User Guide

UPS® Developer Kit



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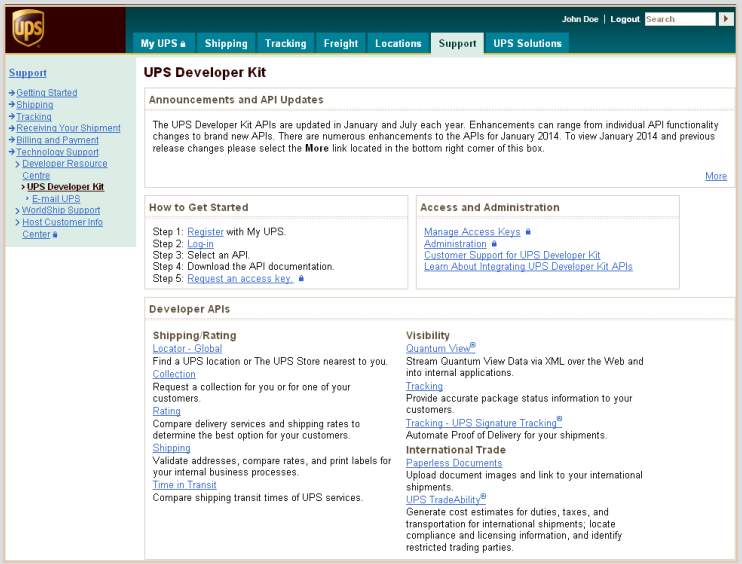
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Welcome to the UPS Developer Kit User Guide. This guide provides information on how to access developer kits and servers to test and transact with UPS. It also provides detailed information on technical support for the APIs, including hours of operation and response times.

The UPS Developer Kit offers flexibility in integrating UPS functionality directly into your business systems and e-commerce websites. UPS offers 11 functionalities via APIs that allow you to improve business process efficiencies and enhance your customers' web experience.

UPS Developer Kit page ups.com
To access this page, go to:
ups.com/developerkit



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Before you start

UPS Developer Kit

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Technical considerations

Prior to downloading any APIs, you should be familiar with:

- Programming URL or socket connections
- Creating a secure socket implementation that supports SSL standards for secure connections
- Encoding and decoding XML documents
- Designing and implementing a strategy into your existing software for handling errors

Check the available versions (XML or Web Services), available modes (Package, LTL Freight and Air Freight) and available countries.

Access requirements

Review whether the particular API provides Test and Production Access with initial access key request, or if additional Production Access requests are required. You will also need to review if your business models are approved for use with each API.

Notes:

- *Custom code, that adapts your application's business logic and data to the API, must be developed in order to integrate API functionality into your e-commerce and/or business system applications. Programming language that supports HTTP communication across Internet sockets and secure connections, such as Java, Visual Basic or C++ can be used.*
- *To help you effectively integrate APIs, the following guide and reference materials are included with the API: Developer's Guide (with technical FAQs), UPS logos and banners, code samples including Visual Basic, Java, .Net, C++, Perl and PHP.*

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Implementation

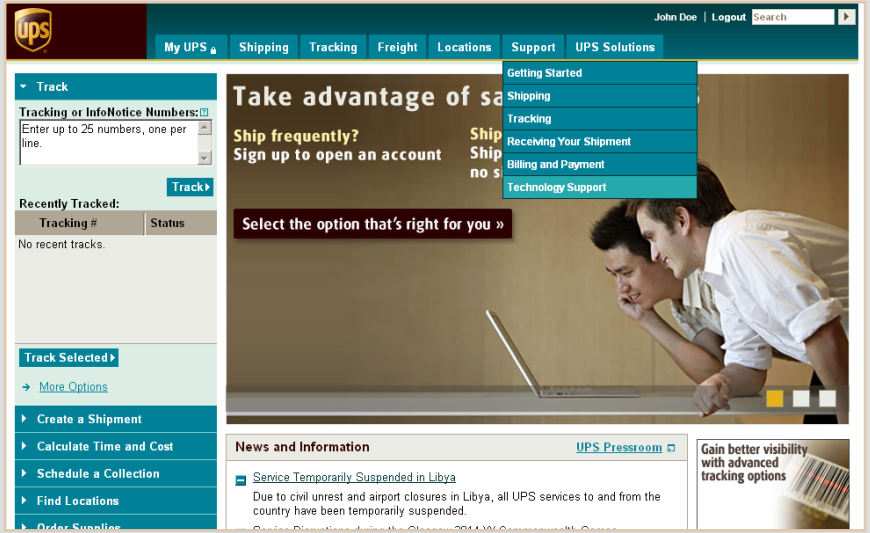
UPS Developer Kit

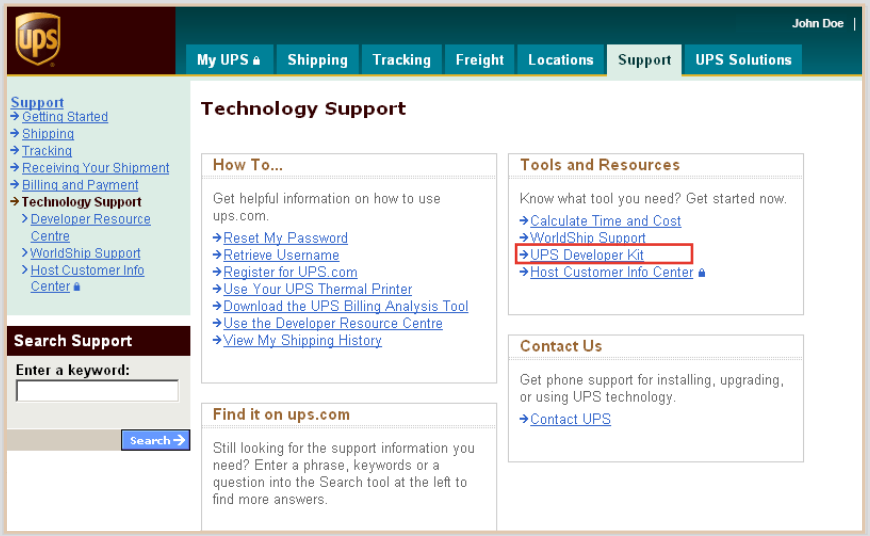
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Getting started

To access the UPS Developer Kit section at **ups.com**®, select **Technology Support** under the **Support** menu.

Then, once you are on the Technology Support page, select **UPS Developer Kit** under **Tools and Resources**.



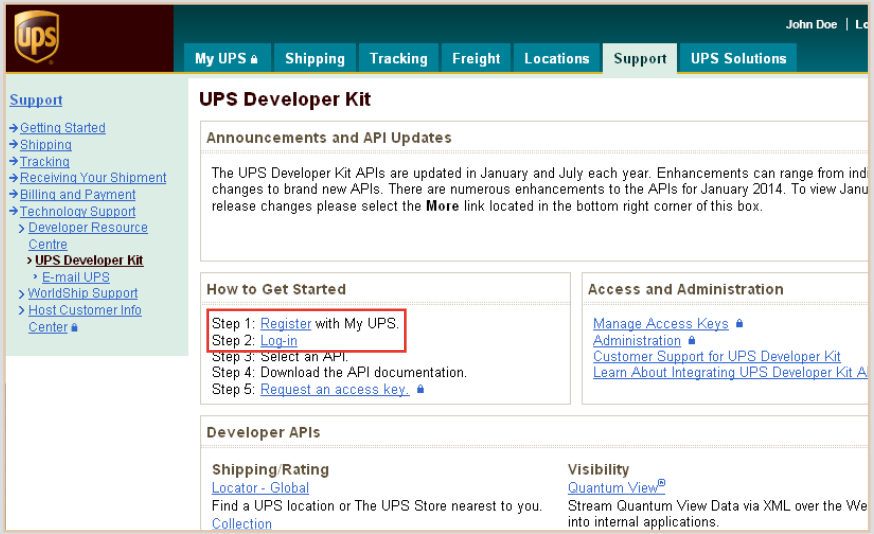


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Getting started (cont.)

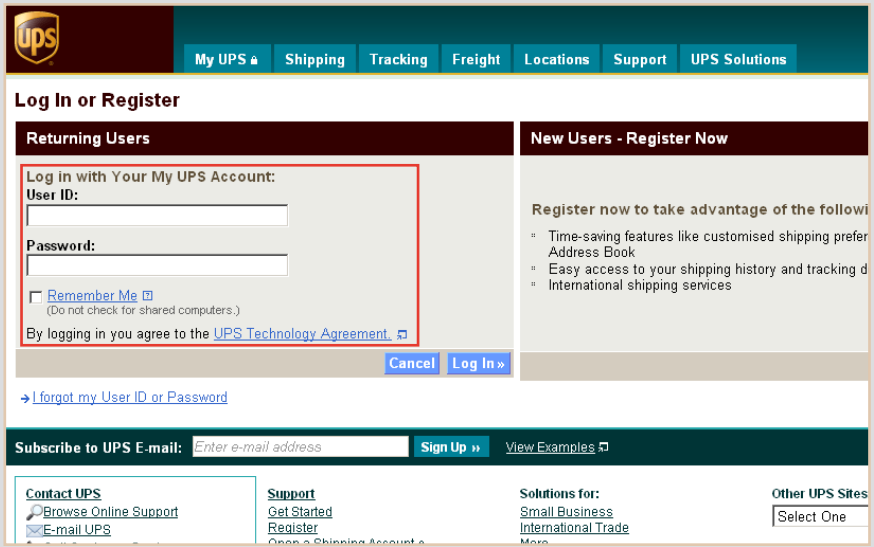
Step 1: Register with My UPS

If already registered, skip to Step 4.



Step 2: Log In

Enter **username**. Click **Next**. You will then be prompted to enter your password. You must be logged in to download document files.

