPS Rate and Service Guide for details.

When comparing shipment charges between applications and API providing UPS rates, be sure that the requests are identical. Working through any discrepancies will require knowledge of all parameters posted along with defaults, numeric rounding, and rate table used by the applications being compared.

For more information on UPS Services, refer to the UPS Service Guide at:

<http://www.ups.com/using/svc-index.html>.

You can check your results against the UPS Quick Cost Calculator™ web application located at:

<http://wwwapps.ups.com/servlet/QCCServlet>.

For integration testing, you should direct your test Rate and Service Selection software to:

<https://wwwcie.ups.com/ups.app/xml/Rate>.

### ***1.9.1.3 System Availability***

The Customer Integration Environment is available 24 hours a day, 7 days a week.

### ***1.9.1.4 Server Availability Check***

All of the UPS services work using HTTPS POST. Using the same URL as you point your application to, perform an HTTPS GET. If the server is available, it will reply with the service name, remote user, server port, server name, and servlet path. To see this in action, type the following URL in your web browser:

<https://wwwcie.ups.com/ups.app/xml/Rate>

The following will be returned:

**Service Name: Rate**  
**Remote User: null**  
**Server Port: 443**  
**Server Name: wwwcie.ups.com**  
**Servlet Path: /Rate**

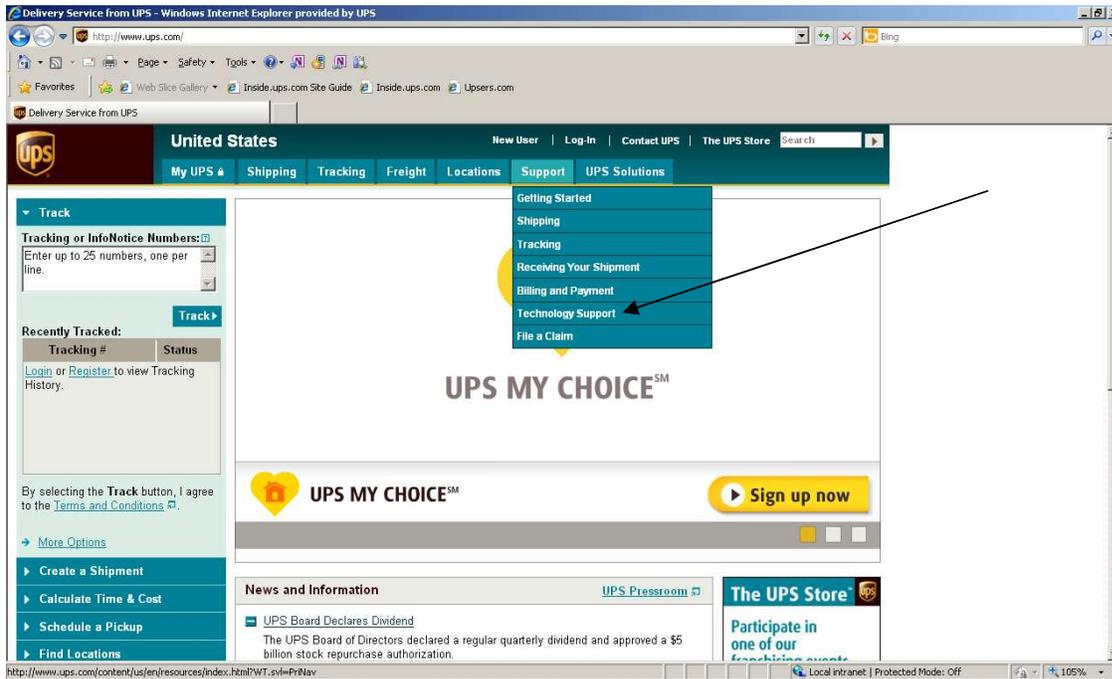
Once testing is completed please direct your Rating Package XML to the URL below for production:

<https://onlinetools.ups.com/ups.app/xml/Rate>

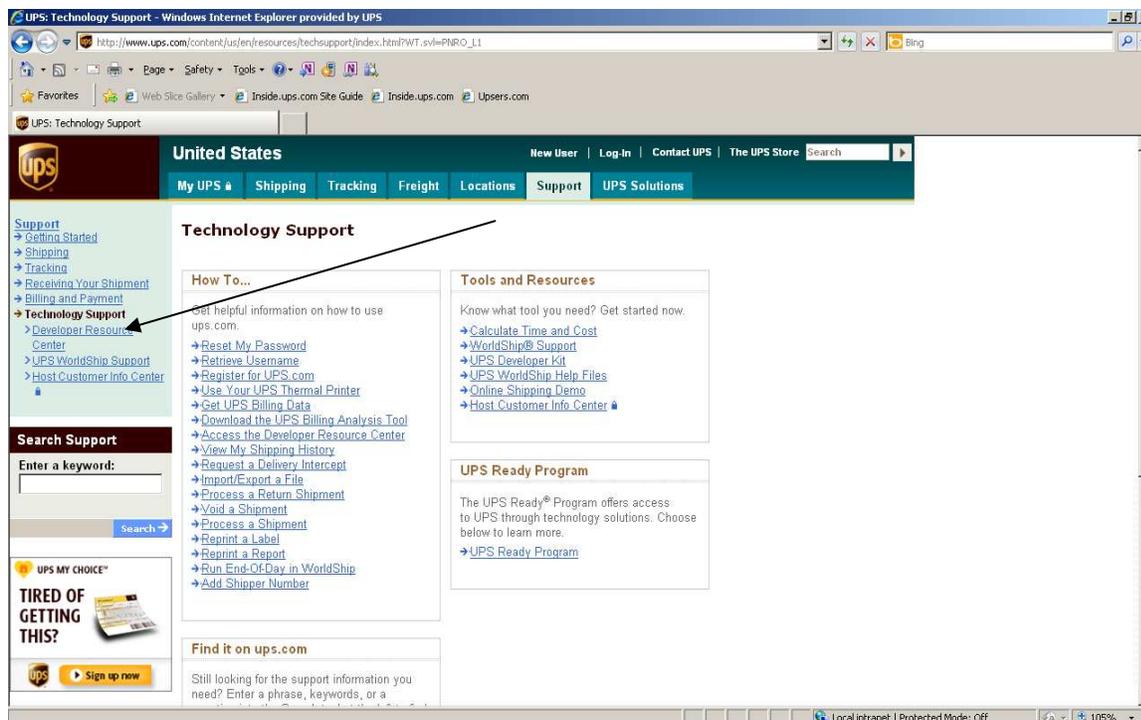
## Appendix A Accessing Tech Support (US Site Example)

Go to ups.com and log in to myUPS with your ID and PW.

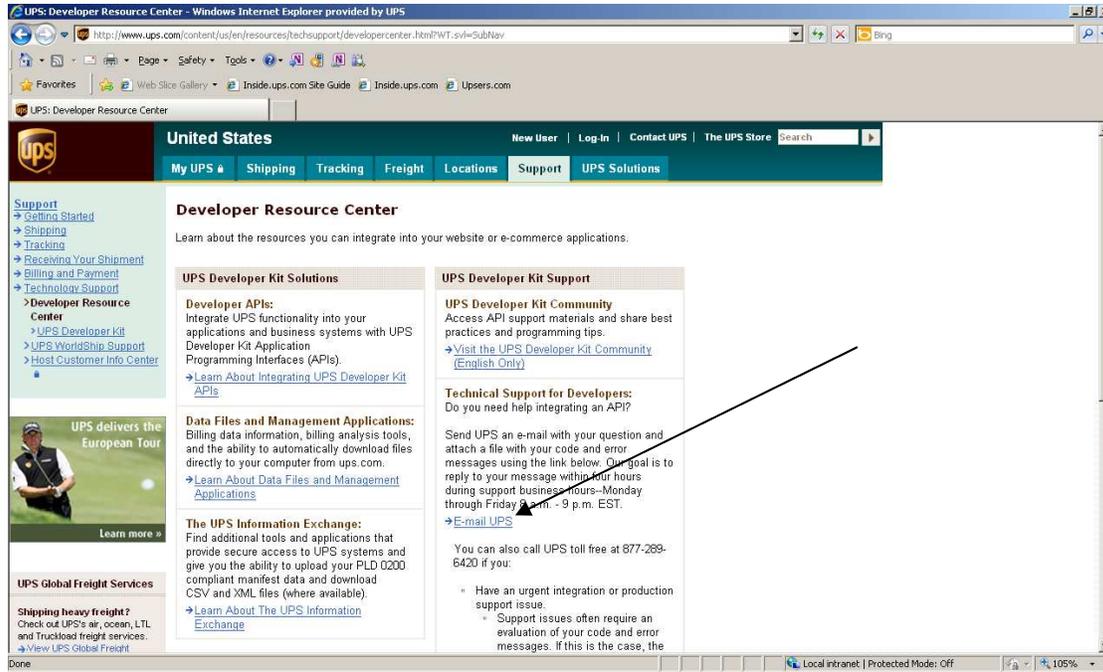
Hover over the “Support” tab, and select “Technology Support” from the drop-down.



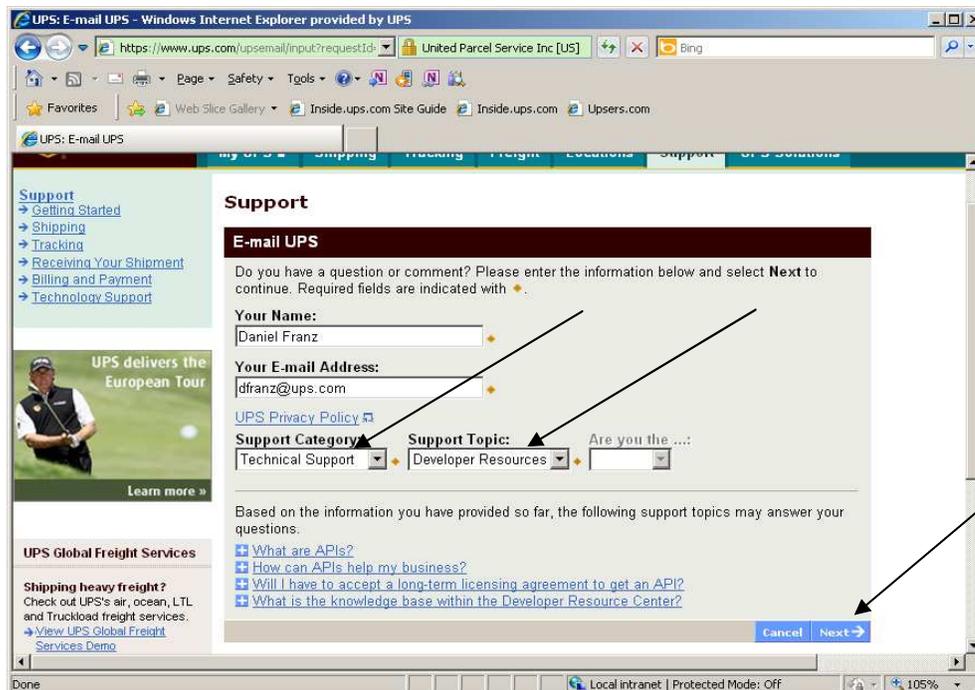
From the Technology Support page select the Developer Resource Center link from the left navigation.



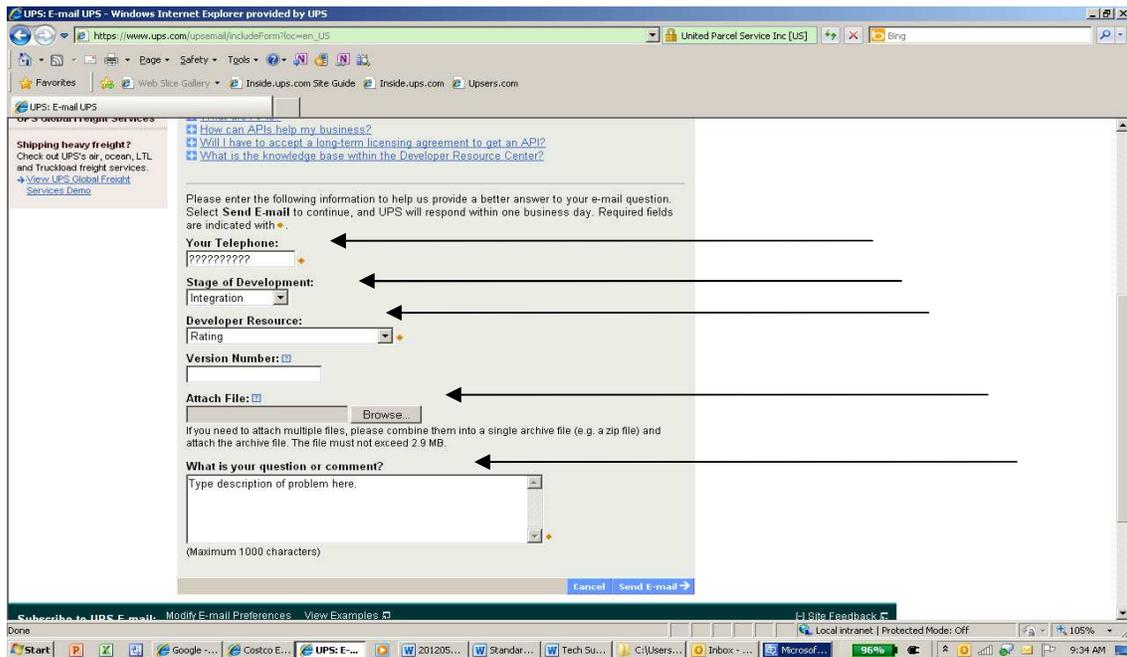
From the Developer Resource Center page select the “Email UPS” link in right hand column.



