Planning Your Applications for Web Services

Planning is a key part of any successful development activity, and UPS Web Service applications are no exception. This section helps that planning by describing the important activities of any UPS Web Services 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.

Web Service Applications

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

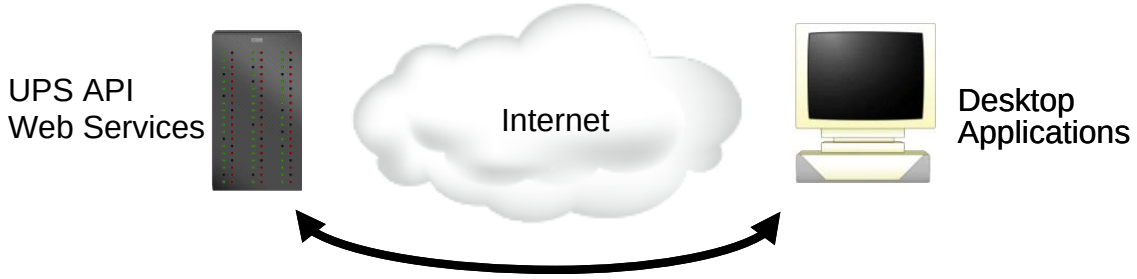

Figure 1: Dedicated applications that users run on their desktops can access UPS Web Services.

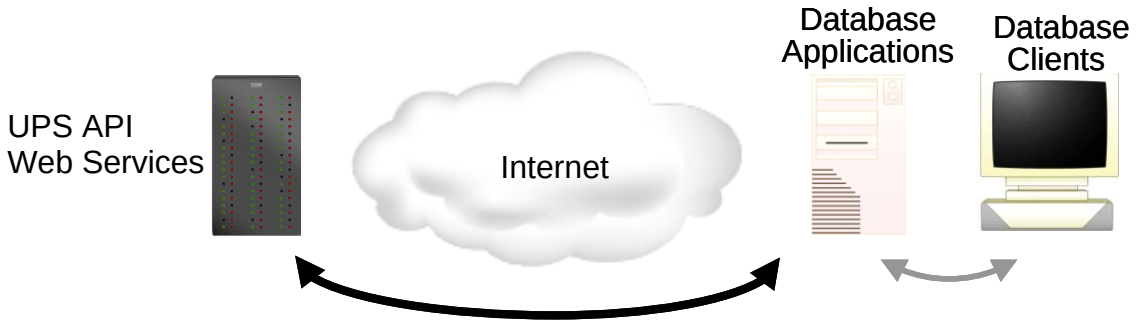

Figure 2: Database applications can access UPS Web Services and return information to their clients.

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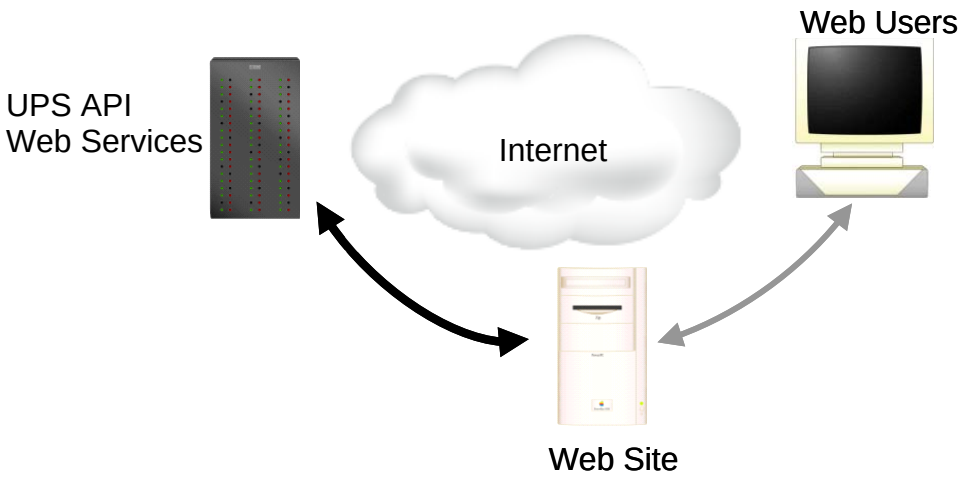

Figure 3: Web sites can access UPS Web Services and return information to users' web browsers.

