

Integration and automation to improve your business processes

UPS° Developer Kit



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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.

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

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 <u>here</u>.

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.

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

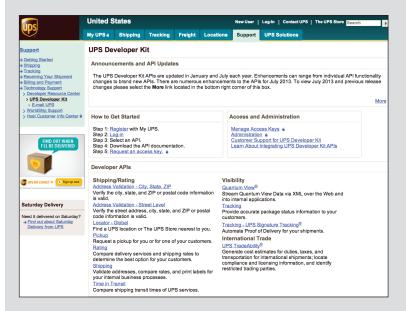
Step 2) Technical requirements

- · 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

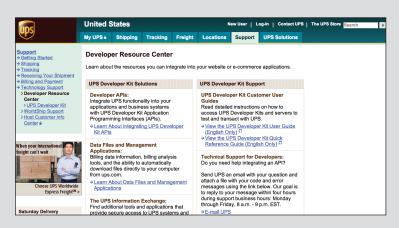
- Determine developer skill level required for XML or Web Service coding
- Evaluate development time to integrate the APIs versus purchasing software with APIs integrated
- Complete cost benefit analysis

Developer access



UPS Developer Kit — This section of <u>ups.com</u>[®] 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.

Resource center



UPS Developer Resource Center — This section of <u>ups.com</u> provides a comprehensive list of technical support options for your developer including the best channel for urgent technical support — the "E-mail UPS" option.

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	Search
UPS Developer Kit Community	Main Page
Main.page Loginicreate account System Status	Welcome to the UPS Developer Kit Community.
Developer Guides Knowledge Base News & Announcements Help Contect Us	PLEASE NOTE: If you have an urgent technical support question/heed please go to the UPS Developer Resource Center (http:// and select "Email UPS". You will get a response within 4 business hours during technical support operating hours (M-F 730am to 8pm EST and Sat-Sun 8um to 8pm EST).
	This community is designed to create a self-serve environment which enables peer to peer sharing amongst developers to resolve issues, share best practices, and discuss emerging trends.
Forum Menu	Our goal is to foster collaboration and idea sharing through the available discussion forums.
Eorum Search Today's Posts	Pease take a moment to read our Community Guidelines before participating. Also, note that since this is a self-sustaining allo, a response to your question or comment will be slower than the UPS technical support email inquiry.
	Again, il you have an urgent technical support issue please go hare 🕼 and submit an email request to UPS technical support.

UPS Developer Kit Community — This section of <u>ups.com</u> provides developers a forum to share best practices and programming tips as well as access all API documentation online.



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.

Implementation to production

Quick-guide for developers (cont.)

Implementation

Review the requirements for each API carefully at the <u>UPS</u> <u>Developer Kit page</u>. 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 <u>click here</u> to review the User Guide and the respective developer guides for details.



Developer support

Quick-guide for developers (cont.)

Resource center

UPS Developer Kit users can obtain support through the <u>Developer Resource Center</u>, 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.

UPS resources

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 <u>e-mail</u> 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.

For more information on product and service availability, visit **ups.com/developerkit**.

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