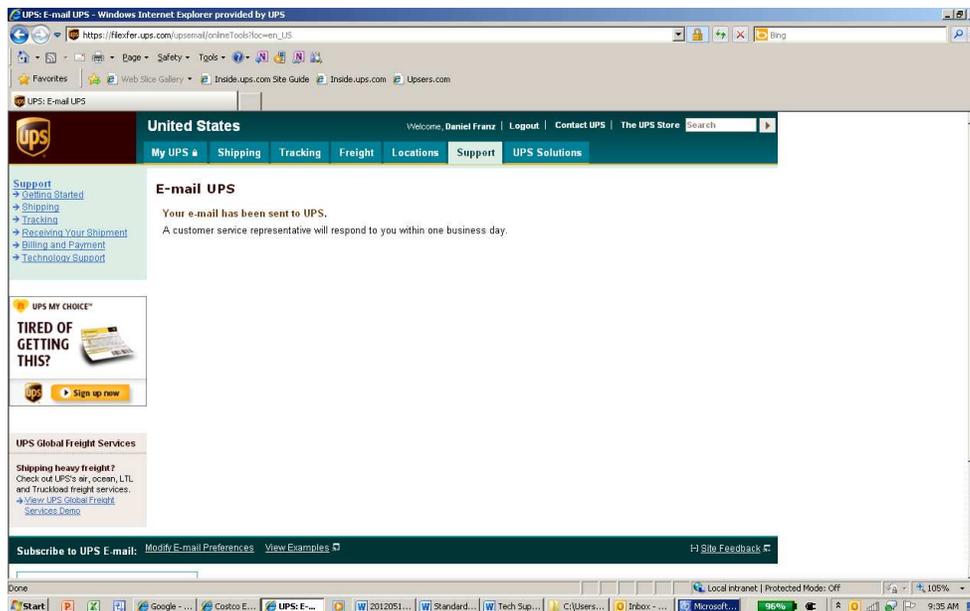
Complete Name, email address, Support Category must be “Technical Support”, and Support Topic must be “Developer Resource”. Select the “Next” button.



Scroll down the page and complete the remainder of the email form including “Your Telephone”, “Stage of Development”, “Developer Resource” which is which API you are integrating, “Attach File” where you attach your XML Request/Response Pair, and any pertinent description of the issues in the “What is your question or comment?” field. Select “Send Email” button.



The screen below will appear. Please see “Technical Support (US)” within this document for tech support hours of operation and response times.



## Appendix B – Rating Error Codes

To discover errors, check the ResponseStatusCode element. A “1” normally indicates a successful response, whereas a “0” indicates an error, either Transient or Hard. When an error occurs there will also be an error code, and an error description.

- Success – Successful responses may or may not include **Warnings**.
  - (without warnings) Request is processed as anticipated by the client.
  - (with warnings) *Warning* messages indicate that UPS was able to process the request; however (potentially) unanticipated results have also occurred. The warning contains information in the response that should be passed to the end user.
- Errors – will return two different levels of severity.
  - *Transient* errors are temporary errors, due to temporary high server loads or scheduled maintenance, for example. The application may re-issue the request at a later time.
  - *Hard* errors indicate that an error existed in the request that UPS could not resolve. These errors are critical and prevent requests from processing.

Applications should not re-issue requests with Hard errors without first correcting the error. The following table lists the errors that UPS may return in response to a request.

Common Errors can apply to all Web Services and API;

Error Code	Severity	Description
10001	Hard	The XML document is not well formed
10002	Hard	The XML document is well formed but the document is not valid
10003	Hard	The XML document is either empty or null
10006	Hard	Although the document is well formed and valid, the element content contains values which do not conform to the rules and constraints contained in this specification
10013	Hard	The message is too large to be processed by the Application
20001	Transient	General process failure
20002	Hard	The specified service name, {0}, and version number, {1}, combination is invalid
20003	Hard	Please check the server environment for the proper J2EE ws apis
20006	Hard	Invalid request action
20012	Hard	The Client Information exceeds its Maximum Limit of {0}
250000	Hard	No XML declaration in the XML document
250001	Hard	Invalid Access License for the tool. Please re-license.
250002	Hard	Invalid UserId/Password
250003	Hard	Invalid Access License number
250004	Hard	Incorrect UserId or Password
250005	Hard	No Access and Authentication Credentials provided
250006	Hard	The maximum number of user access attempts was exceeded
250007	Hard	The UserId is currently locked out; please try again in 24 hours.
250009	Hard	License Number not found in the UPS database

Error Code	Severity	Description
250050	Transient	License system not available

Rating API specific errors:

Error Code	Severity	Description
110000	Hard	Rating and Service Selection currently unavailable.
110001	Transient	Rating and Service Selection temporarily unavailable.
110002	Hard	No packages in shipment
110003	Hard	Maximum number of packages exceeded
110005	Hard	This multi piece shipment contains one or more letters.
110006	Hard	Two different shipment notification memos were provided at either the shipment- or package-level. Only one memo is allowed per level.
110050	Hard	Illegal RequestAction
110051	Hard	Illegal RequestOption
110099	Hard	Validation Error: {0}
110101	Hard	Missing/Invalid shipper name
110102	Hard	Missing/Invalid shipper address line 1
110103	Hard	Invalid shipper address line 2
110104	Hard	Invalid shipper address line 3
110105	Hard	Missing Illegal Shipper/Address/City
110106	Hard	Missing/Illegal Shipper/Address/StateProvCode
110107	Hard	Missing/Illegal Shipper/PostalCode. {0}
110108	Hard	Missing/Illegal Shipper/CountryCode
110109	Hard	Missing Illegal Shipper/PhoneNumber
110110	Hard	Missing/Illegal Shipper/AttentionName
110111	Hard	Shipment/Shipper/EmailAddress cannot exceed a length of 50 characters
110112	Hard	Shipment/Shipper/EmailAddress is an invalid format
110113	Hard	Shipper number must contain alphanumeric characters only
110114	Hard	Shipper/PhoneNumber/StructuredPhoneNumber/PhoneExtension cannot exceed the length of 4.
110115	Hard	Shipper/PhoneNumber must be at least 10 alphanumeric characters
110116	Hard	Shipper/PhoneNumber/StructuredPhoneNumber/PhoneExtension must contain only numbers
110117	Hard	Shipper/PhoneNumber/StructuredPhoneNumber/PhoneExtension is only available if the shipper is located in US, Puerto Rico or Canada
110118	Hard	Shipper/PhoneNumber/StructuredPhoneNumber/PhoneExtension is only valid if a phone number is given
110119	Hard	Shipper phone number and phone extension together cannot be more than 15 digits long

110120	Hard	The country associated with Shipper/ShipperNumber must be the same as the shipments origin country
110121	Hard	Shipper/ShipperNumber is not an active account
110122	Hard	Invalid Shipper/ShipperNumber
110200	Hard	Missing/Illegal ShipTo/CompanyName
110201	Hard	Missing/Illegal ShipTo/AttentionName
110202	Hard	Missing/Illegal ShipTo/Address/AddressLine1
110203	Hard	Illegal ShipTo/Address/AddressLine2
110204	Hard	Illegal ShipTo/Address/AddressLine3
110205	Hard	Missing/Illegal ShipTo/Address/City
110206	Hard	Missing/Illegal ShipTo/Address/StateProvCode
110207	Hard	Missing/Illegal ShipTo/Address/PostalCode. {0}
110208	Hard	Missing/Illegal ShipTo/Address/CountryCode
110209	Hard	Missing/Illegal ShipTo/PhoneNumber
110210	Hard	Shipment/ShipTo/EmailAddress cannot exceed a length of 50 characters
110211	Hard	Shipment/ShipTo/EmailAddress is an invalid format
110212	Hard	ShipTo/PhoneNumber/StructuredPhoneNumber/PhoneExtension cannot exceed the length of 4.
110213	Hard	ShipTo/PhoneNumber must be at least 10 alphanumeric characters
110214	Hard	ShipTo/PhoneNumber/StructuredPhoneNumber/PhoneExtension must contain only numbers
110215	Hard	ShipTo/PhoneNumber/StructuredPhoneNumber/PhoneExtension is only available if the shipper is located in US, Puerto Rico or Canada
110216	Hard	ShipTo/PhoneNumber/StructuredPhoneNumber/PhoneExtension is only valid if a phone number is given
110217	Hard	ShipTo phone number and phone extension together cannot be more than 15 digits long
110300	Hard	Missing/Illegal ShipFrom/CompanyName
110301	Hard	Missing/Illegal ShipFrom/AttentionName
110302	Hard	Missing/Illegal ShipFrom/Address/AddressLine1
110303	Hard	Illegal ShipFrom/Address/AddressLine2
110304	Hard	Illegal ShipFrom/Address/AddressLine3
110305	Hard	Missing/Illegal ShipFrom/Address/City
110306	Hard	Missing/Illegal ShipFrom/Address/StateProvCode
110307	Hard	Missing/Illegal ShipFrom/Address/PostalCode. {0}
110308	Hard	Missing/Illegal ShipFrom/Address/CountryCode
110309	Hard	Missing/Illegal ShipFrom/PhoneNumber
110310	Hard	Shipment/ShipFrom/EmailAddress cannot exceed a length of 50 characters
110311	Hard	Shipment/ShipFrom/EmailAddress is an invalid format
110312	Hard	ShipFrom/PhoneNumber/StructuredPhoneNumber/PhoneExtension cannot exceed the length of 4.

110313	Hard	ShipFrom/PhoneNumber must be at least 10 alphanumeric characters
110314	Hard	ShipFrom/PhoneNumber/StructuredPhoneNumber/PhoneExtension must contain only numbers
110315	Hard	ShipFrom/PhoneNumber/StructuredPhoneNumber/PhoneExtension is only available if the shipper is located in US, Puerto Rico or Canada
110316	Hard	ShipFrom/PhoneNumber/StructuredPhoneNumber/PhoneExtension is only valid if a phone number is given
110317	Hard	The ShipFrom country must be the same as the Shipper country
110318	Hard	ShipFrom phone number and phone extension together cannot be more than 15 digits long
110400	Hard	The shipment is missing payment information.
110401	Hard	Missing/Illegal PaymentInformation/Prepaid/BillShipper
110402	Hard	Missing/Illegal PaymentInformation/Prepaid/BillShipper/CreditCardType
110403	Hard	Missing/Illegal PaymentInformation/Prepaid/BillShipper/CreditCardNumber
110404	Hard	Missing/Illegal PaymentInformation/Prepaid/BillShipper/CreditCardExpirationDate
110406	Hard	Mismatch Credit Card Type/Credit Card Number
110407	Hard	The credit card you have provided in PaymentInformation/Prepaid/BillShipper/CreditCard has expired
110408	Hard	Missing PaymentInformation/Prepaid/BillShipper/CreditCard/Type
110409	Hard	Error validating backup credit card
110410	Hard	One payment method allowed for PaymentInformation/Prepaid/BillShipper
110411	Hard	PaymentInformation/Prepaid/BillShipper/CreditCard is not allowed for shipments whose origin is not US or Puerto Rico
110412	Hard	Missing/Invalid PaymentInformation/Prepaid/BillShipper/AccountNumber
110413	Hard	The shipper number PaymentInformation/Prepaid/BillShipper/AccountNumber cannot be billed because the account is not active
110414	Hard	Credit card authorization failed, contact your financial institution
110500	Hard	Missing/Illegal Service/Code
110501	Hard	Invalid Shipment/ReferenceNumber/Value
110502	Hard	InvoiceLineTotal/MonetaryValue must be greater than 0
110503	Hard	Shipment/Description must not exceed the length of 35 characters
110504	Hard	InvoiceLineTotal is not allowed for this shipment
110505	Hard	Saturday Delivery Option cannot be used for this shipment
110506	Hard	Invalid Shipment/ReferenceNumber/Code
110508	Hard	Missing/Invalid ShipmentServiceOptions/OnCallAir/Pickup/PickupDate
110509	Hard	Invalid shipment declared value
110510	Hard	Invalid/Missing ShipmentServiceOptions/ OnCallAir/PickupDetails/ LatestPickupTime

110511	Hard	Invalid ShipmentServiceOptions/OnCallAir/PickupDetails/PickupDate or Invalid ShipmentServiceOptions/OnCallAir/PickupDetails/EarliestPickupTime or Invalid ShipmentServiceOptions/OnCallAir/PickupDetails/LatestPickupTime
110512	Hard	Shipment/Description is required for this shipment.
110513	Hard	The first Email Address used for Email Shipment Notification exceeds the maximum length of 50 characters.
110514	Hard	Invalid format for first Email Address used for Email Shipment Notification
110515	Hard	ShipmentServiceOptions/ShipmentNotification/EMailMessage/Memo cannot exceed the length of 150 characters
110516	Hard	The first Email Address used for Email Shipment Notification is missing or contains invalid characters
110517	Hard	The second Email Address used for Email Shipment Notification exceeds the maximum length of 50 characters
110518	Hard	The format of the second Email Address entered in for Email Shipment Notification is invalid
110519	Hard	The second Email Address entered in for Email Shipment Notification is missing or contains invalid characters
110520	Hard	For a shipment, the maximum number of Email Addresses allowed for Email Shipment Notifications is 2
110521	Hard	For a shipment, the maximum number of Memos allowed for Email Shipment Notifications is 1
110522	Hard	Invalid Shipment/AlternateDeliveryTime
110523	Hard	Shipment/DocumentsOnly is invalid with the shipments origin/destination pair
110524	Hard	Package Pickup Request is not available with this shipments service
110525	Hard	AlternateDeliveryTime must be between {0} and {1}
110526	Hard	InvoiceLineTotal/MonetaryValue may not exceed the length of 8
110527	Hard	Cannot use multiple types of currency in a shipment
110528	Hard	A shipment can have only one type of UnitOfMeasurement for Dimensions
110529	Hard	A shipment can have only one type of UnitOfMeasurement for a Weight
110530	Hard	ShipmentServiceOptions/OnCallAir/PickupDetails/SuiteRoomID length cannot exceed 8 characters
110531	Hard	ShipmentServiceOptions/OnCallAir/PickupDetails/FloorID length cannot exceed 3 characters
110532	Hard	ShipmentServiceOptions/OnCallAir/PickupDetails/Location length cannot exceed 11 characters
110533	Hard	ShipmentServiceOptions/OnCallAir/PickupDetails/EarliestTimeReady is required