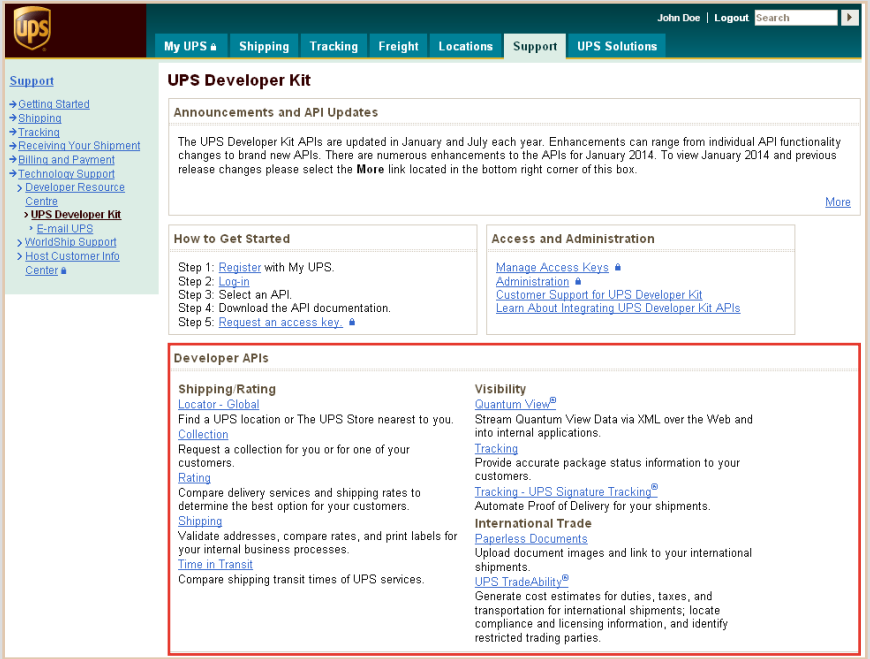


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Getting started (cont.)

Step 3: Select an API

Under **Developer APIs**, you will find the requirements for each of the APIs that you require and can access downloadable files, as well as availability for specific countries. You may also consult the Product Overview section of this guide starting on page 21.



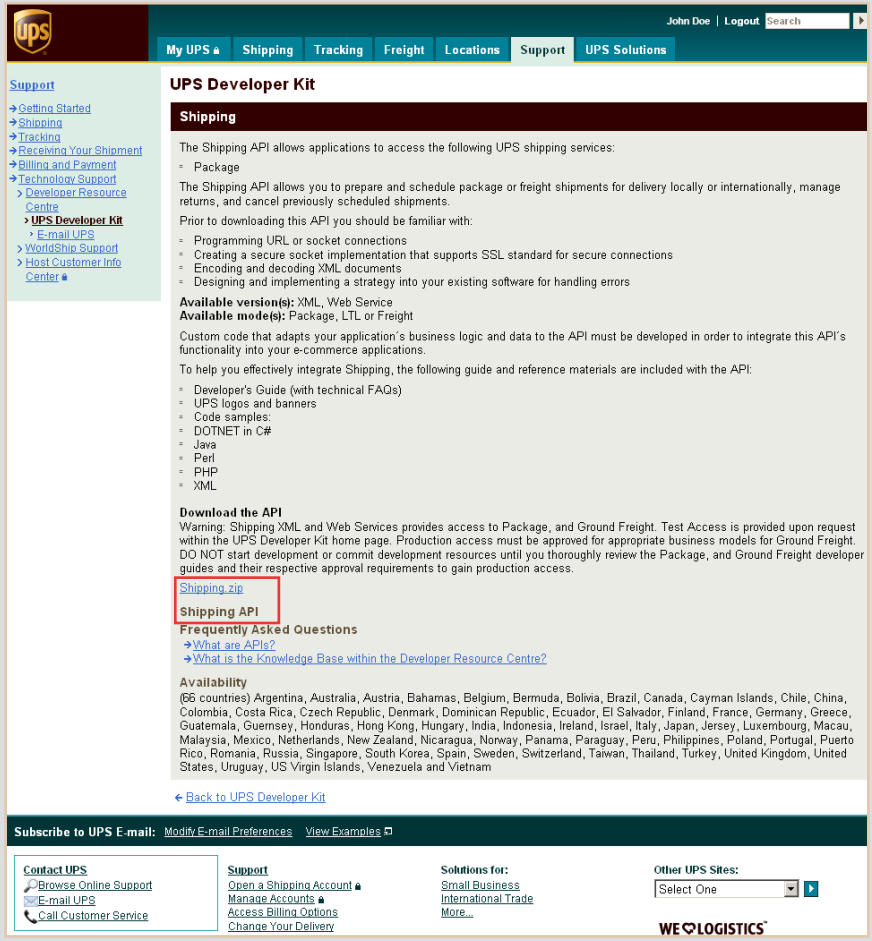
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Getting started (cont.)

Step 4: Download the API documentation

1. Download zip file for the chosen **API**
2. When prompted, click on **Save**
3. Extract the file on your local computer

The downloaded file contains the Software Developer Kit. Carefully review the entire Developer Guide for the APIs that you will integrate. The Software Developer Kit also includes sample code and WSDLs.



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Getting started (cont.)

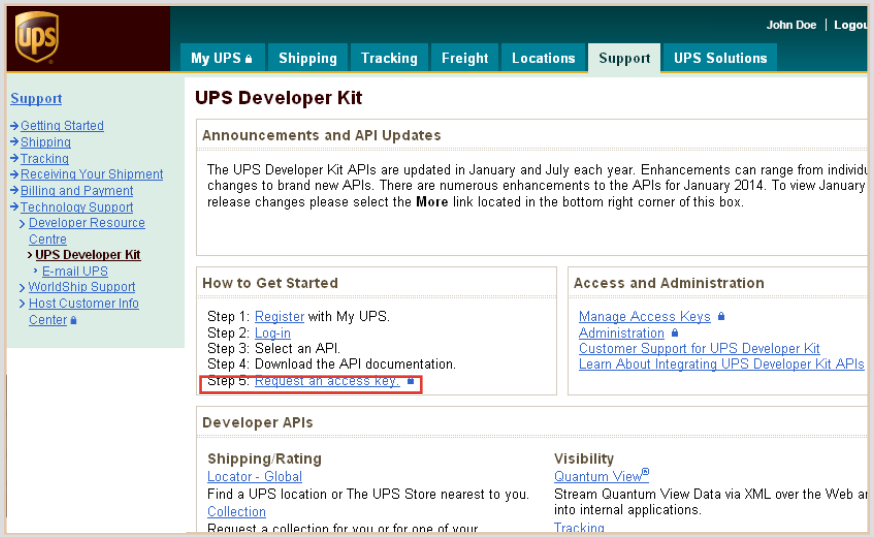
UPS provides a testing environment that is accessible with an access key for all APIs. This will allow you to simulate live request and response messaging to ensure that you have properly formatted your XML or Web Service requests.

Most APIs provide immediate access to both test and production environments. However, the following APIs require a second request to activate production access: Locator and LTL Freight APIs (Collection, Rating and Shipping).

Step 5: Request an access key

Once you have reviewed the Software Developer Kit, you should request access to the UPS test environment. You will be asked to:

1. Provide account information
2. Authenticate account information
3. Upon authentication, you will receive confirmation that your request has been received

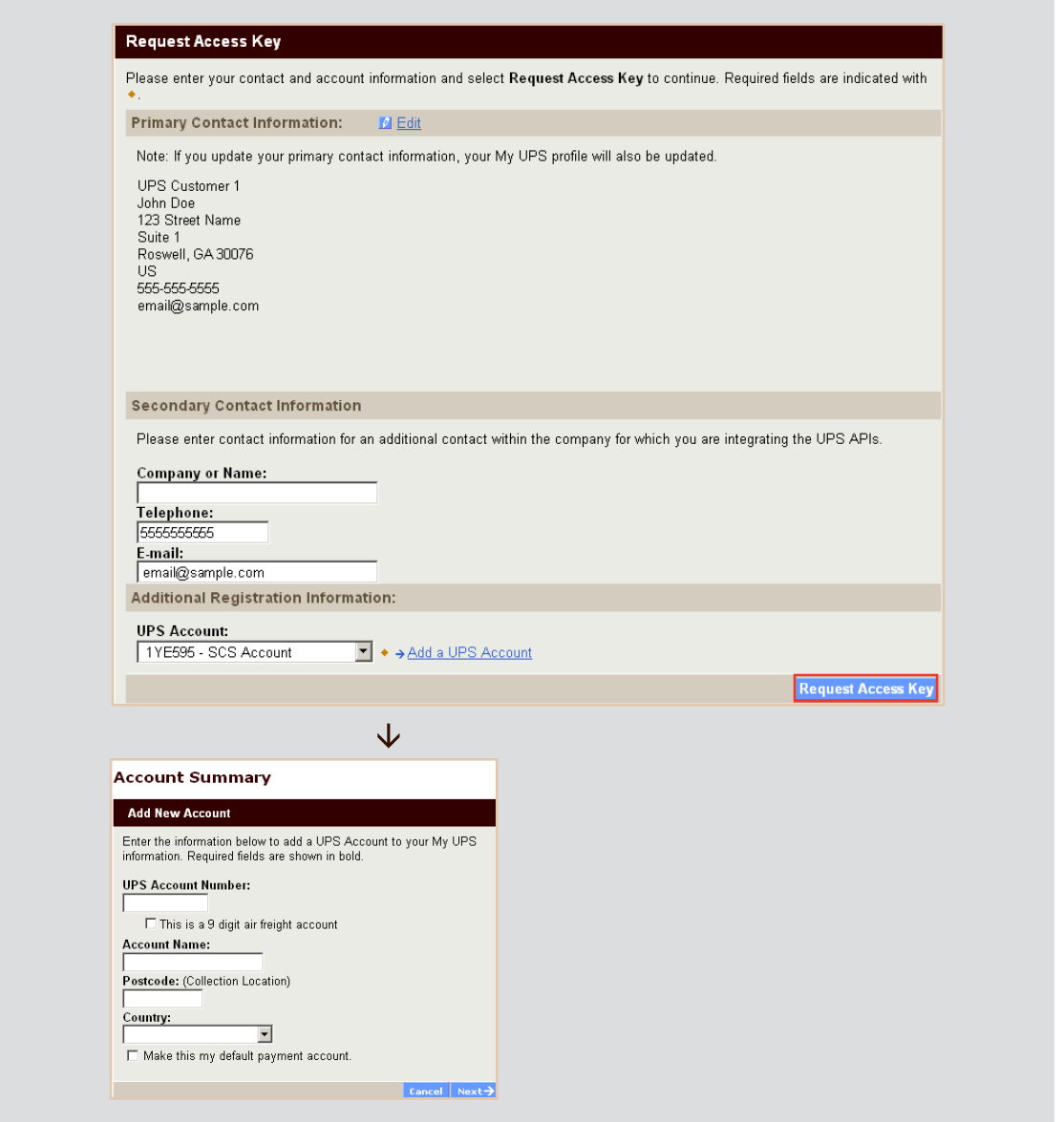


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Getting started (cont.)

