



*Integration and  
automation to  
improve your  
business processes*

## **UPS® Developer Kit**

---



[INDEX](#)

[PRINT](#)

[EXIT](#)

[NEXT ▶](#)

# UPS Developer Kit

Integrate UPS functionality directly into your business systems and e-commerce websites.

With this collection of eleven powerful Application Programming Interfaces (APIs), you can integrate UPS transportation functionality into your processes for small package, LTL and air freight shipments.

Integration is designed to increase internal efficiencies and overall customer satisfaction for:

- **Ordering** – Street Level Address Validation, Rating or Time in Transit APIs help improve order accuracy.
- **Shipping** – Pickup, Shipping and UPS TradeAbility™ APIs automate fulfillment and global shipping processes.
- **Customer service** – Quantum View™, Rating, Tracking, Signature Tracking™ and Locator APIs provide shipment visibility to customers and your customer service agents.

► LEARN MORE

◀ PREVIOUS

INDEX

PRINT

EXIT

NEXT ▶

## Integration that delivers real benefits

- **Address Validation API** — Catch errors before they catch up with you
- **Address Validation Street Level API** — Reduce operating cost and improve customer service with help from UPS and the United States Postal Service®
- **Locator API** — Find UPS shipping locations with ease
- **Paperless Document API** — Upload document images and link to your international shipments
- **Pickup API** — Offer customers the option to schedule a pickup at their convenience
- **Quantum View API** — Access inbound and outbound shipment manifests
- **Rating API** — Offer your customers the option to compare delivery services and rates
- **Shipping API** — Deliver UPS shipping functionality from your website or enterprise system
- **Tracking API** — Visibility to up-to-the-minute status reports
- **Time in Transit API** — Give your customers insights into shipment and delivery timelines
- **Signature Tracking API** — Automate your Proof of Delivery process
- **UPS TradeAbility API** — Anticipate and manage trade regulation compliance

► [LEARN MORE](#)

◀ [PREVIOUS](#)

[INDEX](#)

[PRINT](#)

[EXIT](#)

[NEXT](#) ▶

## *Build or buy*

### Who do I consult for expertise?

Making a decision involving complex technologies requires expertise. You should consult a technical team who is proficient in XML/Web Service coding. Based on whether you plan to build or buy, the type of developer will be different.

#### Build

- Secure an in-house development team or a third-party integrator
- UPS will provide technical support

#### Buy

- If you've decided to buy, your next step is to select a UPS Ready™ Provider. Learn more [here](#).

UPS offers technical support during the integration process and for post-implementation or production issues. Technical support hours are: Monday through Friday: 7:30 a.m. to 9:00 p.m. EST, Saturdays and Sundays: 9:00 a.m. to 6:00 p.m. EST. Response time for e-mail technical support is typically four hours or less within the stated hours of operation.

▶ LEARN MORE

◀ PREVIOUS

INDEX

PRINT

EXIT

NEXT ▶

## *Evaluation steps*

### How do you determine which is best for you?

Examine the following steps to help you determine the expense and development time for integration. These steps take into account both business and technical planning processes. Consult a technical team who is proficient in XML or Web Service coding. Complete the steps outlined below to assist you in making a more informed decision whether to integrate the APIs or purchase a UPS Ready turnkey solution. Of course, this list is not comprehensive and is to be used as a guideline. Each customer has numerous variables that must be considered that are unique to their proprietary business processes and systems.