110534	Hard	ShipmentServiceOptions/OnCallAir/PickupDetails/LatestTimeReady is required
110535	Hard	ShipmentServiceOptions/OnCallAir/PickupDetails/ContactInfo/Name is required
110536	Hard	ShipmentServiceOptions/OnCallAir/PickupDetails/ContactInfo/Phone Number is required
110537	Hard	Invalid/Missing ShipmentServiceOptions/OnCallAir/PickupDetails/EarliestPickupTime
110538	Hard	On Call Air Pickup Error, {0}
110539	Hard	InvoiceLineTotal/MonetaryValue is required and must be a whole number
110540	Hard	On Call Air Pickup is not available for this shipment
110541	Hard	Shipment/ReferenceNumber is not allowed for this shipment
110542	Hard	Package/ReferenceNumber is not allowed for this shipment
110543	Hard	No more than 2 Shipment/ReferenceNumber can be given per shipment
110544	Hard	No more than 2 Package/ReferenceNumber can be given per package
110545	Hard	Shipment/Description is not valid with this shipment
110546	Hard	{0} is not a valid unit of measurement for weight for this shipment
110547	Hard	{0} is not a valid unit of measurement for dimensions for this shipment
110548	Hard	A shipment cannot have a KGS/IN or LBS/CM as its unit of measurements
110600	Hard	Missing/Invalid Package/PackagingType/Code
110601	Hard	Missing/Illegal Package/PackageWeight/Weight
110602	Hard	Missing/Illegal Combination of Package/Dimensions
110603	Hard	Illegal Package/Reference/Value
110604	Hard	Invalid package declared value
110605	Hard	Mismatch PackageDimensions/PackageType
110606	Hard	Mismatch PackageDimensions/PackageType/PackageWeight
110607	Hard	Illegal Package Reference/Code
110608	Hard	Package/PackageWeight/Weight is required
110609	Hard	All Package Dimensions are required and each must be greater than 0
110610	Hard	The COD Amount is invalid. Please check the value entered
110611	Hard	PackageServiceOptions/VerbalConfirmationContactInfo/Name cannot exceed a length of 35
110612	Hard	PackageServiceOptions/VerbalConfirmation/ContactInfo/PhoneNumber cannot exceed the length of 15
110613	Hard	PackageServiceOptions/VerbalConfirmation/ContactInfo/PhoneNumber must be at least 10 alphanumeric characters
110614	Hard	PackageServiceOptions/VerbalConfirmation/PhoneNumber/StructuredPhoneNumber/PhoneExtension cannot exceed the length of 4

110615	Hard	PackageServiceOptions/VerbalConfirmation/PhoneNumber/StructuredPhoneNumber/PhoneExtension cannot exceed the length of 4
110616	Hard	Package/PackageWeight/Weight cannot exceed a length of 5
110617	Hard	Package declared value cannot exceed a value of 999
110618	Hard	PackageServiceOptions/VerbalConfirmation/ContactInfo/ Name/ is required for verbal confirmation of delivery
110619	Hard	PackageServiceOptions/VerbalConfirmation/ContactInfo/PhoneNumber is required for verbal confirmation of delivery
110620	Hard	Package/PackageWeight, Package/DimensionalWeight, Package/OversizePackage and Package/Dimensions do not apply to UPS Envelopes
110621	Hard	Package declared value cannot be greater than {0} {1}
110622	Hard	Package/Description is required
110623	Hard	Invalid Package/Description
110624	Hard	A Return Shipment can only have one package
110625	Hard	Invalid/Missing Package/ReturnService/Code
110626	Hard	Invalid COD Funds Code
110627	Hard	Invalid COD Code
110628	Hard	Invalid PackageServiceOptions/LabelDelivery/EMailMessage/ReplyToEMailAddress
110629	Hard	Invalid PackageServiceOptions/LabelDelivery/EMailMessage/EMailAddress
110630	Hard	Invalid PackageServiceOptions/LabelDelivery/EMailMessage/UndeliverableEMailAddress
110631	Hard	Invalid PackageServiceOptions/LabelDelivery/EMailMessage/Memo
110632	Hard	Invalid PackageServiceOptions/LabelDelivery/EMailMessage/Subject
110633	Hard	Invalid PackageServiceOptions/PickupNotification/EMailMessage/ReplyToEMailAddress
110634	Hard	Invalid PackageServiceOptions/PickupNotification/EMailMessage/EMailAddress
110635	Hard	Invalid PackageServiceOptions/PickupNotification/EMailMessage/UndeliverableEMailAddress
110636	Hard	Invalid PackageServiceOptions/PickupNotification/EMailMessage/Memo
110637	Hard	Invalid PackageServiceOptions/PickupNotification/EMailMessage/Subject
110638	Hard	Invalid PackageServiceOptions/ReturnNotification/EMailMessage/ReplyToEMailAddress
110639	Hard	Invalid PackageServiceOptions/ReturnNotification/EMailMessage/EMailAddress[1]
110640	Hard	Invalid PackageServiceOptions/ReturnNotification/EMailMessage/EMailAddress[2]
110641	Hard	Invalid PackageServiceOptions/ReturnNotification/EMailMessage/UndeliverableEMailAddress

110642	Hard	Invalid PackageServiceOptions/ReturnNotification/EMailMessage/Memo
110643	Hard	Invalid PackageServiceOptions/ReturnNotification/EMailMessage/Subject
110644	Hard	PackageServiceOptions/LabelDelivery is not valid with the shipments return service type
110645	Hard	PackageServiceOptions/PickupNotification is not valid with the shipments return service
110646	Hard	Package Level COD is not valid for the shipment origin and/or destination
110647	Hard	Invalid COD currency code. Please use the destination country currency code.
110700	Hard	Missing/Illegal LabelSpecification/LabelPrintMethod/Code
110701	Hard	Missing/Illegal LabelSpecification/HTTPUserAgent
110702	Hard	Missing/Illegal Label Specification/LabelImageFormat/Code
110703	Hard	Missing/Illegal Combination of LabelSpecification/LabelStockSize
110704	Hard	Missing/Invalid LabelSpecification/ LabelStockSize/Height
110705	Hard	Missing/Invalid LabelSpecification/ LabelStockSize/Width
110710	Hard	Invalid package Delivery Confirmation type
110801	Hard	Address Validation Error on Shipment/Shipper/Address
110802	Hard	Address Validation Error on Shipment/ShipTo/Address
110803	Hard	Address Validation Error on Shipment/ShipFrom/Address
111000	Hard	Verify that the supplied country code for the ship from and/or ship to is correct and is in uppercase (Cannot locate site).
111005	Hard	The COD option cannot be combined with the Return Services option.
111010	Hard	Hazardous materials cannot be shipped using Return Services.
111015	Hard	The Saturday Delivery option cannot be combined with the Return Services option.
111020	Hard	The Delivery Confirmation option cannot be combined with the Return Services option.
111025	Hard	The maximum declared amount was exceeded.
111030	Hard	Packages must weigh more than zero pounds.
111031	Hard	Packages must weigh more than zero kg.
111035	Hard	The maximum per package weight for that service from the selected country is %country.maxPkgWeight% pounds.
111036	Hard	The maximum per package weight for that service from the selected country is %country.maxPkgWeight% kg.
111040	Hard	The Return Services accessories are unavailable with the requested service.
111045	Hard	The Saturday Delivery option is unavailable with the requested service.
111047	Hard	Saturday Delivery may not be combined with this product and container type.
111050	Hard	Package exceeds the maximum size total constraints of %maxLengthGirth% (length + girth where girth is 2 x width plus 2 x height).

111055	Hard	Package exceeds the maximum length constraint of 108 inches.
111056	Hard	This package exceeds the maximum length constraint of 270 cm.
111057	Hard	This measurement system is not valid for the selected country.
111060	Hard	Hazardous Materials cannot be shipped in a UPS Letter.
111063	Hard	The requested accessory cannot be combined with the selected service.
111065	Hard	The shipment of Hazardous Materials to the selected location is unavailable.
111070	Hard	The requested accessory is not allowed with this pickup method.
111075	Hard	The International Declared Value accessory is not valid with a domestic service.
111080	Hard	The Domestic Declared Value accessory is not valid with an international service.
111085	Hard	The requested accessory cannot be added to this shipment.
111086	Hard	Only one Authorized Return Service option is allowed.
111087	Hard	The Authorized Return Service option is not allowed for shipments.
111090	Hard	The requested billing zone is invalid for the selected product.
111091	Hard	The selected service is unavailable to an extended area.
111095	Hard	A zone cannot be determined for the package
111100	Hard	The requested service is invalid for the selected site.
111105	Hard	The requested accessory key is invalid for the selected site.
111106	Hard	Unsupported country specified.
111107	Hard	An origin postal code must be specified.
111108	Hard	Shipments must have at least 1 package.
111109	Hard	Delivery Area Surcharge Tier is invalid.
111110	Hard	Typically indicates a syntax error in the cfg file
111115	Hard	The COD amount must be greater than zero.
111120	Hard	The COD amount cannot exceed \$1,000 when a cashiers check or money order is requested.
111121	Hard	The COD value entered exceeds the maximum allowed for cash
111125	Hard	The COD amount cannot exceed \$50,000.
111126	Hard	The COD value entered exceeds the maximum allowed for check
111130	Hard	The Saturday Pickup option cannot be combined with the Return Services option.
111135	Hard	The Saturday Pickup option cannot be combined with the Saturday Delivery option.
111140	Hard	The Saturday Pickup option is unavailable with the selected service.
111145	Hard	Only one Delivery Confirmation option is allowed.
111150	Hard	The Delivery Confirmation option is unavailable with the selected service.
111155	Hard	The COD option is unavailable with the selected service.
111160	Hard	The requested accessory option is unavailable with the selected billing option.
111165	Hard	The Verbal Confirmation of Delivery option cannot be combined with the Return Services option.

111170	Hard	The Delivery Confirmation option cannot be combined with the Verbal Confirmation of Delivery option.
111175	Hard	The Verbal Confirmation of Delivery option is unavailable with the selected service.
111180	Hard	Consignee Billing is unavailable with the selected service.
111185	Hard	The selected service is unavailable to the desired country
111190	Hard	Only one Return Services option is allowed.
111195	Hard	The requested billing option is unavailable with the selected service.
111196	Hard	The requested billing option is unavailable with UPS Letters.
111200	Hard	The requested service Saturday Delivery is unavailable to the selected location.
111205	Hard	The Additional Handling option is unavailable with the selected service.
111206	Hard	The Additional Handling option is unavailable with UPS Letters.
111210	Hard	The requested service is unavailable between the selected locations.
111211	Hard	The requested accessory option is unavailable between the selected locations.
111212	Hard	The requested type of container is unavailable between the selected locations.
111213	Hard	The requested billing option is unavailable between the selected locations.
111214	Hard	Cannot ship between the selected locations.
111215	Hard	The requested service is unavailable to residential destinations.
111219	Hard	The requested service is unavailable between the selected locations. Please check your Documents Only, Letter/Envelope, and Saturday Delivery settings as these may affect service availability.
111220	Hard	The Ship Notification option cannot be combined with the Return Services option.
111222	Hard	A shipment using the Return Services Electronic Return Label option must contain only Goods in Free Circulation.
111225	Hard	The Return Services option is unavailable to the selected location.
111230	Hard	Next Day Air Early AM is unavailable with the selected service.
111231	Hard	Switzerland Domestic Container must weigh greater than or equal to 2 KG.
111232	Hard	Worldwide Express Plus from Europe to Switzerland must be UPS Envelope or document only.
111235	Hard	No more than %acsGrp.grpLimit% of the following may be combined: %acsGrp.grpMembers%.
111240	Hard	The requested accessory may not be applied to a package more than %accs.limit% time(s).
111245	Hard	The Saturday Pickup option cannot be combined with the Shipper Duty Fees option.
111250	Hard	The Saturday Delivery option cannot be combined with the Shipper Duty Fees option.