Step 5: Request an access key (cont.)

Submit account information.



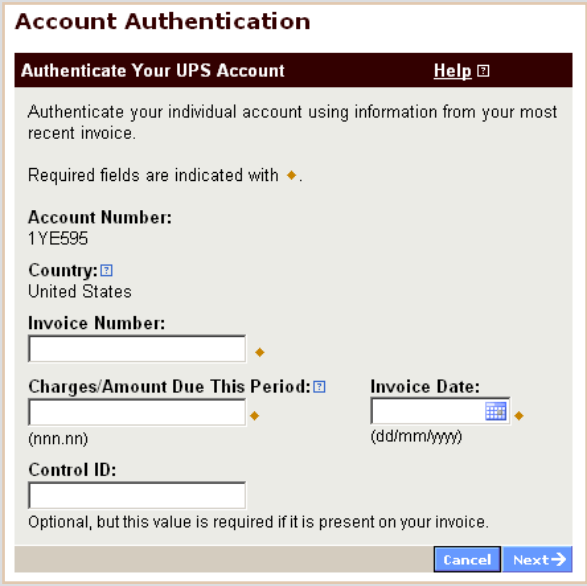
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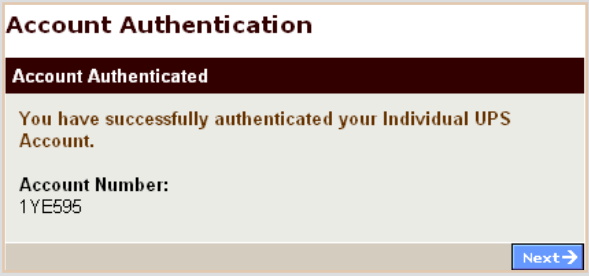
Getting started (cont.)

Step 5: Request an access key (cont.)

1. Provide account authentication
2. Once authentication is complete, you will be brought back to the **Request Access Key** page
3. Click on the **Request Access Key** button at the bottom

Note: *Account Invoice Authentication (AIA) is required for you to see your negotiated rates via the Shipping and Rating APIs. Ensure that you have a copy of your most recent invoice (within the last 45 days) to AIA authenticate at My UPS at* ***ups.com****.*



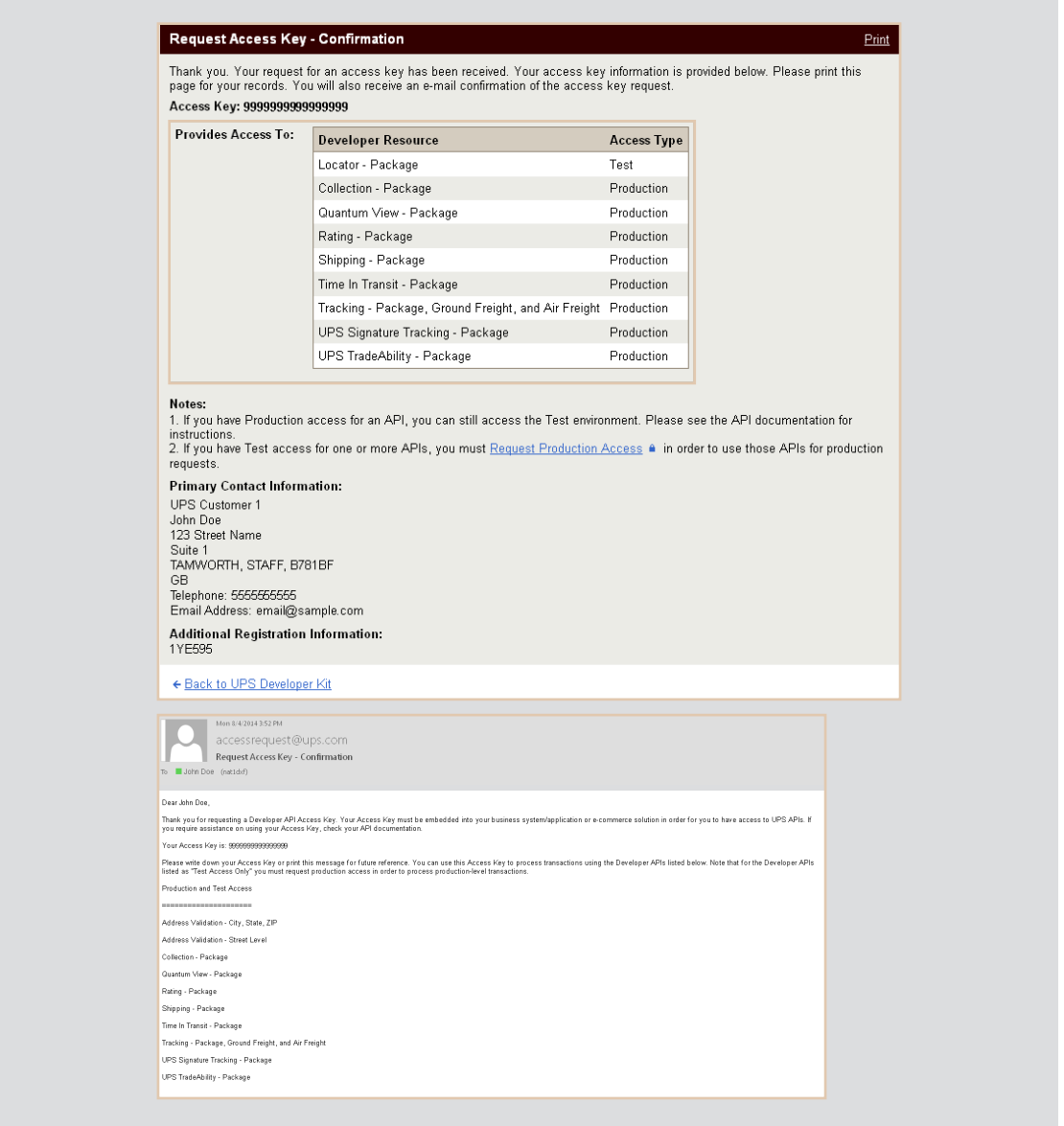


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Getting started (cont.)

Step 5: Request an access key (cont.)

View confirmation that your request was received and receive a confirmation e-mail.



Request Access Key - Confirmation Print

Thank you. Your request for an access key has been received. Your access key information is provided below. Please print this page for your records. You will also receive an e-mail confirmation of the access key request.

Access Key: 9999999999999999

Provides Access To:

Developer Resource	Access Type
Locator - Package	Test
Collection - Package	Production
Quantum View - Package	Production
Rating - Package	Production
Shipping - Package	Production
Time In Transit - Package	Production
Tracking - Package, Ground Freight, and Air Freight	Production
UPS Signature Tracking - Package	Production
UPS TradeAbility - Package	Production

Notes:
1. If you have Production access for an API, you can still access the Test environment. Please see the API documentation for instructions.
2. If you have Test access for one or more APIs, you must Request Production Access in order to use those APIs for production requests.

Primary Contact Information:
UPS Customer 1
John Doe
123 Street Name
Suite 1
TAMWORTH, STAFF, B781BF
GB
Telephone: 5555555555
Email Address: email@sample.com

Additional Registration Information:
1YE595

Back to UPS Developer Kit

Mon 6/4/2014 3:52 PM
accessrequest@ups.com
Request Access Key - Confirmation
To: John Doe (nat1ddf)

Dear John Doe,

Thank you for requesting a Developer API Access Key. Your Access Key must be embedded into your business system/application or e-commerce solution in order for you to have access to UPS APIs. If you require assistance on using your Access Key, check your API documentation.

Your Access Key is: 9999999999999999

Please write down your Access Key or print this message for future reference. You can use this Access Key to process transactions using the Developer APIs listed below. Note that for the Developer APIs listed as "Test Access Only" you must request production access in order to process production-level transactions.

