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.

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.

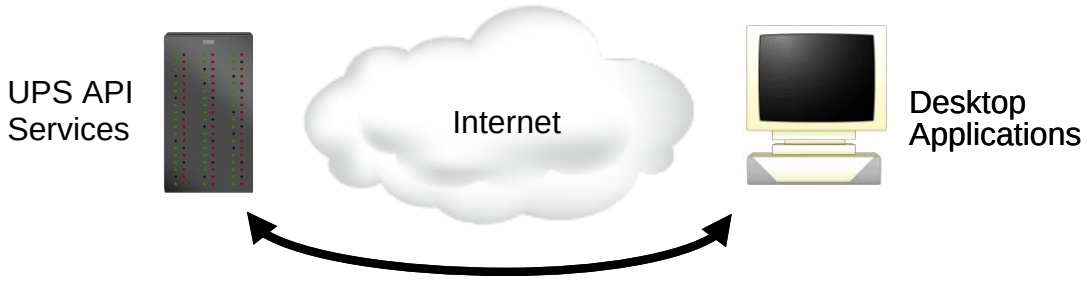

Figure 1: Dedicated applications that users run on their desktops can access UPS Developer APIs.

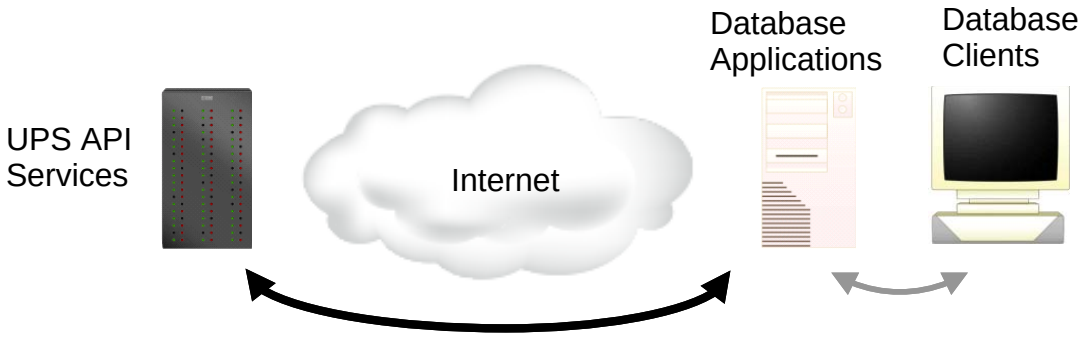

Figure 2: Database applications can access UPS Developer APIs and return information to their clients

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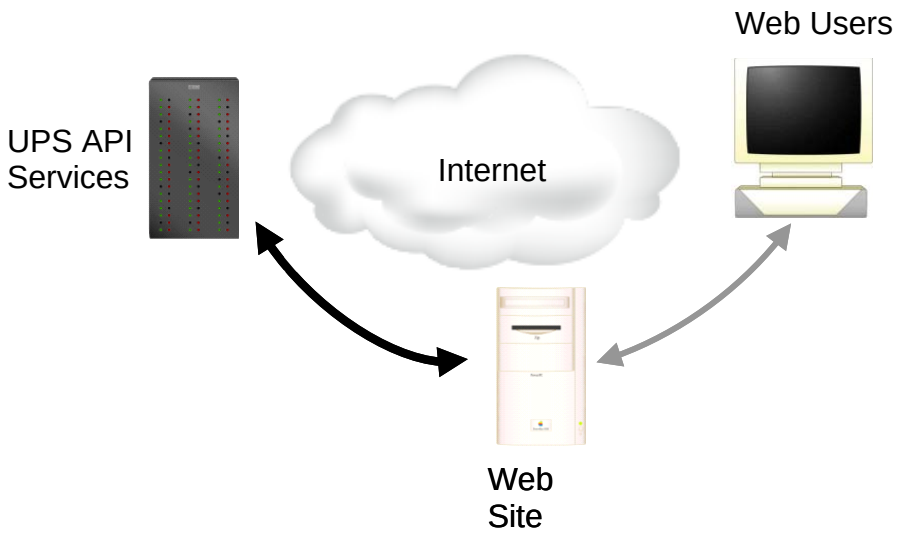

Figure 3: Web sites can access UPS Developer APIs and return information to users' web browsers.

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 withal 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.

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.

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

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APIs without providing branded recognition to UPS. Your use of the UPS logo can in no way imply endorsement, sponsorship or certification of your e-commerce 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.

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.

Microsoft Visual Studio

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.

Java Standard Edition and Enterprise Edition

Java

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.

Open Source

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.

Getting Technical Support

UPS provides technical support for developers who are using the UPS Developer APIs. To get in touch with a UPS technical support engineer, fill out the technical support request form on the UPS web site.

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Within the United States

UPS provides seven days-a-week support either via email or phone. The primary and most effective method for support is to use email (https://www.ups.com/upsemail/input?requestId=gec&category=techsupport&topic=onlinetools&loc=en_US&WT.svl=SubNav) since you will need to include your code for review by the UPS support team. UPS now provides phone support for all phases of development in extremely urgent situations. To access phone support please call toll free 1-877-289-6420.

For developers in the United States, the request form may be found by selecting "Contact UPS" from the www.myups.com web site, or from www.ups.com from the steps below.

1. Navigate to the UPS website http://www.ups.com.
2. Select a language, (ex. United States – English).
3. Log into www.ups.com with your User ID and Password.
4. Click the "Support" tab
5. Select "Technology Support" from "Support" tab
6. Click on "Developer Resource Center", and then click "UPS Developer Kit" on the left-hand navigation window.
7. Click the link for "Customer Support for UPS Developer Kit" under Access and Administration.
8. Complete the e-mail form. Please explain details about errors that are being returned, and under what circumstances.

Outside of the United States

Developers outside the United States can find the technical support request in the UPS Developer APIs page within the Support section of their country's UPS web site.

1. Navigate to the UPS website http://www.ups.com.
2. Select a language,
3. Log into www.ups.com with your User ID and Password.
4. Click the "Support" tab
5. Select "Technology Support" from "Support" tab
6. Click on "Developer Resource Center", and then click "UPS Developer Kit" on the left-hand navigation window.
7. Click the link for "Customer Support for UPS Developer Kit" under Access and Administration.

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8. Complete the e-mail form. Please explain details about errors that are being returned, and under what circumstances.

For more information or assistance with UPS technical support, please contact your UPS Developer APIs representative

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.

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. 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. You can also return to the UPS Support area of ups.com for the latest updated information about UPS Developer APIs.

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