111255	Hard	The Shipper Duty Fee option is unavailable with the selected service.
111260	Hard	The Shipper Duty Fee option is unavailable with the selected billing option.
111261	Hard	The requested option is unavailable with the selected service.
111262	Hard	The accessory is not valid with the selected option.
111265	Hard	The requested billing option is unavailable to the selected location.
111266	Hard	The requested currency is not a legal tender in this country.
111275	Hard	Cannot create attribute %attrName%.
111280	Hard	Cannot remove attribute %attrName%.
111285	Hard	The postal code %postal% is invalid for %state% %country%.
111286	Hard	%state% is not a valid state abbreviation for %country%.
111290	Hard	The requested billing option is invalid.
111295	Hard	Package %child.index% failed validation in shipment.
111300	Hard	The Shipper Pays Duty - VAT Unpaid option is unavailable with the selected option.
111305	Hard	The Shipper Pays Duty - VAT Unpaid option is unavailable with the selected service.
111310	Hard	The Shipper Pays Duty - VAT Unpaid option is unavailable with the selected billing option.
111315	Hard	The Authorized Return Service option is unavailable with the selected accessory.
111320	Hard	The Authorized Return Service option is unavailable with the selected service.
111325	Hard	The Authorized Return Service is unavailable with the selected billing option.
111330	Hard	The Certificate of Origin is unavailable with the selected accessory.
111335	Hard	The Certificate of Origin is unavailable with the selected service.
111340	Hard	The Certificate of Origin is unavailable with the selected billing option.
111343	Hard	The Certificate of Origin is unavailable from the selected origin.
111345	Hard	The Shipper Export Declaration is unavailable with the selected accessory.
111350	Hard	The Shipper Export Declaration is unavailable with the selected service.
111355	Hard	The Shipper Export Declaration is unavailable with the selected billing option.
111360	Hard	The Worldwide Express Plus is unavailable with the selected service.
111363	Hard	The One Time Pickup is unavailable with the selected service.
111365	Hard	The requested service is not available through the selected acquisition type.
111370	Hard	Unsupported acquisition type.
111375	Hard	The requested service is not valid for shipments with more than 1 package.

111380	Hard	The requested Package service may not be consolidated with the selected shipment service.
111385	Hard	The requested Package billing option does not match the selected shipment billing option.
111390	Hard	The requested Package billing tier does not match the selected shipment billing tier.
111395	Hard	Package consignee %pkg.dest.company% does not match the shipment consignee %ship.dest.company%.
111400	Hard	Package consignee street address %pkg.dest.street1% does not match the shipment consignee street address %ship.dest.street1%.
111405	Hard	Package consignee street address %pkg.dest.street2% does not match the shipment consignee street address %ship.dest.street2%.
111410	Hard	Package consignee street address %pkg.dest.street3% does not match the shipment consignee street address %ship.dest.street3%.
111415	Hard	Package consignee city %pkg.dest.city% does not match the shipment consignee city %ship.dest.city%.
111420	Hard	Package consignee state %pkg.dest.state% does not match the shipment consignee state %ship.dest.state%.
111425	Hard	Package consignee postal code does not match the shipment consignee postal code.
111430	Hard	Package consignee country does not match the shipment consignee country.
111431	Hard	All packages in the shipment must have the same UPS shipper number as the shipment.
111435	Hard	All packages in the shipment must have the Saturday Delivery option if 1 package has it.
111440	Hard	All packages in the shipment must have the Saturday Pickup option if 1 package has it.
111445	Hard	UPS does not allow Hazardous Materials in shipments consisting of more than one piece.
111450	Hard	Only one type of Return Service option is allowed per package.
111455	Hard	All packages in the shipment must have the Return Services option if 1 package has it.
111456	Hard	All packages in the shipment must have the Residential option if 1 package has it.
111457	Hard	Shipments with the Residential option set must have the Residential option set on all packages.
111460	Hard	Shipments cannot exceed a COD amount of \$5000 when requesting a cashiers check or money order.
111465	Hard	The selected Package access method does not match the shipment access method.
111500	Hard	Special rates are unavailable for the selected service using requested containers.

111501	Hard	The selected container is not valid with the requested accessory option.
111510	Hard	Unsupported container type requested.
111511	Hard	Unsupported accessory requested.
111512	Hard	Unsupported billing option requested.
111513	Hard	Unsupported service requested.
111515	Hard	Weight of %weight.actual% exceeds maximum for rating the requested container. Using standard package rates.
111519	Hard	The selected Package rating category does not match the shipment rating category.
112000	Hard	Only one type of oversize can be set on a package
112001	Hard	Oversize 1 (%overSize1MinWeight %) or Oversize 2 (%overSize2MinWeight %) or Oversize 3 (%overSize3MinWeight %) waiver invalid.
111217	Hard	The requested service is unavailable between the selected locations
111502	Hard	The selected country allows Return Services only
119020	Warning	When user indicated Residential indicator is different from AMS Classification.
119058	Hard	Shipper Number {0} does not support pallet Contract Service.
119076	Hard	All package types must be pallets.
119077	Warning	A dimensional surcharge has been added to pallet {0}.
119078	Hard	The maximum dimensions for a pallet are 200 cm by 160 cm by 120 cm.
119079	Hard	The requested service is not valid with pallets with a weight greater than 1000kg. Please select Dedicated Package Courier Same Day Service.
119083	Hard	Pallet {0} exceeds maximum weight.
110971	Warning	Your invoice may vary from the displayed reference rates
110721	Hard	Invalid Shipment Delivery Confirmation Type
113060	Warning	The weight exceeds the limit for the UPS Letter/Envelope rate and will be rated using the weight.
111582	Hard	Missing/Invalid InvoiceLineTotal Monetary Value
10002	Hard	RatingServiceSelectionRequest/Shipment/ InvoiceLineTotal/MonetaryValue
110004	Hard	Package {0} is Void, which is not valid for the Rating and Service Selection service
110007	Hard	{0}
110030	Transient	Shipper, {0}, unrecognized or has not commissioned
110031	Hard	Shipper data access error, {0}
110549	Hard	Invalid Shipment Weight
110950	Hard	Customer Classification Code is required with the requested Pickup Type
111077	Hard	{0}
111201	Hard	Invalid Service Code
111202	Hard	Invalid Accessorial

111203	Hard	Upsell unavailable
111209	Hard	Invalid Service Type
111216	Hard	No Services available
111218	Hard	Unsupported Country
113020	Hard	{0}
113021	Hard	{0}
115581	Hard	Unsupported Customer Classification Code
115582	Hard	Invalid Customer Classification Code
113005	Hard	A service may not guarantee Early AM arrival to dest.city dest.state dest.postal dest.countryname;
113010	Hard	A package in the shipment contains a warning.
119001	Hard	Additional Handling has automatically been set on Package %package.index%.
119002	Hard	Extended Area surcharge applied.
119003	Hard	The requested service may not guarantee Next Day arrival to the selected location.
119004	Hard	Check the UPS Service Guide for supported Saturday delivery destinations within the selected country.
119005	Hard	The requested service may not guarantee Second Day arrival to the selected location.
119006	Hard	The Second Day Air service may not guarantee Second Day arrival to the selected location.
119011	Hard	The maximum declared value amount for the 1-Attempt option is \$1,000
119012	Hard	The maximum declared value amount for the Print and Mail option is \$1,000.
119013	Hard	The maximum declared value amount for the Print Return Label option is \$1,000.
119014	Hard	The maximum declared value amount for the Electronic Delivery option is \$1,000.
119015	Hard	The maximum declared value amount for the 3-Attempt option is \$50,000.
119017	Hard	Oversize 3 indicator has automatically been set on Package.
119018	Hard	Oversize 3 does not apply, and has automatically been removed from Package.
119070	Hard	Large Package Surcharge has been added to Package %package.index%.
119071	Hard	Large Package indicator has been set and Large Package Surcharge has been added to Package %package.index%.
119072	Hard	Additional Handling has been removed. Large Package Surcharge has been;
119077	Warning	A dimensional surcharge has been added to pallet {0}.
119080	Hard	Pallet {0} exceeds maximum width.
119081	Hard	Pallet {0} exceeds maximum height.
119082	Hard	Pallet {0} exceeds maximum length.
110984	Warning	Exceeds maximum weight for rating the requested packaging. Standard package rates apply
110720	Warning	The Account Number of FRS payment information is not FRS enabled.

112045	Hard	The payer of transportation's country is not valid for Carbon Neutral shipments.
112050	Hard	At least one rate information; either negotiated rates or rate chart indicator is required.
10001	Hard	The XML document is not well formed
10002	Hard	The XML document is well formed but the document is not valid
10003	Hard	The XML document is either empty or null
10006	Hard	Although the document is well formed and valid, the element content contains values which do not conform to the rules and constraints contained in this specification
10013	Hard	The message is too large to be processed by the Application
20001	Hard	General process failure
20002	Hard	The specified service name, {0}, and version number, {1}, combination is invalid
20003	Hard	Please check the server environment for the proper J2EE ws apis
20004	Hard	Cannot access the high level business components, {0}
20005	Hard	Cannot access the low level business components, {0}
20006	Hard	Invalid request action
20007	Hard	Missing required field, {0}
20008	Hard	The field, {0}, contains invalid data, {1}
20010	Hard	The phone number contains invalid characters
20011	Hard	The Integration Indicator is no longer supported
20012	Hard	The Client Information exceeds its Maximum Limit of {0}
250000	Hard	No XML declaration in the XML document
250001	Hard	Invalid Access License for the tool. Please re-license.
250002	Hard	Invalid UserId/Password
250003	Hard	Invalid Access License number
250004	Hard	Incorrect UserId or Password

250005	Hard	No Access and Authentication Credentials provided
250006	Hard	The maximum number of user access attempts was exceeded
250007	Hard	The UserId is currently locked out; please try again in 24 hours.
250009	Hard	License Number not found in the UPS database
250010	Hard	Illegal Request Action
250011	Hard	Illegal Request Option
250012	Hard	No tool is requested
250019	Hard	Invalid field value
250020	Hard	Invalid developer license number
250021	Hard	The data length is in error for CompanyName
250022	Hard	The data length is in error for AddressLine1
250023	Hard	The data length is in error for AddressLine2
250024	Hard	The data length is in error for AddressLine3
250025	Hard	The data length is in error for City
250026	Hard	Invalid country code
250027	Hard	The data is in error for StateProvinceCode
250028	Hard	The data length is in error for PostalCode
250029	Hard	The data is in error for phone number
250030	Hard	Invalid e-mail address
250031	Hard	Invalid URL
250032	Hard	Invalid Country Code in AccessLicenseProfile
250033	Hard	Invalid Language Code in AccessLicenseProfile
250034	Hard	Invalid ToolVersion

250035	Hard	The data length is in error for the name of contact person
250036	Hard	The data length is in error for the title of contact person
250037	Hard	The data is in error for fax number
250038	Hard	Error in Shipper Number
250040	Hard	Client software profile is missed for the 3rd party developer license
250041	Hard	Invalid ToolID
250042	Hard	Tool Version not available for the Access License
250043	Hard	Tool ID not available for the Access License
250044	Hard	Tool Version not licensed for developer
250045	Hard	Tool already licensed
250046	Hard	User already has a license
250047	Hard	License number revoked
250048	Hard	Missing License Agreement Text
250049	Hard	Invalid License Agreement Text
250050	Hard	License system not available
250051	Hard	Not allowed to create new license
250052	Hard	Authorization system is currently unavailable
250060	Hard	The data length is in error for the Software Installer
250061	Hard	The data length is in error for the Software Product Name
250062	Hard	The data length is in error for the Software Provider
250063	Hard	The data length is in error for the Software Version Number
250064	Hard	Invalid ToolID/ToolVersion
120001	Hard	XML Shipping System is unavailable, please try again later.

150000	Hard	Tracking service unavailable
126098	Warning	Account authentication is required to be completed to get negotiated rates.

## Appendix C - Country Codes

UPS country code abbreviations generally follow the recommendations of the International Standards Organization, which publishes a list of currency abbreviations in ISO Standard 3166. The following table lists the ISO country codes that ISO had defined when this document was published. The latest information is available from the ISO web site.

Please note that not all UPS services are available in every country. For more information on UPS services, refer to the latest *UPS*

*Rate and Service Guide* available at <http://www.ups.com>.

Country Code	Country Name	Forward Origin	Return Origin
AF	Afghanistan		
AX	Åland Islands		
AL	Albania		Yes
DZ	Algeria		
AS	American Samoa		
AD	Andorra		Yes
AO	Angola		
AI	Anguilla		Yes
AQ	Antarctica		
AG	Antigua and Barbados		Yes
AR	Argentina	Yes	Yes
AM	Armenia		
AW	Aruba		
AU	Australia	Yes	Yes
AT	Austria	Yes	Yes
AZ	Azerbaijan		
BS	Bahamas	Yes	
BH	Bahrain		Yes
BD	Bangladesh		
BB	Barbados		
BY	Belarus		
BE	Belgium	Yes	Yes
BZ	Belize		
BJ	Benin		
BM	Bermuda	Yes	Yes
BT	Bhutan		
BO	Bolivia	Yes	
BA	Bosnia and Herzegovina		
BW	Botswana		
BV	Bouvet Island		
BR	Brazil	Yes	Yes
IO	British Indian Ocean Territory		
BN	Brunei Darussalam		

Country Code	Country Name	Forward Origin	Return Origin
BG	Bulgaria		Yes
BF	Burkina Faso		
BI	Burundi		
KH	Cambodia		
CM	Cameroon		
CA	Canada	Yes	Yes
CV	Cape Verde		
KY	Cayman Islands	Yes	
CF	Central African Republic		
TD	Chad		
CL	Chile	Yes	Yes
CN	China	Yes	Yes
CX	Christmas Island		
CC	Cocos (Keeling) Islands		
CO	Colombia	Yes	Yes
KM	Comoros		
CG	Congo		
CD	Congo, The Democratic Republic of		
CK	Cook Islands		
CR	Costa Rica	Yes	Yes
CI	Côte Divoire		
HR	Croatia		Yes
CU	Cuba		
CY	Cyprus		Yes
CZ	Czech Republic	Yes	Yes
DK	Denmark	Yes	Yes
DJ	Djibouti		
DM	Dominica		
DO	Dominican Republic	Yes	Yes
EC	Ecuador	Yes	Yes
EG	Egypt		Yes
SV	El Salvador	Yes	Yes
GQ	Equatorial Guinea		
ER	Eritrea		
EE	Estonia		Yes
ET	Ethiopia		
FK	Falkland Islands (Malvinas)		
FO	Faroe Islands		
FJ	Fiji		
FI	Finland	Yes	Yes
FR	France	Yes	Yes
GF	French Guiana		
PF	French Polynesia		