Production and Test Access

==========

Address Validation - City, State, ZIP

Address Validation - Street Level

Collection - Package

Quantum View - Package

Rating - Package

Shipping - Package

Time In Transit - Package

Tracking - Package, Ground Freight, and Air Freight

UPS Signature Tracking - Package

UPS TradeAbility - Package

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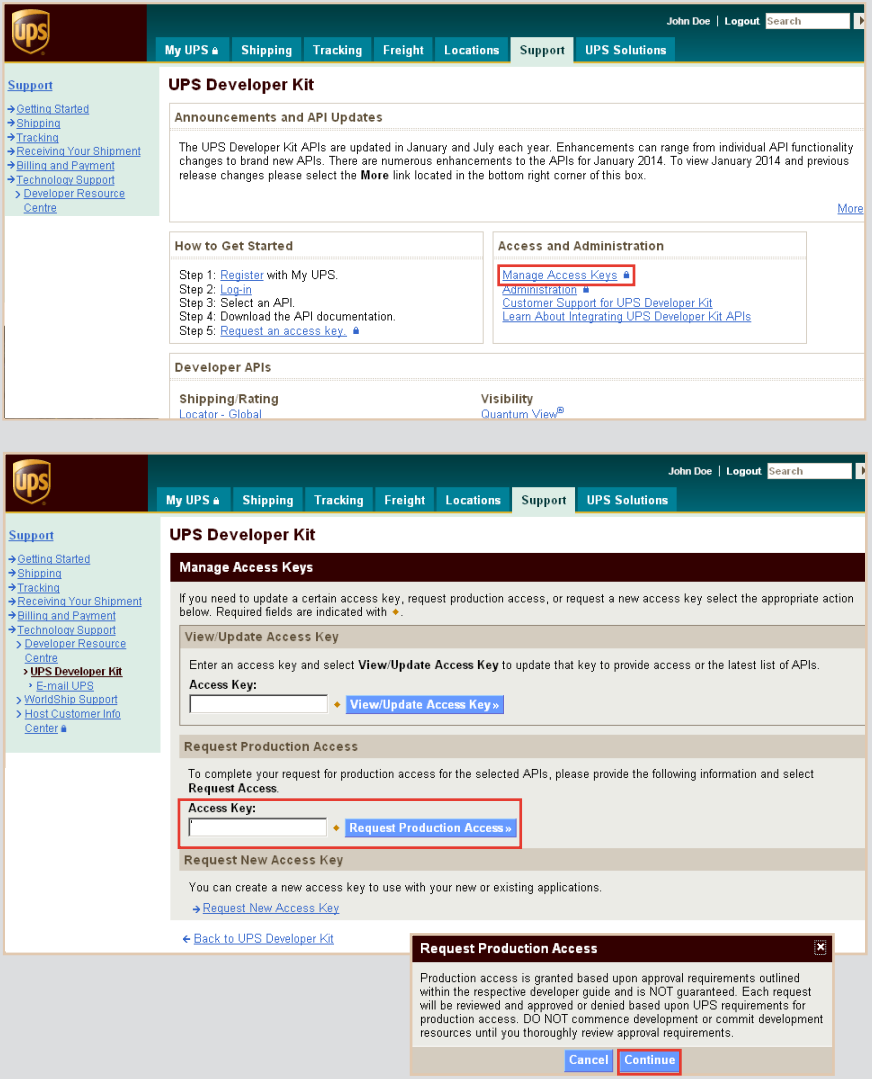
Access and administration

Requesting production access

Most APIs provide immediate access to both test and production environments. However, the following APIs require a second request to activate production access: Locator and LTL Freight APIs (Collection, Rating and Shipping).

Ensure that your implementation meets UPS requirements for gaining production access.

- Go the **UPS Developer Kit** page and select **Manage Access Keys** in the **Access and Administration** section.
- A dialogue window will appear requesting that you review requirements for approval. Click **Continue** if ready to proceed.

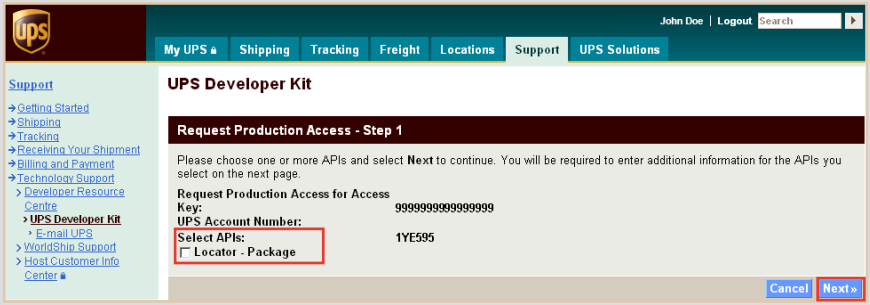


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Access and administration (cont.)

Requesting production access (cont.)

Step 1: Choose one or more APIs and select **Next** to continue.

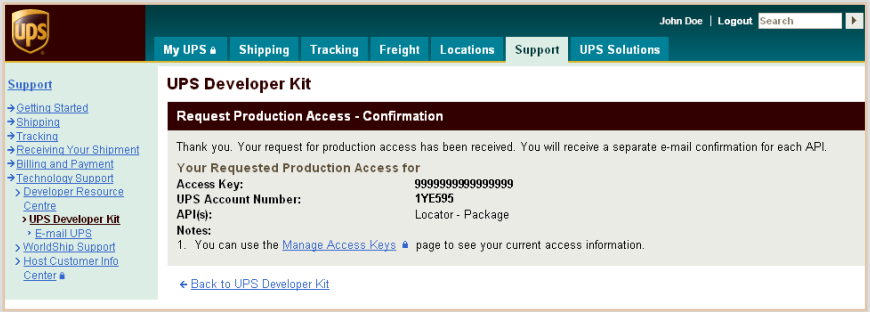


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Access and administration (cont.)

Requesting production access (cont.)

- Receive online and e-mail confirmation of your request for production access.



---------- Forwarded message ----------
From: <globallocator@ups.com>
Date: Aug 5, 2014 8:06 AM
Subject: RE: Request Production Access for Access Key
To: < email@sample.com >
Cc:

Thank you for your interest in the Locator API. I would like to provide you with additional details to help you in your understanding of how this API can be used. The Locator API allows you to find UPS retail locations to do the following:

1. Shipping - You can find a location that offers packaging supplies and have your item packed and shipped. You can also drop off a package that you have already packaged and manifested.
2. Manage returns - You can direct your customers to either drop off or ship a return from a UPS retail location such as The UPS Store(r) or if already pre-manifested a UPS Drop Box.
3. ADL - Find retail locations that would be Alternative Delivery Location (ADL). This allows you to provide more centralized locations and saves on windshield time for those technicians. It also provides a secure place to hold those packages until picked up. This is usually done through a contract involving UPS, The UPS Store CRS group, and yourself.
4. SPL - Find retail locations that would assist your customer in Service Parts Logistics (SPL) where you would have parts sent to one of our retail locations and your technicians go there to pick up the parts. This provides a more centralized location and saves on windshield time for those technicians. It also provides a secure place to hold those packages until picked up. This is usually done through a contract involving UPS, The UPS Store CRS group, and yourself.

If this is what you are looking to do, then the Locator API can help you. Please note that the location types will vary by country and I can provide you with a matrix that outlines what locations types are available and the services they offer by country.

NOTE: THIS APPROVAL IS FOR END USER DEVELOPMENT ONLY (I.E. you will use the Locator API for your business) IF YOU ARE A 3RD PARTY (software or application provider), YOU MUST SUBMIT A REQUEST for that approval. The Locator API has restrictions in functionality and how it can be used.

In addition, please note that the Retail Locations that the Locator API would be identifying do not currently support the following services.

Hazardous Materials, UPS Hundredweight, UPS WorldEase and UPS TradeDirect

It is helpful for my records to know what you plan on doing with the API so I can report back to my management on how the API is being utilized by our external customers and also will help in my decision making for future enhancements. In order to continue with the process of providing you an access key, I will need some additional information that was not completed in the original request received below:

Primary Country or Countries that you will be searching for UPS Locations:

Primary purpose for using the Locator API:

For more information contact your UPS Account Executive to discuss all of your UPS needs at 1-800-PICK UPS.

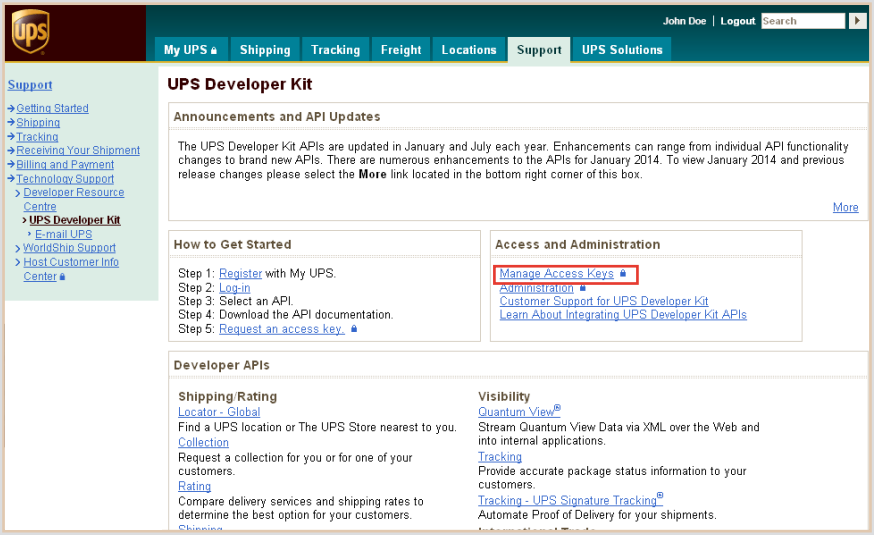
Regards,
Global Locator Manager

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Access and administration (cont.)

View/update access keys

To manage and update access keys, go to the **UPS Developer Kit** page and select **Manage Access Keys** in the **Access and Administration** section.

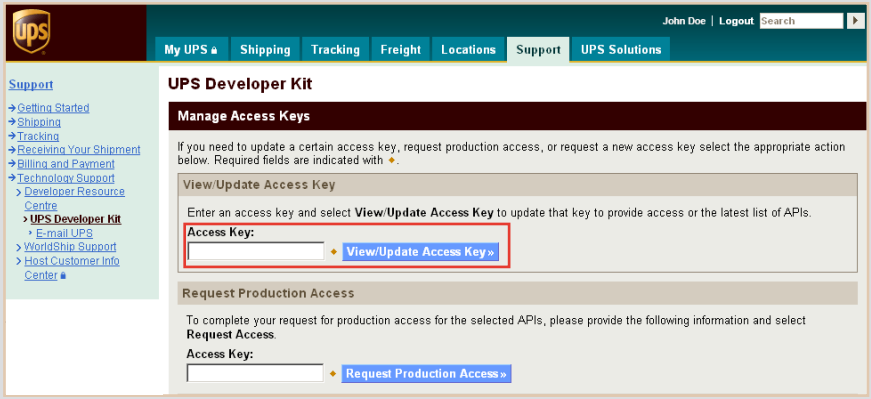


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Access and administration (cont.)