#### Step 1) Needs analysis

- Map and document business processes and pain points
- Document software functionality required to address pain points
- Identify appropriate APIs to meet business needs

#### Step 2) Technical requirements

- Identify the number and type of platforms/systems impacted
- Pinpoint high-level impacts to interfaces and internal processing logic of each system

#### Step 3) Cost comparison

- Determine developer skill level required for XML or Web Service coding
- Evaluate development time to integrate the APIs versus purchasing software with APIs integrated
- Complete cost benefit analysis

► [LEARN MORE](#)

# Developer access

The screenshot shows the 'UPS Developer Kit' page on the UPS website. The page is titled 'UPS Developer Kit' and is part of the 'Support' section. It features a navigation menu with links for 'My UPS', 'Shipping', 'Tracking', 'Freight', 'Locations', 'Support', and 'UPS Solutions'. The main content area is divided into several sections:

- Announcements and API Updates:** A section with a heading and a paragraph stating that the UPS Developer Kit APIs are updated in January and July each year. It includes a 'More' link.
- How to Get Started:** A section with a heading and a list of five steps: 1. Register with My UPS, 2. Log-in, 3. Select an API, 4. Download the API documentation, and 5. Request an access key.
- Access and Administration:** A section with a heading and a list of links: 'Manage Access Keys', 'Administration', 'Customer Support for UPS Developer Kit', and 'Learn About Integrating UPS Developer Kit APIs'.
- Developer APIs:** A section with a heading and several sub-sections: 'Shipping/Rating' (with links for 'Address Validation - City, State, ZIP' and 'Address Validation - Street Level'), 'Locator - Global', 'Pickup', 'Rating', 'Shipping', 'Visibility' (with links for 'Quantum View', 'Tracking', and 'Tracking - UPS Signature Tracking'), 'International Trade' (with link for 'UPS TradeAbility'), and 'Time in Transit'.

On the left side of the page, there is a 'Support' sidebar with links for 'Getting Started', 'Shipping', 'Tracking', 'Receiving Your Shipment', 'Billing and Payment', 'Technology Support', 'Developer Resource Center', 'UPS Developer Kit', 'E-mail UPS', 'WorldShip Support', and 'Host Customer Info Center'. Below the sidebar is a 'Saturday Delivery' section with a 'Find out about Saturday Delivery from UPS' link. At the bottom left, there is a 'FIND OUT WHEN I'LL BE DELIVERED' button and a 'UPS MY CHOICE' button with a 'Sign up now' link.

**UPS Developer Kit** — This section of [ups.com](http://ups.com)<sup>®</sup> provides access for developers to download developer guides, sample code and UPS logos. Developer can also request an Access Key to gain access to UPS test and production API servers. Complete instructions are available within the UPS Developer Kit User Guide.

▶ LEARN MORE

◀ PREVIOUS

INDEX

PRINT

EXIT

NEXT ▶

# Resource center

The screenshot shows the 'United States' version of the UPS Developer Resource Center. The top navigation bar includes 'My UPS', 'Shipping', 'Tracking', 'Freight', 'Locations', 'Support', and 'UPS Solutions'. The main content area is titled 'Developer Resource Center' and includes a sub-header 'Learn about the resources you can integrate into your website or e-commerce applications.' Below this, there are two columns of content. The left column is titled 'UPS Developer Kit Solutions' and contains sections for 'Developer APIs', 'Data Files and Management Applications', and 'The UPS Information Exchange'. The right column is titled 'UPS Developer Kit Support' and contains sections for 'UPS Developer Kit Customer User Guides', 'Technical Support for Developers', and 'E-mail UPS'. A sidebar on the left contains a 'Support' menu and a 'When your International freight can't wait' section with an image of a person and a box.

**UPS Developer Resource Center** — This section of [ups.com](http://ups.com) provides a comprehensive list of technical support options for your developer including the best channel for urgent technical support — the “E-mail UPS” option.

The screenshot shows the 'UPS Developer Kit Community' page. The top navigation bar includes 'Log in / create account' and a search box. The main content area is titled 'Main Page' and includes a sub-header 'Welcome to the UPS Developer Kit Community.' Below this, there is a 'PLEASE NOTE' section, a paragraph describing the community's purpose, and a paragraph about the forum's goal. A sidebar on the left contains a 'UPS Developer Kit Community' menu and a 'Forum Menu' section.