Country Code	Country Name	Forward Origin	Return Origin
TF	French Southern Territories		
GA	Gabon		
GM	Gambia		
GE	Georgia		
DE	Germany	Yes	Yes
GH	Ghana		
GI	Gibraltar		
GR	Greece	Yes	Yes
GL	Greenland		
GD	Grenada		Yes
GP	Guadeloupe		
GU	Guam		
GT	Guatemala	Yes	Yes
GG	Guernsey	Yes	Yes
GN	Guinea		
GW	Guinea-Bissau		
GY	Guyana		
HT	Haiti		Yes
HM	Heard Island and McDonald Islands		
VA	Holy See (Vatican City State)		
HN	Honduras	Yes	Yes
HK	Hong Kong	Yes	Yes
HU	Hungary	Yes	Yes
IS	Iceland		Yes
IN	India	Yes	Yes
ID	Indonesia	Yes	Yes
IR	Iran, Islamic Republic of		
IQ	Iraq		
IE	Ireland	Yes	Yes
IM	Isle of Man		
IL	Israel	Yes	Yes
IT	Italy	Yes	Yes
JM	Jamaica		Yes
JP	Japan	Yes	Yes
JE	Jersey	Yes	Yes
JO	Jordan		
KZ	Kazakhstan		
KE	Kenya		
KI	Kiribati		
KP	Korea, Democratic Peoples Republic of		

Country Code	Country Name	Forward Origin	Return Origin
KR	Korea, Republic of	Yes	Yes
KW	Kuwait		Yes
KG	Kyrgyzstan		
LA	Lao Peoples Democratic Republic		
LV	Latvia		Yes
LB	Lebanon		Yes
LS	Lesotho		
LR	Liberia		
LY	Libyan Arab Jamahiriya		
LI	Liechtenstein		Yes
LT	Lithuania		Yes
LU	Luxembourg		Yes
MO	Macao	Yes	Yes
MK	Macedonia, The Former Yugoslav Republic of		
MG	Madagascar		
MW	Malawi		
MY	Malaysia	Yes	Yes
MV	Maldives		
ML	Mali		
MT	Malta		Yes
MH	Marshall Islands		
MQ	Martinique		Yes
MR	Mauritania		
MU	Mauritius		
YT	Mayotte		
MX	Mexico	Yes	Yes
FM	Micronesia, Federated States of		
MD	Moldova, Republic of		
MC	Monaco		Yes
MN	Mongolia		
ME	Montenegro		Yes
MS	Montserrat		Yes
MA	Morocco		
MZ	Mozambique		
MM	Myanmar		
NA	Namibia		
NR	Nauru		
NP	Nepal		
NL	Netherlands	Yes	Yes
AN	Netherlands Antilles		
NC	New Caledonia		

Country Code	Country Name	Forward Origin	Return Origin
NZ	New Zealand	Yes	Yes
NI	Nicaragua	Yes	Yes
NE	Niger		
NG	Nigeria		Yes
NG	Nigeria		
NU	Niue		
NF	Norfolk Island		
MP	Northern Mariana Islands		
NO	Norway	Yes	Yes
OM	Oman		Yes
PK	Pakistan		Yes
PW	Palau		Yes
PS	Palestinian Territory, Occupied		
PA	Panama	Yes	Yes
PG	Papua New Guinea		
PY	Paraguay	Yes	Yes
PE	Peru	Yes	Yes
PH	Philippines	Yes	Yes
PN	Pitcairn		
PL	Poland	Yes	Yes
PT	Portugal	Yes	Yes
PR	Puerto Rico	Yes	Yes
QA	Qatar		Yes
RE	Réunion		
RO	Romania	Yes	Yes
RU	Russian Federation	Yes	Yes
RW	Rwanda		
SH	Saint Helena		
KN	Saint Kitts and Nevis		Yes
LC	Saint Lucia		Yes
PM	Saint Pierre and Miquelon		
VC	Saint Vincent and The Grenadines		Yes
WS	Samoa		
SM	San Marino		Yes
ST	Sao Tome and Principe		
SA	Saudi Arabia		Yes
SN	Senegal		
RS	Serbia		Yes
SC	Seychelles		
SL	Sierra Leone		
SG	Singapore	Yes	Yes
SK	Slovakia		Yes

Country Code	Country Name	Forward Origin	Return Origin
SI	Slovenia		Yes
SB	Solomon Islands		
SO	Somalia		
ZA	South Africa		Yes
GS	South Georgia and The South Sandwich Islands		
ES	Spain	Yes	Yes
LK	Sri Lanka		Yes
SD	Sudan		
SR	Suriname		Yes
SJ	Svalbard and Jan Mayen		
SZ	Swaziland		
SE	Sweden	Yes	Yes
CH	Switzerland	Yes	Yes
SY	Syrian Arab Republic		
TW	Taiwan, Province of China	Yes	Yes
TJ	Tajikistan		
TZ	Tanzania, United Republic of		
TH	Thailand	Yes	Yes
TL	Timor-Leste		
TG	Togo		
TK	Tokelau		
TO	Tonga		
TT	Trinidad and Tobago		
TN	Tunisia		Yes
TR	Turkey	Yes	Yes
TM	Turkmenistan		
TC	Turks and Caicos Islands		Yes
TV	Tuvalu		
UG	Uganda		
UA	Ukraine		Yes
AE	United Arab Emirates		Yes
GB	United Kingdom	Yes	Yes
US	United States	Yes	Yes
UM	United States Minor Outlying Islands		
UY	Uruguay		Yes
UZ	Uzbekistan		
VU	Vanuatu		
VE	Venezuela	Yes	Yes
VN	Viet Nam	Yes	
VG	Virgin Islands, British		
VI	Virgin Islands, U.S.	Yes	Yes
WF	Wallis and Futuna		

<b>Country Code</b>	<b>Country Name</b>	<b>Forward Origin</b>	<b>Return Origin</b>
EH	Western Sahara		
YE	Yemen		
ZM	Zambia		
ZW	Zimbabwe		

## Appendix D - Currency Codes

UPS currency code abbreviations generally follow the recommendations of the International Standards Organization, which publishes a list of currency abbreviations in ISO Standard 4217, for which the latest information is available from the ISO website. Exceptions are noted in bold in the table below.

Note that countries sometimes change their official currency. UPS may require some time after the introduction of a new currency before it can fully support that currency. In addition, UPS may continue to support the older currency for an interim period in order to provide backwards compatibility. UPS may also require the use of currencies other than the official currency for some countries. For the latest information, please contact your UPS Developer API representative.

Country/Region	Currency Name	Currency Code
Afghanistan	Afghani	AFN
Albania	Lek	ALL
Algeria	Algerian Dinar	DZD
American Samoa	US Dollar	USD
Andorra	Euro	EUR
Angola	Kwanza	AOA
Anguilla	East Caribbean Dollar	XCD
Antigua And Barbuda	East Caribbean Dollar	XCD
Argentina	Argentine Peso	ARS
Armenia	Armenian Dram	AMD
Aruba	Aruban Guilder	AWG
Australia	Australian Dollar	AUD
Austria	Euro	EUR
Azerbaijan	Azerbaijani Manat	AZN
Bahamas	Bahamian Dollar	BSD
Bahrain	Bahraini Dinar	BHD
Bangladesh	Taka	BDT
Barbados	Barbados Dollar	BBD
Belarus	Belarussian Ruble	BYR
Belgium	Euro	EUR
Belize	Belize Dollar	BZD
Benin	CFA Franc BCEAO	XOF
Bermuda	Bermudian Dollar (customarily known as Bermuda Dollar)	BMD
Bhutan	Indian Rupee	INR
Bhutan	Ngultrum	BTN
Bolivia	Boliviano	BOB
Bolivia	Mvdol	BOV
Bosnia and Herzegovina	Convertible Marks	BAM
Botswana	Pula	BWP
Bouvet Island	Norwegian Krone	NOK
Brazil	Brazilian Real	BRL

Country/Region	Currency Name	Currency Code
British Indian Ocean Territory	US Dollar	USD
Brunei Darussalam	Brunei Dollar	BND
Bulgaria	Bulgarian Lev	BGN
Burkina Faso	CFA Franc BCEAO	XOF
Burundi	Burundi Franc	BIF
Cambodia	Riel	KHR
Cameroon	US Dollar	USD
Canada	Canadian Dollar	CAD
Cape Verde	Cape Verde Escudo	CVE
Cayman Islands	Cayman Islands Dollar	KYD
Central African Republic	CFA Franc BEAC	XAF
Chad	CFA Franc BEAC	XAF
Chile	Chilean Peso	CLP
Chile	Unidades de formento	CLF
China	Yuan Renminbi	RMB
Christmas Island	Australian Dollar	AUD
Cocos (Keeling) Islands	Australian Dollar	AUD
Colombia	Colombian Peso	COP
Colombia	Unidad de Valor Real	COU
Comoros	Comoro Franc	KMF
Congo	CFA Franc BEAC	XAF
Congo, The Democratic Republic of	Franc Congolais	CDF
Cook Islands	New Zealand Dollar	NZD
Costa Rica	Costa Rican Colon	CRC
Côte Divoire	CFA Franc BCEAO	XOF
Croatia	Croatian Kuna	HRK
Cuba	Cuban Peso	CUP
Cyprus	Euro	EUR
Czech Republic	Czech Koruna	CZK
Denmark	Danish Krone	DKK
Djibouti	Djibouti Franc	DJF
Dominica	East Caribbean Dollar	XCD
Dominican Republic	Dominican Peso	DOP
Ecuador	US Dollar	USD
Egypt	Egyptian Pound	EGP
El Salvador	El Salvador Colon	SVC
El Salvador	US Dollar	USD
Equatorial Guinea	CFA Franc BEAC	XAF
Eritrea	Nakfa	ERN
Estonia	Euro	EUR
Ethiopia	Ethiopian Birr	ETB
Falkland Islands (Malvinas)	Falkland Islands Pound	FKP
Faroe Islands	Danish Krone	DKK
Fiji	Fiji Dollar	FJD

Country/Region	Currency Name	Currency Code
Finland	Euro	EUR
France	Euro	EUR
French Guiana	Euro	EUR
French Polynesia	CFP Franc	XPF
French Southern Territories	Euro	EUR
Gabon	CFA Franc BEAC	XAF
Gambia	Dalasi	GMD
Georgia	Lari	GEL
Germany	Euro	EUR
Ghana	Cedi	GHS
Gibraltar	Gibraltar Pound	GIP
Greece	Euro	EUR
Greenland	Danish Krone	DKK
Grenada	East Caribbean Dollar	XCD
Guadeloupe	Euro	EUR
Guam	US Dollar	USD
Guatemala	Quetzal	GTQ
Guernsey	Pound Sterling	GBP
Guinea	Guinea Franc	GNF
Guinea-Bissau	Guinea-Bissau Peso	GWP
Guinea-Bissau	CFA Franc BCEAO	XOF
Guyana	Guyana Dollar	GYD
Haiti	Gourde	HTG
Haiti	US Dollar	USD
Heard Island and McDonald Islands	Australian Dollar	AUD
Holy See (Vatican City State)	Euro	EUR
Honduras	Lempira	HNL
Hong Kong	Hong Kong Dollar	HKD
Hungary	Forint	HUF
Iceland	Iceland Krona	ISK
India	Indian Rupee	INR
Indonesia	Rupiah	IDR
Iran (Islamic Republic of)	Iranian Rial	IRR
Iraq	Iraqi Dinar	IQD
Ireland	Euro	EUR
Israel	New Israeli Sheqel	ILS
Italy	Euro	EUR
Jamaica	Jamaican Dollar	JMD
Japan	Yen	JPY
Jersey	Pound Sterling	GBP
Jordan	Jordanian Dinar	JOD
Kazakhstan	Tenge	KZT
Kenya	Kenyan Shilling	KES

Country/Region	Currency Name	Currency Code
Kiribati	Australian Dollar	AUD
Korea, Democratic Peoples Republic of	North Korean Won	KPW
Korea, Republic of	Won	KRW
Kuwait	Kuwaiti Dinar	KWD
Kyrgyzstan	Som	KGS
Lao Peoples Democratic Republic	Kip	LAK
Latvia	Latvian Lats	LVL
Lebanon	Lebanese Pound	LBP
Lesotho	Rand	ZAR
Lesotho	Loti	LSL
Liberia	Liberian Dollar	LRD
Libyan Arab Jamahiriya	Libyan Dinar	LYD
Liechtenstein	Swiss Franc	CHF
Lithuania	Lithuanian Litas	LTL
Luxembourg	Euro	EUR
Macao	Pataca	MOP
Macedonia, The Former Yugoslav Republic of	Denar	MKD
Madagascar	Malagascy Ariary	MGA
Malawi	Kwacha	MWK
Malaysia	Malaysian Ringgit	MYR
Maldives	Rufiyaa	MVR
Mali	CFA Franc BCEAO	XOF
Malta	Euro	EUR
Marshall Islands	US Dollar	USD
Martinique	Euro	EUR
Mauritania	Ouguiya	MRO
Mauritius	Mauritius Rupee	MUR
Mayotte	Euro	EUR
Mexico	Mexican Peso	MXN
Mexico	Mexican Unidad de Inversion (UID)	MXV
Micronesia (Federated States of)	US Dollar	USD
Moldova, Republic of	Moldovan Leu	MDL
Monaco	Euro	EUR
Mongolia	Tugrik	MNT
Montenegro	Euro	EUR
Montserrat	East Caribbean Dollar	XCD
Morocco	Moroccan Dirham	MAD
Mozambique	Metical	MZN
Myanmar	Kyat	MMK
Namibia	Rand	ZAR