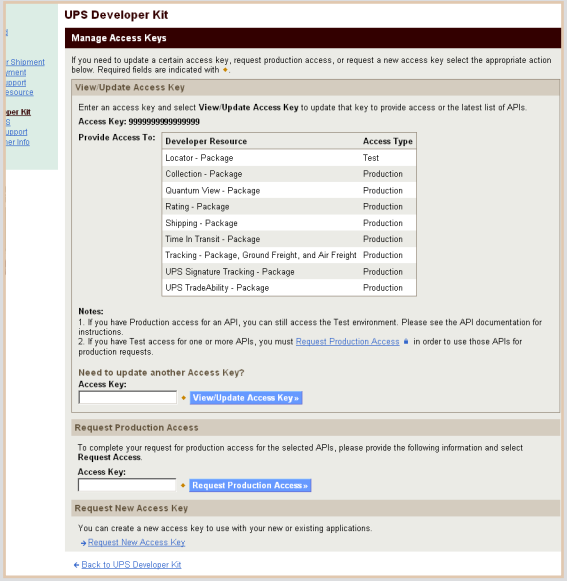
View/update access keys (cont.)

- Enter your Access Key in the **View/Update Access Key** section.



- The next screen will display a list of APIs with the status (Test or Production) for the key you have entered.

Note: *From that page, you can also request production access or a new access key.*

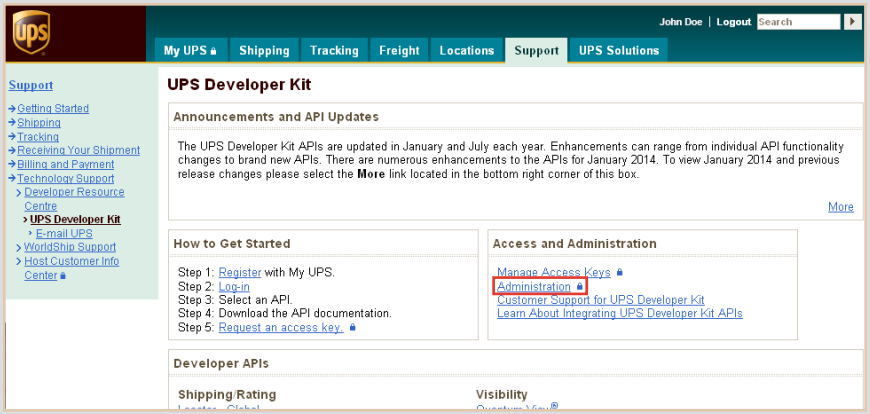


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Access and administration (cont.)

Edit account/contact information

To update primary and secondary contact information, as well as account information, go to the **UPS Developer Kit** page and select **Administration** in the **Access and Administration** section.



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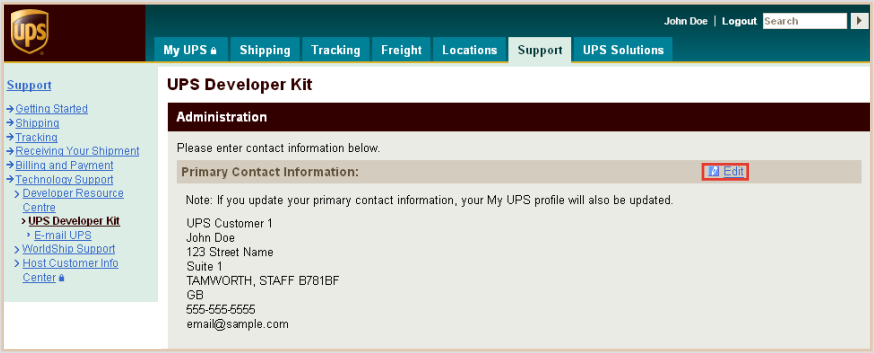
Access and administration (cont.)

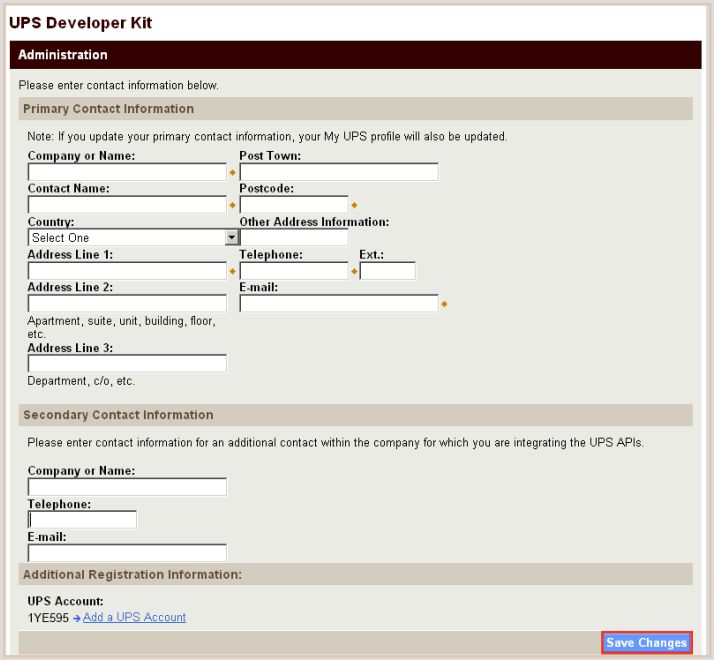
Edit account/contact information (cont.)

Contact information will be displayed. Select **Edit** to make changes.

Note: *It is very important for specific e-mail notifications regarding changes to UPS certificates and other major changes that the contact information is current. Also, if you have used an integrator it is important that the contact information is changed to your company IT contact so they can receive the important notifications.*

A new screen will appear for you to make changes. Click **Save Changes** once finished.





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Product overview

UPS Developer Kit

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Shipping and rating business processes

Address Validation API

Whether integrated into a web page or a non-web order system, the *Address Validation API* allows merchants to compare town/city-county-postcode combinations provided by buyers with those maintained on UPS's central computers (servers). If the combination is not valid, UPS returns a list of possible town/city-county-postcode combinations to the merchant's application. UPS provides up to ten alternative addresses.

Approved business models

- Validation of addresses for shipments tendered to UPS for delivery

Unapproved business models/usages

- "Scrubbing" address databases
- Validation of addresses for any uses other than UPS shipping

Available countries:	**U.S. and Puerto Rico for all modes of transport**
Available version(s):	**XML only**
Available mode(s):	**All modes**
Access requirements:	**One request for Test & Production access**

API limitations

- Only validates U.S. and Puerto Rico addresses
- No latitude longitude coordinates provided in the API response
- Only validates the town/city-county-postcode combination — not street address
- Only validates one town/city, county, postcode combination per request
- The UPS address database is updated monthly with information provided by the USPS
- NOT a CASS-certified validation engine
- Does not replace the requirement for CASS AV software

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Shipping and rating business processes (cont.)

Address Validation Street Level API

Whether integrated into a web page or a non-web order system, the *Address Validation Street Level (AVSL) API* allows merchants to compare street-town/city-county-postcode combinations provided by buyers with those maintained on UPS's central computers (servers). If the combination is not valid, UPS returns a list of possible street-town/city-county-postcode combinations to the merchant's application. UPS returns up to ten alternative addresses.

Additionally, the *AVSL API* classifies commercial/residential addresses for U.S. and Canada (classification is based upon UPS internal operations classification and not USPS information).

Approved business models

- Validation of addresses for shipments tendered to and delivered by UPS

Unapproved business models/usages

- "Scrubbing" address databases
- Validation of addresses for any use other than UPS shipping

Available countries:	**U.S. and Puerto Rico for all modes of transport**
Available version(s):	**XML and Web Service**
Available mode(s):	**All modes**
Access requirements:	**One request for Test & Production access**

API limitations

- Only validates U.S. and Puerto Rico addresses
- Only classifies (commercial/residential) U.S. and Canadian addresses
- Only validates one street, town/city, county, postcode combination per request
- Only validates a flat number if a flat number is provided within the API Request or if the flat number is in the UPS database
- No latitude longitude coordinates provided in the API response
- The UPS address database is updated monthly with information provided by the USPS
- NOT a CASS-certified application
- Does not replace the requirement for CASS AV software

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Shipping and rating business processes (cont.)

Locator API

The *Locator API* enables users to find local UPS service locations using an address or phone number. The *Locator API* provides UPS full-service and self-service locations, hours of operation and collection times. The *Locator API* can be customised to present information in different configurations that include locations, additional services, programme types, type codes and if a location is a retail location. In addition, the *Locator* provides an interactive map that displays up to ten UPS locations and turn-by-turn driving directions (where available).

Find locations such as:

- The UPS Store®
- Mail Boxes Etc.®
- UPS Customer Centres
- UPS Drop Boxes
- UPS Express®
- UPS Alliance Locations
- UPS Authorised Shipping Outlets (ASO)
- UPS Authorised Service Providers

Available in 27 countries for Small Package only

Available version(s):	**XML**
Available mode(s):	**Package**
Access requirements:	**Two separate requests for Test & Production access**

Approved business models

- Use on merchant websites and non-web, back-end systems

Unapproved business models/usages

- Use by third-party logistics providers

API limitations

- Latitude longitude coordinates are not provided
- Maps are not provided

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Shipping and rating business processes (cont.)

Collection API

The *Collection API* enables users to schedule a UPS collection from their home or office. Users may also schedule the collection of a previously processed package, freight shipment or new shipment. Additionally, UPS's environmentally friendly collection options are available with the small package *Collection API.*

Approved business models

- Use on merchant websites and non-web, back-end systems

Unapproved business models/usages

- Third-party hosting of collection requests
- Use by third-party logistics providers

API limitations

- None

Available in 36 countries for Small Package and LTL Freight

Available version(s):	**Web Service**
Available mode(s):	**Package, LTL Freight**
Access requirements:	**One request for Collection API Small Package for Test & Production access, two separate requests for Collection API Ground Freight for Test & Production access**

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Shipping and rating business processes (cont.)

Rating API

The *Rating API* provides rates (daily collection, on-demand or retail) for available UPS small package and UPS Freight® LTL service levels to any destination served by UPS. The *Rating API* can be configured to present all rates available ("Shop" option) or rates for specific service levels ("Rate" option). Published rates are provided by default; account-specific negotiated rates can be enabled by **Account Invoice Authentication** in the **Account Summary** or **Account Maintenance** pages at **ups.com** under My UPS tab. Please see page 11 of this guide for further details. The *Rating API* provides delivery date and time for all services except Ground (the *Time-in-Transit API* must be used for this information).