**UPS Developer Kit Community** — This section of [ups.com](http://ups.com) provides developers a forum to share best practices and programming tips as well as access all API documentation online.

▶ LEARN MORE

◀ PREVIOUS

INDEX

PRINT

EXIT

NEXT ▶

# *Integration process*

## Quick-guide for developers

Key things to know before and during the integration process.

The UPS Developer Kit offers convenience in integrating UPS functionality directly into your business systems and e-commerce websites using the Internet. Choose from 11 UPS Developer APIs to help automate and improve internal efficiencies while enhancing end-to-end customer experience.

### Technical considerations

Prior to downloading APIs, you should be familiar with:

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

### 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, as well as the business models approved for use with each API.

▶ [LEARN MORE](#)



## *Implementation to production*

### Quick-guide for developers (cont.)

#### Implementation

Review the requirements for each API carefully at the [UPS Developer Kit page](#). Download the Software Developer Kit (SDK) and carefully review the entire developer guide for each of the APIs you will integrate. The Developer Kit also includes sample code and WSDLs. Once you have reviewed the Kit, you should request access to the UPS test environment. Most APIs provide immediate access to both test and production environments. However, the following APIs require a second request to activate production access: Address Validation Street Level, Locator, Pickup, Rating (LTL Freight only) and Shipping.

#### Testing and certification

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 you have properly formatted your XML or Web Service requests.

LTL Freight and Locator APIs require an additional request to gain production access. Please [click here](#) to review the User Guide and the respective developer guides for details.

▶ LEARN MORE

◀ PREVIOUS

INDEX

PRINT

EXIT

NEXT ▶

# *Developer support*

## Quick-guide for developers (cont.)

### Resource center

UPS Developer Kit users can obtain support through the [Developer Resource Center](#), including:

- Data files and management applications
- The UPS information exchange
- UPS Developer Kit Community
- Technical support
- The knowledge base

### Technical support

For general questions, you can download the Knowledge Base file. This resource contains answers to hundreds of questions about the APIs. You can also obtain e-mail support at **ups.com**.

1. Attach a file with your e-mail support request that includes your XML request/response messages and errors.
2. First-level Technical Support will respond the next day (this excludes U.S. holidays).
3. If your problem log is escalated to the next level of Technical Support, you will get a response by the next business day (excluding U.S. holidays).
4. Finally, if your issue is urgent and you need immediate assistance, you can call the first-level Technical Support desk in the U.S. at 1-877-289-6420.

► [LEARN MORE](#)

## Build or buy, you've got support

Wherever you are in the integration process, UPS offers a number of ways to find out what you need to know.

If you've decided to buy, your next step is to select a UPS Ready Provider. Learn [more](#).

For builders, the UPS Developer Resource Center offers several support options. Learn [more](#).

### UPS Developer Kit support (at UPS Developer Resource Center)

- **UPS Developer Kit Community** — Access online documentation, FAQs and share best practices and programming tips. However, if you need urgent technical support use the UPS Developer Resource Center “E-mail UPS” link outlined below under Technical Support.
- **Knowledge base** — This Knowledge Base PDF document is a downloadable PDF file that provides answers to your business and functionality questions regarding the UPS APIs.
- **Technical support** — Send UPS an [e-mail](#) with your question and attach a file with your code and error messages using the “E-mail UPS” link at the UPS Developer Resource Center. Our goal is to reply to your message within four hours during support business hours — Monday through Friday: 7:30 a.m. to 9:00 p.m. EST, Saturdays and Sundays: 9:00 a.m. to 6:00 p.m. EST.

▶ LEARN MORE

For more information on product  
and service availability, visit  
[ups.com/developerkit](https://www.ups.com/developerkit).

---

© 2015 United Parcel Service of America, Inc. UPS, the UPS brandmark and the color brown are trademarks of United Parcel Service of America, Inc. All rights reserved. 01971640 1/15 us\_en