<b>Country/Region</b>	<b>Currency Name</b>	<b>Currency Code</b>
Namibia	Namibian Dollar	NAD
Nauru	Australian Dollar	AUD
Nepal	Nepalese Rupee	NPR
Netherlands	Euro	EUR
Netherlands Antilles	Netherlands Antillian Guilder	ANG
New Caledonia	CFP Franc	XPF
New Zealand	New Zealand Dollar	NZD
Nicaragua	Cordoba Oro	NIO
Niger	CFA Franc BCEAO	XOF
Nigeria	Naira	NGN
Niue	New Zealand Dollar	NZD
Norfolk Island	Australian Dollar	AUD
Northern Mariana Islands	US Dollar	USD
Norway	Norwegian Krone	NOK
Oman	Rial Omani	OMR
Pakistan	Pakistan Rupee	PKR
Palau	US Dollar	USD
Panama	Balboa	PAB
Panama	US Dollar	USD
Papua New Guinea	Kina	PGK
Paraguay	Guarani	PYG
Peru	Nuevo Sol	PEN
Philippines	Philippine Peso	PHP
Pitcairn	New Zealand Dollar	NZD
Poland	Zloty	PLN
Portugal	Euro	EUR
Puerto Rico	US Dollar	USD
Qatar	Qatari Rial	QAR
Réunion	Euro	EUR
Romania	New Leu	RON
Russian Federation	Russian Ruble	RUB
Rwanda	Rwanda Franc	RWF
Saint Helena	Saint Helena Pound	SHP
Saint Kitts and Nevis	East Caribbean Dollar	XCD
Saint Lucia	East Caribbean Dollar	XCD
Saint Pierre and Miquelon	Euro	EUR
Saint Vincent and The Grenadines	East Caribbean Dollar	XCD
Samoa	Tala	WST
San Marino	Euro	EUR
São Tome and Principe	Dobra	STD
Saudi Arabia	Saudi Riyal	SAR
Senegal	CFA Franc BCEAO	XOF
Serbia	Serbian Dinar	RSD

<b>Country/Region</b>	<b>Currency Name</b>	<b>Currency Code</b>
Seychelles	Seychelles Rupee	SCR
Sierra Leone	Leone	SLL
Singapore	Singapore Dollar	SGD
Slovakia	Euro	EUR
Slovenia	Euro	EUR
Solomon Islands	Solomon Islands Dollar	SBD
Somalia	Somali Shilling	SOS
South Africa	Rand	ZAR
Spain	Euro	EUR
Sri Lanka	Sri Lanka Rupee	LKR
Sudan	Sudanese Dinar	SDD
Suriname	Surinam Dollar	SRD
Svalbard and Jan Mayen	Norwegian Krone	NOK
Swaziland	Lilangeni	SZL
Sweden	Swedish Krona	SEK
Switzerland	Swiss Franc	CHF
Switzerland	WIR Franc	CHW
Switzerland	WIR Euro	CHE
Syrian Arab Republic	Syrian Pound	SYP
Taiwan, Province of China	New Taiwan Dollar	TWD
Tajikistan	Somoni	TJS
Tanzania, United Republic of	Tanzanian Shilling	TZS
Thailand	Baht	THB
Timor-Leste	US Dollar	USD
Togo	CFA Franc BCEAO	XOF
Tokelau	New Zealand Dollar	NZD
Tonga	Paanga	TOP
Trinidad And Tobago	Trinidad and Tobago Dollar	TTD
Tunisia	Tunisian Dinar	TND
Turkey	New Turkish Lira	TRY
Turkmenistan	Manat	TMM
Turks And Caicos Islands	US Dollar	USD
Tuvalu	Australian Dollar	AUD
Uganda	Uganda Shilling	UGX
Ukraine	Hryvnia	UAH
United Arab Emirates	UAE Dirham	AED
United Kingdom	Pound Sterling	GBP
United States	US Dollar	USD
United States Minor Outlying Islands	US Dollar	USD
Uruguay	Peso Uruguayo	UYU
Uruguay	Uruguay Peso en Unidades Indexadas	UYI

<b>Country/Region</b>	<b>Currency Name</b>	<b>Currency Code</b>
Uzbekistan	Uzbekistan Sum	UZS
Vanuatu	Vatu	VUV
Venezuela	Bolivar	VEB
Viet Nam	Dong	VND
Virgin Islands (British)	US Dollar	USD
Virgin Islands (US)	US Dollar	USD
Wallis And Futuna	CFP Franc	XPF
Western Sahara	Moroccan Dirham	MAD
Yemen	Yemeni Rial	YER
Zambia	Kwacha	ZMK
Zimbabwe	Zimbabwe Dollar	USD

## Appendix E - Service Codes

UPS offers a wide variety of package delivery services. The following tables list the service code values for these services; they are ordered by the origin of the shipment. The final table lists service codes for freight shipments. For more information on UPS services, refer to the latest *UPS Rate and Service Guide* available at <http://www.ups.com>.

Description	Category	Shipping Service Code	Rating Service Code
UPS Express	Polish Domestic Shipments	07	07
UPS ExpeditedSM	Polish Domestic Shipments	08	08
UPS Standard	Polish Domestic Shipments	11	11
UPS Worldwide Express PlusSM	Polish Domestic Shipments	54	54
UPS Saver	Polish Domestic Shipments	65	65
UPS Today StandardSM	Polish Domestic Shipments	82	82
UPS Today Dedicated CourierSM	Polish Domestic Shipments	83	83
UPS Today Express	Polish Domestic Shipments	85	85
UPS Today Express Saver	Polish Domestic Shipments	86	86
UPS Express	Shipments Originating in Canada	01	01
UPS Worldwide ExpeditedSM	Shipments Originating in Canada	08	02
UPS Standard	Shipments Originating in Canada	11	11
UPS Three-Day Select®	Shipments Originating in Canada	12	12
UPS Saver SM	Shipments Originating in Canada	65	13
UPS Express Early A.M. SM	Shipments Originating in Canada	14	14
UPS Express	Shipments Originating in Canada going to the 01 United States		07
UPS Express	Shipments Originating in Mexico	07	07
UPS ExpeditedSM	Shipments Originating in Mexico	08	08
UPS Standard	Shipments Originating in Mexico	11	11
UPS Express Plus	Shipments Originating in Mexico	54	54
UPS Saver	Shipments Originating in Mexico	65	65
UPS Express	Shipments Originating in Other Countries	07	07
UPS Worldwide ExpeditedSM	Shipments Originating in Other Countries	08	08
UPS Standard	Shipments Originating in Other Countries	11	11
UPS Worldwide Express PlusSM	Shipments Originating in Other Countries	54	54
UPS Saver	Shipments Originating in Other Countries	65	65
UPS Next Day Air®	Shipments Originating in Puerto Rico	01	01
UPS Second Day Air®	Shipments Originating in Puerto Rico	02	02
UPS Ground	Shipments Originating in Puerto Rico	03	03
UPS Worldwide ExpressSM	Shipments Originating in Puerto Rico	07	07
UPS Worldwide ExpeditedSM	Shipments Originating in Puerto Rico	08	08
UPS Next Day Air® Early A.M. SM	Shipments Originating in Puerto Rico	14	14
UPS Worldwide Express PlusSM	Shipments Originating in Puerto Rico	54	54
UPS Saver	Shipments Originating in Puerto Rico	65	65
UPS Express	Shipments Originating in the European Union	07	07

<b>Description</b>	<b>Category</b>	<b>Shipping Service Code</b>	<b>Rating Service Code</b>
UPS ExpeditedSM	Shipments Originating in the European Union	08	08
UPS Standard	Shipments Originating in the European Union	11	11
UPS Worldwide Express PlusSM	Shipments Originating in the European Union	54	54
UPS Saver	Shipments Originating in the European Union	65	65
UPS Next Day Air®	Shipments Originating in United States	01	01
UPS Second Day Air®	Shipments Originating in United States	02	02
UPS Ground	Shipments Originating in United States	03	03
UPS Worldwide ExpressSM	Shipments Originating in United States	07	07
UPS Worldwide ExpeditedSM	Shipments Originating in United States	08	08
UPS Standard	Shipments Originating in United States	11	11
UPS Three-Day Select®	Shipments Originating in United States	12	12
UPS Next Day Air® Early A.M. SM	Shipments Originating in United States	14	14
UPS Worldwide Express PlusSM	Shipments Originating in United States	54	54
UPS Second Day Air A.M.®	Shipments Originating in United States	59	59
UPS Saver	Shipments Originating in United States	65	65
UPS Next Day Air®	United States Domestic Shipments	01	01
UPS Second Day Air®	United States Domestic Shipments	02	02
UPS Ground	United States Domestic Shipments	03	03
UPS Three-Day Select®	United States Domestic Shipments	12	12
UPS Next Day Air Saver®	United States Domestic Shipments	13	13
UPS Next Day Air® Early A.M. SM	United States Domestic Shipments	14	14
UPS Second Day Air A.M.®	United States Domestic Shipments	59	59
UPS Saver	United States Domestic Shipments	65	65

## Appendix F – Valid Origin/Destination Combinations: for DC, DC-SR, and DC-ASR Accessorials

Origin	Destination	DC	DC-SR	DC-ASR
US50	US50, PR	P	P	P
	CA, VI	--	S	S
	Intl (not CA, PR, VI)	--	S	S
CA	CA	P	P	P
	US50, PR, VI	--	S	S
	Intl (not US, PR, VI)	--	S	S
PR	PR, US50	P	P	P
	CA, VI	--	S	S
	Intl (not US, CA, VI)	--	S	S
Intl RAVE-supported origin countries (not US, PR, CA, VI; see list below)	Intl (natl, transborder, worldwide) – per Mktg validation tables	--	S	S
<p>S = shipment-level accessorial; P= package-level accessorial. All the origin/destination pairs valid for forward shipments only.</p>				

## Appendix G - Frequently Asked Questions: Rating Package

API	Category	Question	Answer
Rating	Rate versus Shop	What is the difference between a "Rate" requests versus a "Shop" request using the Rating API - Package?	A "Rate" request returns the rate for a single service for each package, while a "Shop" request returns the rates for all services available between a given origin/destination pair for each package.
Rating	Choosing a service	Can a customer compare services for a shipment using the Rating API - Package?	Yes, if a user chooses the "Shop" option in the rate request, as opposed to the "Rate" option, the application will return all available services for the specified lane pair, then the customer chooses which they want. On the contrary, the "Rate" options require that the user specify the service that they want in the request. If the service is not valid for the lane pair then an error message will be returned in the rate response. If it is believed that the services the Rating API is returning is incorrect, a user may compare it with what Calculate Time and Cost displays for the same request criteria on UPS.com.
Rating	Return Services	Does Rating API support Return Services?	No, Rating API does not support any Return services
Rating	Number of packages per shipment	What is the maximum number of packages you can rate per shipment via Rating API - Package?	You can rate a max of 200 packages per shipment via this API.
Rating	Time in Transit Support	Does the Rating API - Package support time in transit results?	No.
Rating	Rating for Web applications	Are rates across all UPS Web applications always the same?	Yes, this is intended. The rates for other Web applications should not differ from the Rating API. The only time rates would be different is if there is a defect within the applications; otherwise it should be assumed that they are all in sync, as each are validated by the engine on the backend. If a user questions rates returned by the Rating API, he could generate the exact rate request on Calculate Time and Cost on UPS.com, to confirm if rates are accurate.  Rates will differ if the user has negotiated rates set up with their account number and is not sending a negotiated rates indicator via the Rating API or does not have negotiated rates approved to be used with the Rating API
Rating	Shipping/ Labeling	Can you ship and/or print labels via the Rating API - Package?	The Rating API does not support the printing of labels and also does not allow shipping. Its only functionality is to provide shipment rates.
Rating	Testing and Production environments	Are there separate test IDs necessary to access the test verses production environment?	No the User ID obtained from the Developer Resource Center on UPS.com to obtain test access to the Rating API will also allow the user to access the Production environment.
Rating	Resi/ Comm	Does Rating API automatically validate Residential verses Commercial addresses?	If the residential indicator is included in the rate request then the shipment will be classified as residential. There is a second validation done by the backend and if the address is really supposed to be commercial then the classification will be

API	Category	Question	Answer
			changed and the customer is notified of this in the rate response.
Rating	Rating Scheduled Time	Does UPS Rating API display the time of day for example: 1da saver residential and 1da saver commercial in a rural area, etc.?	Yes. There is a scheduled delivery time within the response message.
Rating	International Rates	Does the Rating API support international rates?	Yes. As long as the shipper number is from the origin country the requests will be validated.
Rating	Accessorials	What accessorials does the Rating API support?	Please see the Rating API Package section for a listing of supported accessorials.
Rating	Maximum Packages Rated	What is the maximum number of packages that can be rated through the Rating API - Package?	When using the "Rate" function there is a maximum of 200 Package containers allowed in each API request. One Package container contains the information for one individual package. In addition, when using the "Shop" function there is a maximum of 50 package containers allowed in each API request.
Rating	Hundredweight Warning Message	How is Hundred Weight (CWT) handled in the Rating API?	HundredWeight (CWT) is applied automatically by the Rating API when the shipper number is set up for HundredWeight and the shipment meets the necessary criteria. There is no indicator to include in the rate request. ABR will provide contract rates based on the tier associated with the shipper's number. Shipper number must be included in the rate request. The rate response doesn't mention that hundredweight has been applied either.
Rating	99 Account Number Limitation	How do I associate more than 99 account numbers for use with the Rating APIs?	The Rating API requires that the account (shipper) number and User ID used in the rate request be associated within the My UPS Account summary of the User ID. This can be accomplished by logging in to UPS.com and navigating to [MyUPS]->[Manage My UPS]->[Account Summary]->[Add a UPS Account]. IMS validates the User ID/password combination.
Rating	Extended Area Surcharge	Is Extended Area Surcharge included within the rating response?	The Extended Area Surcharge (EAS) is returned with the transportation charges. If EAS is applied to a shipment, a warning will be returned in the XML response stating that an EAS has been added. However, international extended area surcharges are not supported.
Rating	Delivery Area Surcharge	Does the Rating API - Package support Delivery Area Surcharge?	Yes. However, it is included within the total transportation charge in the rate response.
Rating	Fuel Surcharge	Does the Rating API (Package) include fuel surcharge?	Yes, however it is not broken out separately it is returned with other charges.
Rating	Ground Freight Pricing	Does Rating API support Ground Freight Pricing (GFP)?	ONLY Rating API - Package Web Service version supports Ground Freight Pricing.
Rating	Saturday Delivery	Will the Rating API - Package allow a customer to know if Saturday delivery is available if they are shipping on a Thursday?	Since Saturday delivery is an accessorial, the customer must input this information in the Rating API rate request. If it is available then the response will specify that the delivery will be on Saturday. The Rating API does not specify guaranteed delivery times. Time in Transit API guarantees delivery times.