Approved business models

- Use on merchant websites and non-web, back-end systems

Unapproved business models/usages

- Display of UPS rates side-by-side with competitor rates

Available in 66 countries for Small Package, 4 countries for LTL Freight and 36 countries for Air Freight (Gemini APIs)

Available version(s):	**XML and Web Services (see notes)**
Available mode(s):	**Package, LTL Freight (1), Air Freight (2)**
Access requirements:	**Two separate requests for Test & Production access for LTL Freight and manual request for Air Freight via the Gemini APIs request form (see links at UPS Developer Kit at ups.com)**

Notes:
(1) Web Service only for LTL Freight
(2) Air Freight through Gemini APIs XML only

API limitations

- Only rates single-package shipments
- Only supports limited accessorials:
  - Insured value
  - Saturday collection
  - Saturday delivery
  - Additional handling
- Rating for *Air Freight* requires use of the *Gemini APIs*. Please see the UPS Developer Kit home page as well as the Announcements and API Updates section for a link to the *Gemini APIs* request form and developer guide. Please read the request form thoroughly for gaining access to this API.

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Shipping and rating business processes (cont.)

Shipping API

The *Shipping API* supports the integration of UPS's shipping functionality across enterprise systems and websites. Integration allows for use of data from the shipper's applications without requiring key-entry by the user while supporting internal processes with convenient and controlled access to shipping. The *Shipping API* also supports the entire small package UPS Returns® portfolio, including international returns. UPS residential/commercial address classification and town/city, county and postcode validation are also provided. Integration of the *UPS Shipping API* requires significant programming time and expertise.

How the Shipping API works

The process consists of two phases: the **Ship Confirm** phase followed by the **Ship Accept** phase. An XML request/response pair is exchanged between the client and server in each phase. Please note that cancelling or voiding a shipment requires its own procedure and message types.

Approved business models

- Use on merchant websites and non-web, back-end systems
- When integrated on a website with controls for access

Available in 66 countries for Small Package, 4 countries for LTL Freight and 36 countries for Air Freight (Gemini APIs)

Available version(s):	**XML and Web Services (see notes)**
Available mode(s):	**Package, LTL Freight (1), Air Freight (2)**
Access requirements:	**Two separate requests for Test & Production access for LTL Freight and manual request for Air Freight via the Gemini APIs request form (see links at UPS Developer Kit at ups.com)**

Notes:

(1) LTL Freight are Web Service only

(2) Air Freight through Gemini APIs XML only

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Shipping and rating business processes (cont.)

Shipping API (cont.)

Unapproved business models/usages

- Display of UPS rates side-by-side with competitor rates
- No side-by-side comparisons with competitors on external or web-based implementations
- No hosting of *Shipping API* on any website

API limitations

- The processing time averages about eight seconds per transaction; inappropriate for high-volume production shipping environments
- The published rates are provided by default; account-specific negotiated rates can be enabled by **Account Invoice Authentication** in the **Account Summary** or **Account Maintenance** pages at **ups.com** under My UPS tab. Please see page 11 of this guide for further details
- Not supported: *Hazardous Materials*, *UPS World Ease*®, Batch Processing and *UPS Hundredweight Service*® aggregation

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Shipping and rating business processes (cont.)

Time-in-Transit API

The *Time-in-Transit API* lets users compare the speed of delivery of different services so they can select the service most appropriate for a shipment. This API provides access to all available UPS shipping services for anywhere UPS delivers around the world. The information includes the scheduled delivery date and time as well as the number of days in transit. Provides the date and time of delivery for ground packages which take into account UPS holidays and weekends.

Approved business models

- Use on merchant websites and non-web, back-end systems

Unapproved business models/usages

- Use by third-party information logistics providers who are not a party to the transaction
- For creating Time-in-Transit tables from UPS proprietary information

API limitations

- None

Available in 66 countries for Small Package only

Available version(s):	**XML and Web Services**
Available mode(s):	**Package**
Access requirements:	**One request for Test & Production access for UPS-approved business models**

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Visibility business processes

Quantum View® API

Quantum View® Data provides comprehensive tracking information that can be seamlessly integrated into in-house applications, from spreadsheets and simple databases to ERP systems.

Shipment status updates can be automatically downloaded to internal system, as frequently as every hour if needed, in a number of common data file formats (CSV, XML, TXT or EDI ANSI or EDI EDIFACT).

- Outbound
- Inbound
- Third-party — Current information on shipments billed to a UPS account via Freight Collect, third-party or Consignee Billing.

Understanding XML Quantum View services

Quantum View presents information as "events". With this API, your application can automatically retrieve Quantum View events and integrate the information into your systems' processes.

Available in 31 countries for Small Package only
Available version(s): XML
Available mode(s): Package
Access requirements: One request for Test & Production access

Subscriptions

This feature gives you a way to indicate which types of Quantum View events you wish to retrieve. You can set up subscriptions for outbound shipments, inbound shipments and shipments using alternative billing. These subscriptions can include manifest, origin, delivery and exception activity. Quantum View subscriptions are created by you through **ups.com**. Managing the type of information you receive and the type of subscription is all completed at **ups.com**. To activate your subscription you must contact your sales representative.

Bookmarks

For users with high volume of activity and to ease the burden on network resources, the *Quantum View API* may limit the amount of information returned for any single request. This limit is approximately 150KB for multiple combined files or 500KB for a single file. For files exceeding the limit, UPS returns part of the information and appends a special bookmark element to the response. To retrieve the additional information, re-issue the original request with the bookmark element added.

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Visibility business processes (cont.)

Quantum View API (cont.)

Information format

When your application requests Quantum View events, the API returns only events that have not been viewed before. File name and date/time requests are the only exceptions to this rule.

Approved business models

- Use on merchant websites and non-web, back-end systems

Unapproved business models/usages

- Use by third-party logistics providers

API limitations

- Updates are in batches and limited to hourly updates
- Files must be appended to existing data, in that only what has changed is included in the hourly file updates
- Only Manifest, Exception and Delivery scans are provided within the files. No intermediate scans (in transit scans)

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Visibility business processes (cont.)

Tracking API

The *Tracking API* provides transparency in allowing customers to track their shipments from an e-commerce site using a reference or order number. Customers can find specific details about their shipment's status, including the time and location of each scan as the package moves towards its final destination. Additionally, tracking information can blend seamlessly with the look of your site.

Approved business models

- Use on merchant websites and non-web, back-end systems

Unapproved business models/usages

- Use by third-party information logistics providers who are not a party to the transaction
- Use by "robots" that track every outbound package until a specified event

Available in 66 countries for all transport modes

Available version(s):	**XML and Web Services**
Available mode(s):	**All modes**
Access requirements:	**One request for Test & Production access**

API limitations

- Limit of 64KB per response regardless of the size of a shipment
- Shipments with 50 packages may only return the first 15 packages dependent upon how much tracking information is available on the packages
- Transactional not batch and no batch upload of tracking numbers
- The API only tracks a single tracking or reference number with each tracking request
- Package scans and weight information is available for 6 months
- Reference number tracking is available for four months
- Delivery scan information is available for 18 months

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Visibility business processes (cont.)

UPS Signature Tracking® API

The *UPS Signature Tracking API* provides the same information as the *Tracking API* plus:

- Receiver's name and address
- C.O.D. collected amount
- Proof of Delivery (POD) signature image

Merchants can integrate a POD letter image into their systems to automatically e-mail, post or fax a POD letter to buyers proactively or in response to non-payment or requests for POD. Since the POD letter includes the receiver's signature (when collected), this solution can meet the demands of buyers not satisfied with the "clarified" signature (typed by UPS driver) information provided by the standard *Tracking API.*

Note: *Processing requests requires that the account number is included in the My UPS ID Account Summary and that the tracking number being tracked was generated by that account number. Tracking numbers generated by other accounts will not work unless those accounts are added to the My UPS ID Account Summary for the My UPS ID used in the XML Request.*

Available in 45 countries for Small Package only

Available version(s):	**XML and Web Services**
Available mode(s):	**Package only**
Access requirements:	**One request for Test & Production access for UPS-approved business models**

Approved business models

- Use on merchant websites and non-web, back-end systems

Unapproved business models/usages

- Use by third-party information logistics providers who are not a party to the transaction
- Use by "robots" that track every outbound package until a specified event

API limitations

- Same as *Tracking API*
- Additional limitation of storage of signatures for 18 months

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International trade business processes

Paperless Document API

Paperless Document API provides you with the ability to upload your document images in conjunction with your shipments. This eliminates the need to attach paper shipping documents to the package and the associated issues of processing delays. This API is used in conjunction with other manifesting systems as well as the *Shipping API*. This capability essentially eliminates the hassle of lost or damaged paperwork and allows for seamless and automated linking of shipments and the document images required for processing.

Note: *You must have a valid six-digit account number and be enabled by your UPS Account Manager for your account within the UPS back-end systems to use the* ***Upload My Forms*** *at* ***ups.com*** *or the* ***Paperless Document API****. If the shipper number is not enabled within back-end systems for the Upload Forms, the Paperless Document API will throw a hard error.*

Available in 66 countries for Small Package	
Available version(s):	**Web Services**
Available mode(s):	**Small Package**
Access requirements:	**Single request for Test & Production access for UPS-approved business models**

Understanding Paperless Document API processing

- The *Paperless Document API* Web Service consists of three operations:
  1. Upload documents to Forms History (See API Limitations on page 34).
  2. Delete uploaded documents (one document ID per delete request).
  3. Push uploaded documents to Image Repository.

Note: *You will need to build input screens that collect the information needed by the application to initiate upload, delete and push requests for document images created.*

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International trade business processes (cont.)

Paperless Document API (cont.)

There are two options when you use the *Paperless Document API* with the *Shipping API* or other manifesting systems.

Option 1:

Step 1: Go to *Paperless Document API* and complete an Upload Request. Upload your documents to Forms History and receive a Document ID.

Step 2: Go to *Shipping API* and submit a request to create a domestic or international shipment with the Document ID from Step 1. *Shipping API* will internally push the documents to a Forms Repository and return Forms Group ID in response back.

Option 2:

Step 1: Go to *Paperless Document API* and complete an Upload Request. Upload your documents to Forms History and receive a Document ID.

Step 2: Go to *Shipping API* and submit a request to create a domestic or international shipment. You will receive a Shipment Identification number and Tracking Number(s).

Step 3: Go to *Paperless Document API* and provide the Document ID from Step 1 along with the Shipment Identification number and Tracking Number(s) from Step 2. Complete a Push To Image Repository Request, which will push the documents to Forms Repository which will return a Forms Group ID back to you.

Approved business models

- Use with shipments that require documentation within internal business processes or other back-end systems. This is not for hosting on the web.

Unapproved business models/usages

- Use by third-party logistics providers

API limitations

- The API is capable of handling multiple files and multiple documents in each file.
  - The maximum allowable size for each file is 1MB with a total maximum allowable size limit for all files of 5MB.
  - A maximum of 13 files are allowed per request with no more than 13 documents in each file or in total per shipment
- There are two steps to each document image.

  Step 1: Upload the image.

  Step 2: Submit the image either through the *Shipping API* or the *Paperless Document API*.

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International trade business processes (cont.)

UPS TradeAbility® APIs

UPS TradeAbility provides a suite of information-based services, enabling the effective management of the movement of goods across international borders. The *TradeAbility APIs* can help to improve regulatory compliance, reduce operating expenses and streamline global supply chains and international trade processes.

- **Landed Cost API**
  Estimates the cost of international shipments: including duties, customs fees and taxes. Preferential duty rates may be included in Landed Cost estimates by default. For these rates to be applied when shipping, the shipper must submit the proper documentation along with the shipment. Allows transactions containing up to 99 products per shipment from one origin country to one destination country. To provide the most accurate estimate of landed cost, the service may refine its estimate through a series of interactive queries and responses using the **QueryRequest** element. The user re-issues the request and includes answers using **EstimateRequest** elements. Once UPS has received all the information needed, a landed cost estimate will be provided.

Available in 32 countries for Small Package	
Available version(s):	Web Services
Available mode(s):	Package
Access requirements:	Single request for Test & Production access for UPS-approved business models

- **Denied Party Screener API**
  From one source, determines who is on the U.S. government watch lists, ensuring current and accurate compliance with government regulations. Allows single transactions and the selection of different match settings to allow broader searches and checks a single source for named parties and destination countries, plus it provides specific reasons for denial and list sources.
- **Import Compliance API**
  Helps to reduce border delays by maximising compliance with country-specific trade relations, procedures and restrictions before importing. Import Compliance transaction details will be stored and can be accessed for 90 days. Allows transactions containing up to 99 products per shipment from one origin country to one destination country.
- **Export Licence Detector API**
  Accesses the latest U.S. export licence requirements based on destination country or commodity information such as Export Classification Number, to help reduce the risk of fines and sanctions.

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International trade business processes (cont.)

UPS TradeAbility APIs (cont.)

Approved business models

- Approved for End Users

Unapproved business models/usages

- No hosting of *TradeAbility APIs* by unapproved third parties

API limitations

- No Harmonised Code look-up functionality
- Outdated tariff codes and country regulations

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UPS Developer Resource Centre

UPS Developer Kit

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Accessing resources and technical support

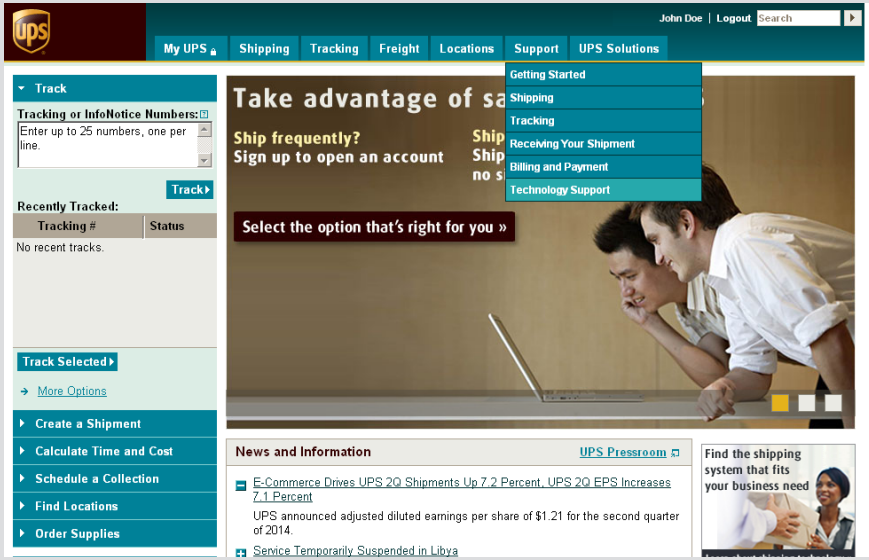
UPS Developer Kit users can access information, download tools and request technical support through the UPS Developer Resource Centre.

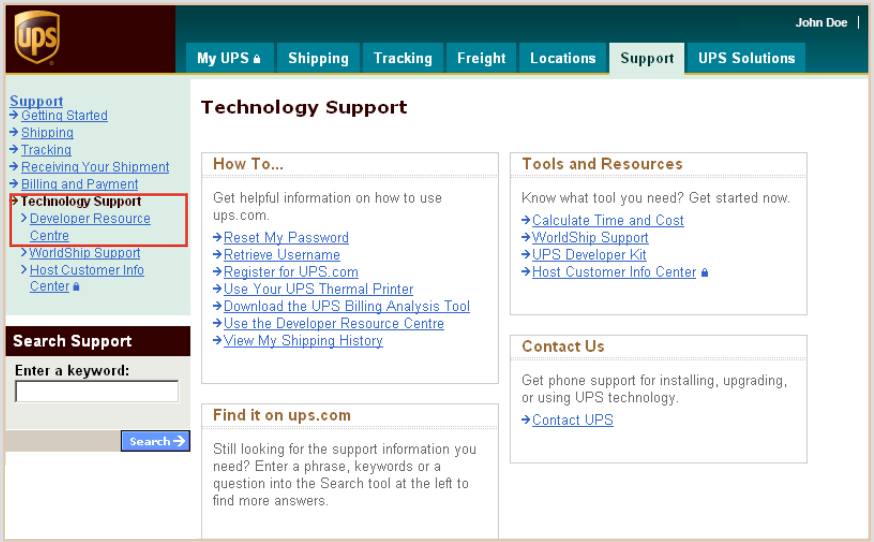
You can access the Developer Resource Centre by following these steps:

Step 1: Go to **ups.com**

Step 2: Mouse over the **Support** tab and select **Technology Support**

Step 3: In the left navigation panel of the page, select the link **Developer Resource Centre**





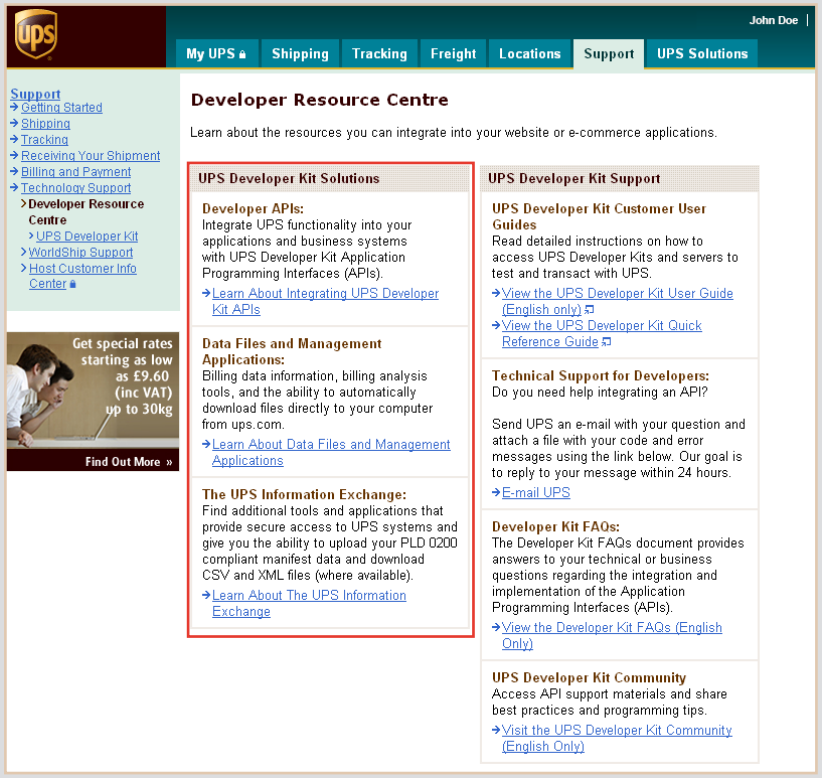
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Resources

Access information, download tools and applications through the UPS Developer Resource Centre.

UPS Developer Kit solutions

- **Developer APIs**
  Integrate UPS functionality into your applications and business systems with UPS Developer Kit Application Programming Interfaces (APIs).
- **Data files and management applications**
  Billing data information, billing analysis tools and the ability to automatically download files directly to your computer from **ups.com**.
- **The UPS information exchange**
  Find additional tools and applications that provide secure access to UPS systems and give you the ability to upload your PLD 0200 compliant manifest data and download CSV and XML files (where available).