API	Category	Question	Answer
Rating	Time in Transit	Does the Rating API for Package support Time in Transit?	No it does not. Time in Transit information can be obtained from the Time in Transit API.
Rating	3rd Party Billing	Does the Rating API - Package support 3rd Party billing requests?	No. The rates provided by the Rating API are not dependent on billing type.
Rating	Currencies	Does the Rating API (Package) return any other currency other than USD? If yes, what currencies are supported?	A list of the currencies and currency codes are available in the Rating API (Package) Developers Guide in the appendices. Currencies will be returned based on the country of origin for the shipper.
Rating	ABR/ Negotiated Rates	Does Rating API support Account Based Rating (ABR)?	Yes, Rating API does support ABR (negotiated rating)
Rating	Published & Negotiated Rates (ABR) Response	Can Rating API provide both published and negotiated rates (assuming ABR has been activated) within the same response?	Yes. A customer can see both published rate and the negotiated rate (ABR) in one rate response assuming the customer has ABR activated.
Rating	Account Based Rates (ABR) or Negotiated Rates	What do negotiated rates include?	<p>Negotiated rates include:</p> <ul style="list-style-type: none"> <li>• Basic incentives</li> <li>• Performance tiered incentives <ul style="list-style-type: none"> <li>◦ Adjustments to performance tiered incentives are automatically updated each week in each solution that supports ABR.</li> </ul> </li> <li>• Ramp-ups on new contracts.</li> <li>• Multiple contracts (for example: a shipper is attached to two or more contracts).</li> <li>• Custom rate charts (cell by cell) <ul style="list-style-type: none"> <li>◦ by weight</li> <li>◦ by lane or zone</li> </ul> </li> <li>• Letter / Document rates</li> <li>• Minimum billable weight for multi-piece shipments <ul style="list-style-type: none"> <li>◦ Per piece or per shipment</li> </ul> </li> <li>• Shipment pricing minimums</li> <li>• Rate caps</li> <li>• Import rates for international returns. <ul style="list-style-type: none"> <li>◦ Note: Import rates are not available for Inbound shipments that were shipped using bill term, Freight Collect</li> </ul> </li> </ul>
Rating	Negotiated Rates	How do get access to Negotiated Package Rates?	<p>Once you have a contract with UPS:</p> <ul style="list-style-type: none"> <li>• Simply add a UPS Account to your MyUPS ID Account Summary as you previously would and your account will be activated automatically for negotiated rates provided you have a contract with UPS.</li> <li>• Remember to select the “Negotiated Rates Indicator” within the XML Request to have your negotiated rates returned within the response.</li> </ul>
Rating	UPS Ground (Freight Pricing)	How do we get GFP rates?	UPS Ground (Freight Pricing) rates can be obtained via the Rating Package WebServices API. This API provides both

API	Category	Question	Answer
			<p>accessorial and GFP rates.</p> <p>The Rating Freight WebServices API can be used to obtain the following:</p> <ul style="list-style-type: none"> <li>- UPS Ground (Freight Pricing)</li> <li>- Less-Than-Truckload (LTL) Rates</li> <li>- GFP and LTL comparison rates</li> </ul> <p>Note: If you choose this tool, you MUST add the small package accessorial before displaying the rate to the end customer</p> <p>The Freight mode of the Rating API returns the UPS Ground (Freight Pricing) transportation rate only. It doesn't return small package accessorial rates. The small package accessorial rates can be obtained via the Package WebServices mode of the Rating API.</p> <p>For a customer to ship the GFP, they must use the Shipping API – Package or the Shipping API – Ground.</p>
Rating	Negotiated Rates	Can a customer with a US Account number rate a package being shipped from another country?	Account Based Rating or negotiated rates are not being returned when the shipper number is US-based and the origin (Ship From) country is a non-US country. The fundamental requirement is the shipper's country and the origin country must match to process a shipment and this follows for negotiated rates as well. A potential workaround would be to set up a shipper number based in the non-US country with a negotiated rates contract so rates could be quoted for shipments from the Non-US country to US.
All	General - security	Does UPS support chained or unchained digital certificates?	Currently, the Ship API uses an unchained cert which will be migrated to chained Sept '09. In the case of the Ship API, INET is responsible for those URLs and corresponding Digital Certifications. They are being renewed at the end of this month as unchained. They will migrate to chained in Sept '09.
All	API availability	Within what countries are the Developer APIs available?	The Developer APIs are available in the countries listed at ups.com by API and by country under the UPS Developer Kit - Developer APIs. Click on any particular API to go to the API page and scroll to the bottom of the page to get the country listing for that particular API.
All	Mail Innovations	Is Mail Innovations available within any of the Developer APIs?	There is no UPS API available for Mail Innovations services at this time nor did we see one at <a href="http://www.upsmailinnovations.com">http://www.upsmailinnovations.com</a> . Additionally we are not aware of any plans to support the services through the UPS Developer APIs. The customer may however contact a Mail Innovations representative by clicking the Support tab of the site for any additional questions or concerns.
All	UPS Logos High Resolution	How do I get access to higher resolution logos than what are available from the downloads	Customers are not routinely provided these UPS shield graphics without having a design/layout submitted to UPS Brand Management for approval.

API	Category	Question	Answer
		in the UPS Developer Kit - Developer APIs?	The customer needs to visit: <a href="https://www.upsbrandexchange.com/brandHome.awsp">https://www.upsbrandexchange.com/brandHome.awsp</a> This site will take them through the process for downloading a limited set of sample images for layout, and how to secure an approval for customer use, as well as the high-resolution graphics.
All	Technical Support email form	Is XPCI a required field within the email support form?	No.
All	Technical Support email form	From where XPCI version number obtained and what does it mean?	XPCI stands for XML Package Carrier Interface (XPCI) and defines a vocabulary and structure for describing packages, shipments, and the activity details for package carriers and their customers. XPCI is a set of DTDs that defines the terminology, transaction enveloping, and XML message definitions. For a client to be XPCI-compliant, the client must generate a well-formed XML message that validates against the XPCI DTDs. Several DTDs, organized into three categories, define XPCI:  Vocabulary — This DTD defines the basic business vocabulary of XPCI. All tags used in a message are defined in this DTD. Interchange — This DTD defines the transaction-enveloping scheme. Every message includes transaction information. Message — Each message has an associated DTD that defines the vocabulary of the message.  The version and date would have been related to versioning however the APIs were not versioned so they currently do not carry significance. They remain as part of the APIs so that in the event they are versioned, we have these elements “just in case”.
All	Technical Support	How do I get technical support for the APIs at ups.com?	Go to the Developer Resource Center and select email support under the UPS Developer Kit Support Column.
All	Characters	Can Japanese Kanji character be recognized by UPS Developer APIs?	No.
All	Basic	Do any of the Developer APIs support Basic service?	No. Basic is not supported within the Rating or Shipping APIs but is supported within the Tracking API available within the UPS Developer Kit - Developer APIs.
All	System Down-Times	Are there any designated system down times for the Developer APIs?	Yes. The overall reserved downtime for the CGI servers is Saturday 10:00 PM ET through Sunday 12:00 PM ET. However, often the window is shortened to two 15 minute intervals with one starting at 11 PM and the other occurring sometime between 1 AM & 3 AM EST Sunday morning for most weekends.  The back end goes through numerous updates typically beginning at 11:00PM Saturday through 4:00AM Sunday. Typically traffic is handled in such a way that there is very little impact to customers, and any impact which does occur does so

API	Category	Question	Answer
			in the 15 minute intervals mentioned previously. Having said this as this entire time is reserved for maintenance we inform customers of the possibility of experiencing issues throughout this time period so that if there are any issues which occur during maintenance we have a time window to troubleshoot and perform measures to resolve. On Sunday, the maintenance is really relegated to just ABR
All	ASMX	Are the Web Services versions of the APIs ASMX based?	No. All Web Services are XML based. This is described in the section 'UPS Developer API Technologies ' of every developer's guide
All	Web Services - Empty folders within the documentation zip file.	The ship_dev_guide and Ship_Reference_guide folders have some sub folders that look like they should contain some code examples / samples but they are all empty? XML_Samples Visual_Basic Code_samples All empty?	Unfortunately code samples are not provided with the Shipping API - Web Services version. The reason being is that a WSDL is included which provides all of the necessary information needed to successfully implement the API. These folders are typically utilized in the XML version of the APIs as there is no WSDL present. If the customer wishes to view the samples contained in the Shipping API they can download the documentation by logging into UPS.com, navigating to the UPS Developer Kit, and then clicking on the Shipping API link.
All	Pointing to the wrong URL for API	I keep getting, "XML document is well formed but the document is not valid." error message. What am I doing wrong?	The "XML document is well formed but the document is not valid" error message is generally returned when an element in the XML request does not adhere to the formatting defined within the Xpath section of that API's developer guide. When the API returns this error it indicates the field which is not valid in the ErrorLocationElementName element in the XML response. When we test the XML provided by you earlier in this email chain we are able to receive a successful response. This would indicate that you may be posting to an incorrect URL. The error message returned from the API should have contained a line similar to the following: <ErrorLocationElementName>XPATH TO FIRST ELEMENT WHERE XML DOESN'T MATCH EXPECTED FORMAT</ErrorLocationElementName>  As previously stated, this element is included in the XML error response to point you to the element of the posted request which is not valid for the Tool. When further clarification is needed you can look up the element in question in the Xpath section of the Developer Guide for the particular API. If this element lists another API's request such as "TrackRequest" it would indicate that you are posting to that API's URL and need to adjust the URL you are sending your XML to.
All	Phone Support	Is phone support provided for the UPS Developer Kit - Developer APIs? If so, what is the number and what are the hours of operation?	Yes. Phone support is provided at 1st Level only and for basic API questions. This includes integration questions and production questions. However, customer's questions that cannot be answered verbally will be directed to the email support form at ups.com to escalate to 3rd level via email. Phone Support Hours: M-F 8AM- 9PM EST Sa-Su 9am - 6pm EST

API	Category	Question	Answer
			1 800-247-9035
All	Examples of API Implementations	Are there any examples of implementations that we can review to understand how best to utilize the APIs?	<p>We do not share customer implementations of our tools amongst customers. On occasion we do post case studies on ups.com and articles in customer-facing newsletters, but that is only after gaining permission from the customer and working with Legal, Customer Communications, etc.</p> <p>Please understand that the XML tool is only data, which is transparent to the end user. How the developer implements the tool and presents results back to the end user can vary from web site to web site. These web sites may not highlight the full functionality of the tool. We need to be able to describe the value proposition of the tool without depending on another customer's usage.</p>
All	Code languages supported	Do the APIs support PHP or Perl with code sample within the Developer Guides or the developer kit zip files?	Yes. We currently support PHP or Perl with sample code.
API	Category	Question	Answer
Rating	Rate versus Shop	What is the difference between a "Rate" requests versus a "Shop" request using the Rating API - Package?	A "Rate" request returns the rate for a single service for each package, while a "Shop" request returns the rates for all services available between a given origin/destination pair for each package.
Rating	Choosing a service	Can a customer compare services for a shipment using the Rating API - Package?	Yes, if a user chooses the "Shop" option in the rate request, as opposed to the "Rate" option, the application will return all available services for the specified lane pair, then the customer chooses which they want. On the contrary, the "Rate" options require that the user specify the service that they want in the request. If the service is not valid for the lane pair then an error message will be returned in the rate response. If it is believed that the services the Rating API is returning is incorrect, a user may compare it with what Calculate Time and Cost displays for the same request criteria on UPS.com.
Rating	Return Services	Does Rating API support Return Services?	No, Rating API does not support any Return services
Rating	Number of packages per shipment	What is the maximum number of packages you can rate per shipment via Rating API - Package?	You can rate a max of 200 packages per shipment via this API.
Rating	Time in Transit Support	Does the Rating API - Package support time in transit results?	No.
Rating	Rating for Web applications	Are rates across all UPS Web applications always the same?	Yes, this is intended. The rates for other Web applications should not differ from the Rating API. The only time rates would be different is if there is a defect within the applications; otherwise it should be assumed that they are all in sync, as each are validated by the engine on the backend. If a user questions