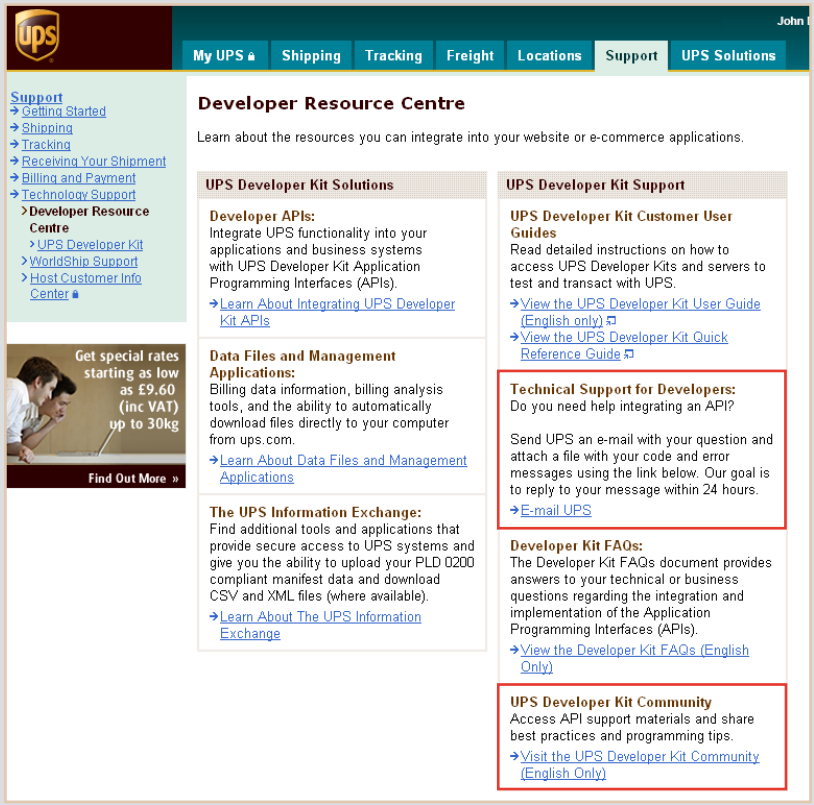
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Technical support

There are four channels for obtaining support for the *UPS Developer Kit* APIs, all of which may be accessed through the *UPS Developer Resource Centre*. Instructions on getting access to the *UPS Developer Resource Centre* can be found on page 38.

UPS Developer Kit support

- **UPS Developer Kit Community**
  This is a community forum for developers to answer one another's questions and share information, therefore response time may vary.
- **Email technical support (preferred channel)**
  This is the support channel for technical support and questions regarding API integration. It is accessed by logging in to My UPS and attaching your XML Request/Response files and any other pertinent information about your integration. UPS E-mail Technical Support can only support the XML Request/Response pair. They cannot advise customers and developers on how to integrate the XML into their internal or purchased software.

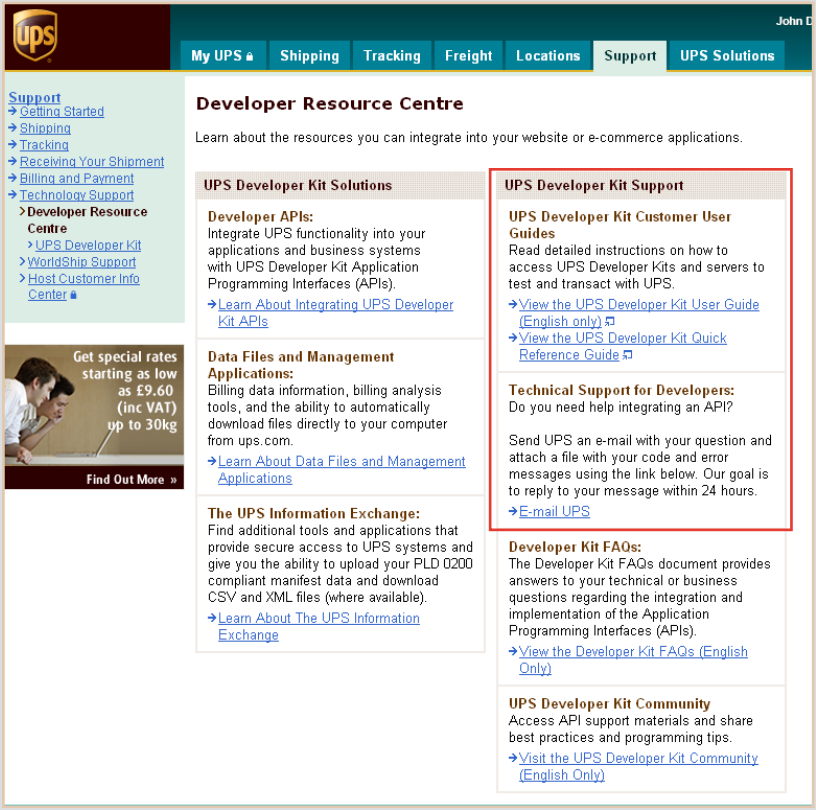


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Technical support (cont.)

UPS Developer Kit support (cont.)

- **General questions phone support**
  Phone support is the least comprehensive support mechanism for developers. This channel of support addresses questions about the user interface at **ups.com** and how to gain access to the APIs and navigate the Access Key request process. It does not provide technical support for XML Request/Response issues and questions. Those types of questions must go through UPS E-mail Technical Support.
- **UPS Developer Kit knowledge base**
  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 UPS Developer Kit APIs. It's also available in an online version at the UPS Developer Kit Community.



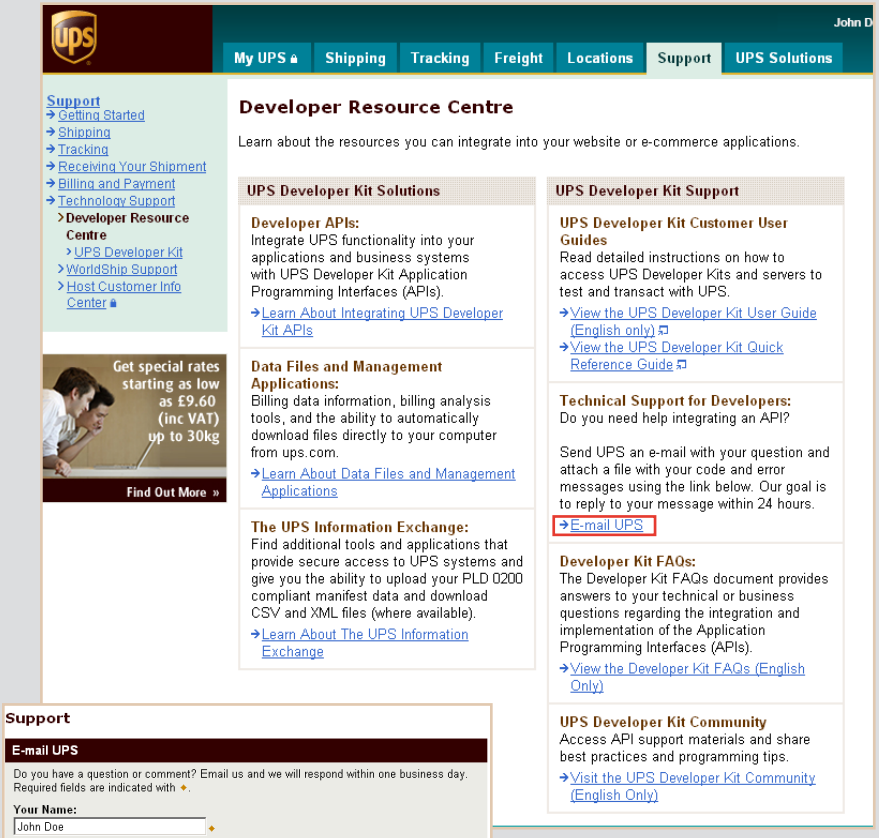
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Technical support (cont.)

Getting e-mail technical support

Step 1: From the **Developer Resource Centre** page select the **E-mail UPS** link in right-hand column.

Step 2: Complete name and e-mail address fields. Support Category must be **Technical Support**, Support Topic must be **Developer Resources**, click **Next**.



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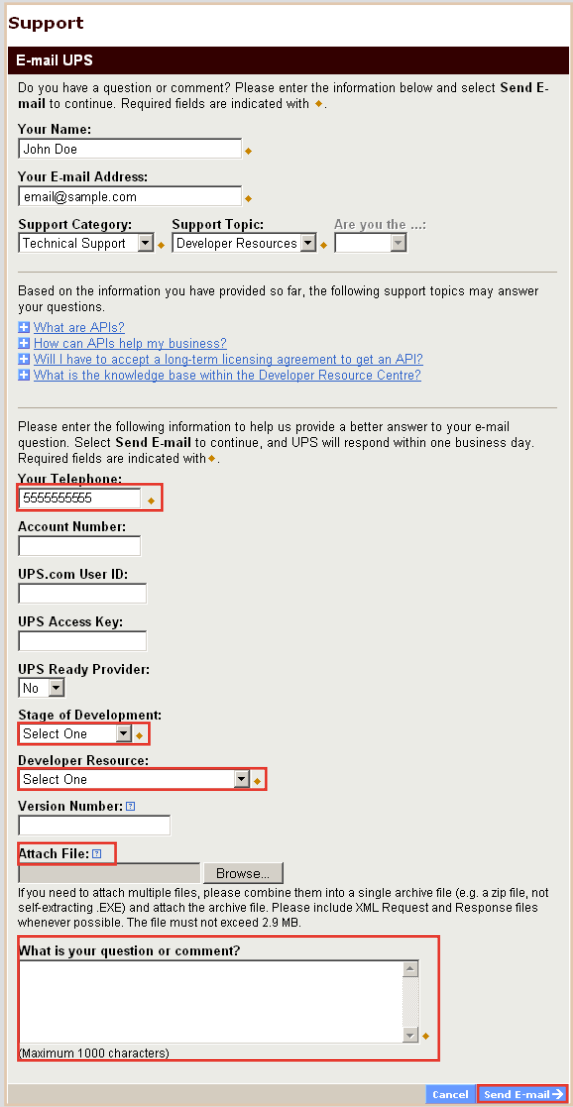
Technical support (cont.)

Getting e-mail technical support (cont.)

Step 3: Scroll down the page and complete the remainder of the form, including:

- **Your Telephone**
- **Stage of Development**
- **Developer Resource** which is the API you are integrating

- **Attach File** where you attach your XML Request/ Response Pair
- Include any pertinent description of the issues in the **What is your question or comment?** field
- Select **Send E-mail** button



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Technical support (cont.)

Technical support hours and response times

Wherever you are in the integration process, UPS offers a number of ways to find out what you need to know. The UPS Developer Resource Centre offers several support options at: **ups.com/content/gb/en/resources/techsupport/developercenter.html**.

Note: *If you submit an e-mail request, response times may vary and translations and escalations may delay the process. You will need to attach a file that includes your XML request/response messages and errors. Our goal is to reply to your message within 24 hours.*

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