API	Category	Question	Answer
			<p>rates returned by the Rating API, he could generate the exact rate request on Calculate Time and Cost on UPS.com, to confirm if rates are accurate.</p> <p>Rates will differ if the user has negotiated rates set up with their account number and is not sending a negotiated rates indicator via the Rating API or does not have negotiated rates approved to be used with the Rating API</p>
Rating	Shipping/ Labeling	Can you ship and/or print labels via the Rating API - Package?	The Rating API does not support the printing of labels and also does not allow shipping. Its only functionality is to provide shipment rates.
Rating	Testing and Production environments	Are there separate test IDs necessary to access the test verses production environment?	No the User ID obtained from the Developer Resource Center on UPS.com to obtain test access to the Rating API will also allow the user to access the Production environment.
Rating	Resi/ Comm	Does Rating API automatically validate Residential verses Commercial addresses?	If the residential indicator is included in the rate request then the shipment will be classified as residential. There is a second validation done by the backend and if the address is really supposed to be commercial then the classification will be changed and the customer is notified of this in the rate response.
Rating	Rating Scheduled Time	Does UPS Rating API display the time of day for example: 1da saver residential and 1da saver commercial in a rural area, etc.?	Yes. There is a scheduled delivery time within the response message.
Rating	International Rates	Does the Rating API support international rates?	Yes. As long as the shipper number is from the origin country the requests will be validated.
Rating	Accessorials	What accessorials does the Rating API support?	Please see the Rating API Package section for a listing of supported accessorials.
Rating	Maximum Packages Rated	What is the maximum number of packages that can be rated through the Rating API - Package?	When using the "Rate" function there is a maximum of 200 Package containers allowed in each API request. One Package container contains the information for one individual package. In addition, when using the "Shop" function there is a maximum of 50 package containers allowed in each API request.
Rating	Hundredweight Warning Message	How is Hundred Weight (CWT) handled in the Rating API?	HundredWeight (CWT) is applied automatically by the Rating API when the shipper number is set up for HundredWeight and the shipment meets the necessary criteria. There is no indicator to include in the rate request. ABR will provide contract rates based on the tier associated with the shipper's number. Shipper number must be included in the rate request. The rate response doesn't mention that hundredweight has been applied either.
Rating	99 Account Number Limitation	How do I associate more than 99 account numbers for use with the Rating APIs?	The Rating API requires that the account (shipper) number and User ID used in the rate request be associated within the My UPS Account summary of the User ID. This can be accomplished by logging in to UPS.com and navigating to [MyUPS]->[Manage My UPS]->[Account Summary]->[Add a UPS Account]. IMS validates the User ID/password combination.

API	Category	Question	Answer
Rating	Extended Area Surcharge	Is Extended Area Surcharge included within the rating response?	The Extended Area Surcharge (EAS) is returned with the transportation charges. If EAS is applied to a shipment, a warning will be returned in the XML response stating that an EAS has been added. However, international extended area surcharges are not supported.
Rating	Delivery Area Surcharge	Does the Rating API - Package support Delivery Area Surcharge?	Yes. However, it is included within the total transportation charge in the rate response.
Rating	Fuel Surcharge	Does the Rating API (Package) include fuel surcharge?	Yes, however it is not broken out separately it is returned with other charges.
Rating	Ground Freight Pricing	Does Rating API support Ground Freight Pricing (GFP)?	ONLY Rating API - Package Web Service version supports Ground Freight Pricing.
Rating	Saturday Delivery	Will the Rating API - Package allow a customer to know if Saturday delivery is available if they are shipping on a Thursday?	Since Saturday delivery is an accessorial, the customer must input this information in the Rating API rate request. If it is available then the response will specify that the delivery will be on Saturday. The Rating API does not specify guaranteed delivery times. Time in Transit API guarantees delivery times.
Rating	Time in Transit	Does the Rating API for Package support Time in Transit?	No it does not. Time in Transit information can be obtained from the Time in Transit API.
Rating	3rd Party Billing	Does the Rating API - Package support 3rd Party billing requests?	No. The rates provided by the Rating API are not dependent on billing type.
Rating	Currencies	Does the Rating API (Package) return any other currency other than USD? If yes, what currencies are supported?	A list of the currencies and currency codes are available in the Rating API (Package) Developers Guide in the appendices. Currencies will be returned based on the country of origin for the shipper.
Rating	ABR/ Negotiated Rates	Does Rating API support Account Based Rating (ABR)?	Yes, Rating API does support ABR (negotiated rating)
Rating	Published & Negotiated Rates (ABR) Response	Can Rating API provide both published and negotiated rates (assuming ABR has been activated) within the same response?	Yes. A customer can see both published rate and the negotiated rate (ABR) in one rate response assuming the customer has ABR activated.
Rating	Account Based Rates (ABR) or Negotiated Rates	Is there a delay in activating a new or modified account in ABR for Rating or Shipping APIs?	Customers can view their UPS Account Based Rates (ABR or Negotiated Rates) within 24-48 hours following authentication.
Rating	Negotiated Rates	How do get access to negotiated Package rates?	Eliminate Account Based Rates (ABR) Setup: <ul style="list-style-type: none"> <li>To streamline your ability to view your negotiated rates through the Rating API UPS has implemented a new process that no longer requires you to wait for a UPS Sales Person to activate your account.</li> <li>Simply add a UPS Account to your MyUPS ID Account Summary as you previously would and your account will be activated automatically for negotiated rates provided you have a contract with UPS.</li> <li>Remember to select the "Negotiated Rates Indicator" within the XML Request to have your negotiated rates</li> </ul>

API	Category	Question	Answer
			returned within the response.
Rating	UPS Ground (Freight Pricing)	How do we get GFP rates?	<p>UPS Ground (Freight Pricing) rates can be obtained via the Rating Package WebServices API. This API provides both accessorial and GFP rates.</p> <p>The Rating Freight WebServices API can be used to obtain the following:</p> <ul style="list-style-type: none"> <li>- UPS Ground (Freight Pricing)</li> <li>- Less-Than-Truckload (LTL) Rates</li> <li>- GFP and LTL comparison rates</li> </ul> <p>Note: If you choose this tool, you MUST add the small package accessorials before displaying the rate to the end customer</p> <p>The Freight mode of the Rating API returns the UPS Ground (Freight Pricing) transportation rate only. It doesn't return small package accessorial rates. The small package accessorial rates can be obtained via the Package WebServices mode of the Rating API.</p> <p>For a customer to ship the GFP, they must use the Shipping API – Package or the Shipping API – Ground.</p>
Rating	Negotiated Rates	Can a customer with a US Account number rate a package being shipped from another country?	Account Based Rating or negotiated rates are not being returned when the shipper number is US-based and the origin (Ship From) country is a non-US country. The fundamental requirement is the shipper's country and the origin country must match to process a shipment and this follows for negotiated rates as well. A potential workaround would be to set up a shipper number based in the non-US country with a negotiated rates contract so rates could be quoted for shipments from the Non-US country to US.
All	General - security	Does UPS support chained or unchained digital certificates?	Currently, the Ship API uses an unchained cert which will be migrated to chained Sept '09. In the case of the Ship API, INET is responsible for those urls and corresponding Digital Certifications. They are being renewed at the end of this month as unchained. They will migrate to chained in Sept '09.
All	API availability	Within what countries are the Developer APIs available?	The Developer APIs are available in the countries listed at ups.com by API and by country under the UPS Developer Kit - Developer APIs. Click on any particular API to go to the API page and scroll to the bottom of the page to get the country listing for that particular API.
All	Mail Innovations	Is Mail Innovations available within any of the Developer APIs?	There is no UPS API available for Mail Innovations services at this time nor did we see one at <a href="http://www.upsmailinnovations.com">http://www.upsmailinnovations.com</a> . Additionally we are not aware of any plans to support the services through the UPS Developer APIs. The customer may however contact a Mail Innovations representative by clicking the Support tab of the

API	Category	Question	Answer
			site for any additional questions or concerns.
All	UPS Logos High Resolution	How do I get access to higher resolution logos than what are available from the downloads in the UPS Developer Kit - Developer APIs?	Customers are not routinely provided these UPS shield graphics without having a design/layout submitted to UPS Brand Management for approval. The customer needs to visit: <a href="https://www.upsbrandexchange.com/brandHome.awsp">https://www.upsbrandexchange.com/brandHome.awsp</a> This site will take them through the process for downloading a limited set of sample images for layout, and how to secure an approval for customer use, as well as the high-resolution graphics.
All	Technical Support email form	Is XPCI a required field within the email support form?	No.
All	Technical Support email form	From where XPCI version number obtained and what does it mean?	XPCI stands for XML Package Carrier Interface (XPCI) and defines a vocabulary and structure for describing packages, shipments, and the activity details for package carriers and their customers. XPCI is a set of DTDs that defines the terminology, transaction enveloping, and XML message definitions. For a client to be XPCI-compliant, the client must generate a well-formed XML message that validates against the XPCI DTDs. Several DTDs, organized into three categories, define XPCI:  Vocabulary — This DTD defines the basic business vocabulary of XPCI. All tags used in a message are defined in this DTD. Interchange — This DTD defines the transaction-enveloping scheme. Every message includes transaction information. Message — Each message has an associated DTD that defines the vocabulary of the message.  The version and date would have been related to versioning however the APIs were not versioned so they currently do not carry significance. They remain as part of the APIs so that in the event they are versioned, we have these elements “just in case”.
All	Technical Support	How do I get technical support for the APIs at ups.com?	Go to the Developer Resource Center and select email support under the UPS Developer Kit Support Column.
All	Characters	Can Japanese Kanji character be recognized by UPS Developer APIs?	No.
All	Basic	Do any of the Developer APIs support Basic service?	No. Basic is not supported within the Rating or Shipping APIs but is supported within the Tracking API available within the UPS Developer Kit - Developer APIs.
All	System Down-Times	Are there any designated systems down times for the Developer APIs?	Yes. The overall reserved downtime for the CGI servers is Saturday 10:00 PM ET through Sunday 12:00 PM ET. However, often the window is shortened to two 15 minute intervals with one starting at 11 PM and the other occurring sometime between 1AM & 3AM EST Sunday morning for most weekends.

API	Category	Question	Answer
			<p>The back end goes through numerous updates typically beginning at 11:00PM Saturday through 4:00AM Sunday. Typically traffic is handled in such a way that there is very little impact to customers, and any impact which does occur does so in the 15 minute intervals mentioned previously. Having said this as this entire time is reserved for maintenance we inform customers of the possibility of experiencing issues throughout this time period so that if there are any issues which occur during maintenance we have a time window to troubleshoot and perform measures to resolve. On Sunday, the maintenance is really relegated to just ABR</p>
All	ASMX	Are the Web Services versions of the APIs ASMX based?	No. All Web Services are XML based. This is described in the section 'UPS Developer API Technologies ' of every developer's guide
All	Web Services - Empty folders within the documentation zip file.	The ship_dev_guide and Ship_Reference_guide folders have some sub folders that look like they should contain some code examples / samples but they are all empty? XML_Samples Visual_Basic Code_samples All empty?	Unfortunately code samples are not provided with the Shipping API - Web Services version. The reason being is that a WSDL is included which provides all of the necessary information needed to successfully implement the API. These folders are typically utilized in the XML version of the APIs as there is no WSDL present. If the customer wishes to view the samples contained in the Shipping API they can download the documentation by logging into UPS.com, navigating to the UPS Developer Kit, and then clicking on the Shipping API link.
All	Pointing to the wrong URL for API	I keep getting, "XML document is well formed but the document is not valid." error message. What am I doing wrong?	<p>The "XML document is well formed but the document is not valid" error message is generally returned when an element in the XML request does not adhere to the formatting defined within the Xpath section of that API's developer guide. When the API returns this error it indicates the field which is not valid in the ErrorLocationElementName element in the XML response. When we test the XML provided by you earlier in this email chain we are able to receive a successful response. This would indicate that you may be posting to an incorrect URL. The error message returned from the API should have contained a line similar to the following:</p> <pre>&lt;ErrorLocationElementName&gt;XPATH TO FIRST ELEMENT WHERE XML DOESN'T MATCH EXPECTED FORMAT&lt;/ErrorLocationElementName&gt;</pre> <p>As previously stated, this element is included in the XML error response to point you to the element of the posted request which is not valid for the Tool. When further clarification is needed you can look up the element in question in the Xpath section of the Developer Guide for the particular API. If this element lists another API's request such as "TrackRequest" it would indicate that you are posting to that API's URL and need to adjust the URL you are sending your XML to.</p>
All	Phone Support	Is phone support provided for the UPS Developer Kit - Developer APIs? If so, what is	Yes. Phone support is provided at 1st Level only and for basic API questions. This includes integration questions and production questions. However, customer's questions that

API	Category	Question	Answer
		the number and what are the hours of operation?	cannot be answered verbally will be directed to the email support form at ups.com to escalate to 3rd level via email. Phone Support Hours: M-F 8am- 9pm EST Sa-Su 9am - 6pm EST 800-247-9035
All	Examples of API Implementations	Are there any examples of implementations that we can review to understand how best to utilize the APIs?	We do not share customer implementations of our tools amongst customers. On occasion we do post case studies on ups.com and articles in customer-facing newsletters, but that is only after gaining permission from the customer and working with Legal, Customer Communications, etc.  Please understand that the XML tool is only data, which is transparent to the end user. How the developer implements the tool and presents results back to the end user can vary from web site to web site. These web sites may not highlight the full functionality of the tool. We need to be able to describe the value proposition of the tool without depending on another customer's usage.
All	Code languages supported	Do the APIs support PHP or Perl with code sample within the Developer Guides or the developer kit zip files?	Yes. We currently support PHP or Perl with sample code.