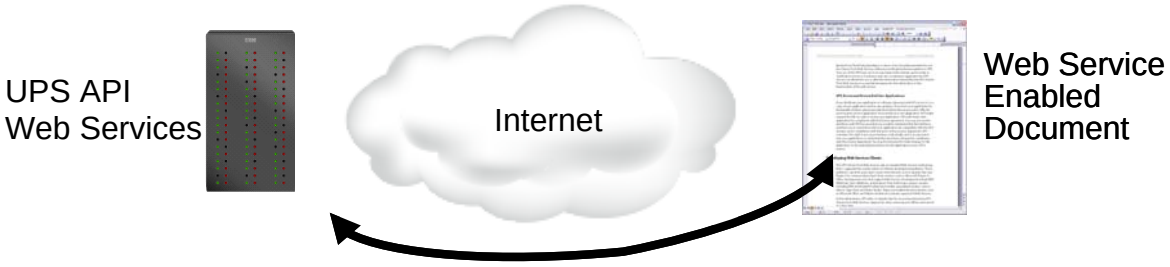

Figure 4: Non-traditional applications such as Microsoft Office or Adobe Acrobat documents can use UPS Web Services to automatically update their content.

The UPS Developer APIs support 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 API Web Services.

Licensing the UPS Developer API Web Services

As part of the UPS Technology Agreement, users of the UPS Developer APIs have certain obligations that are spelled out within the service agreement and its exhibits. Regardless of the manner in which the UPS Developer API Web Services 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 API Web Services. No End User, Third Party Developer or Access User should be permitted to use the Developer API Web Services without providing branded recognition to UPS. Your use of the UPS logo can in no way imply endorsement, sponsorship or

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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 API Web Service in a way that misrepresents the information or the functionality of the web service.

UPS Review of Applications

If you distribute your application as software, please provide UPS access to, or a copy of, your application (and/or any updates). If you host your application for the benefit of others, please provide the Uniform Resource Locator (URL) for each location of your application. If you build your own application, UPS might request the URL in order to review your application. UPS may review each application for compliance with the UPS Technology Agreement.

See the Customer Integration Environment chapter for more information on the certification process.

Developing Web Services Clients

The UPS Developer API Web Services rely on standard Web Services technology that is supported by a wide variety of software development platforms. Those platforms vary from pure open source environments such as Apache Axis (see Figure 5) to commercial products from vendors such as Microsoft (Figure 6). Other development tools that support Web Services development include BEA WebLogic, Sun's NetBeans, and products from both major systems vendors including IBM and Hewlett-Packard and smaller, specialized vendors such as Altova, Cape Clear, and Stylus Studio. Many non-traditional environments such as Microsoft Office and Adobe Acrobat also include support for Web Services.

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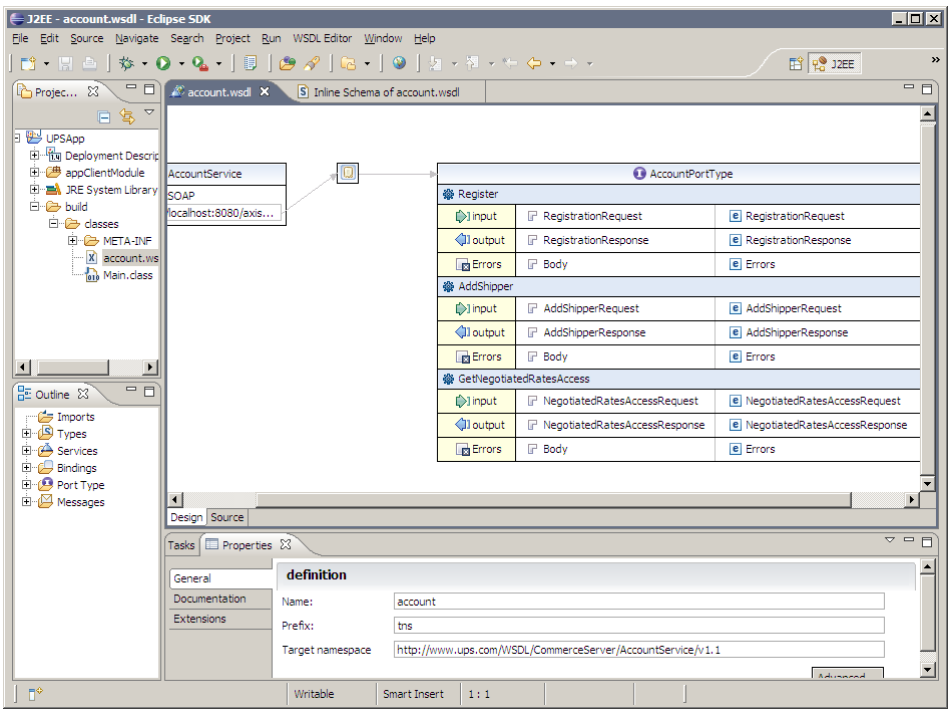

Figure 5: The Eclipse Web Tools Platform (WTP) project provides support for Web Services in a Java development environment.

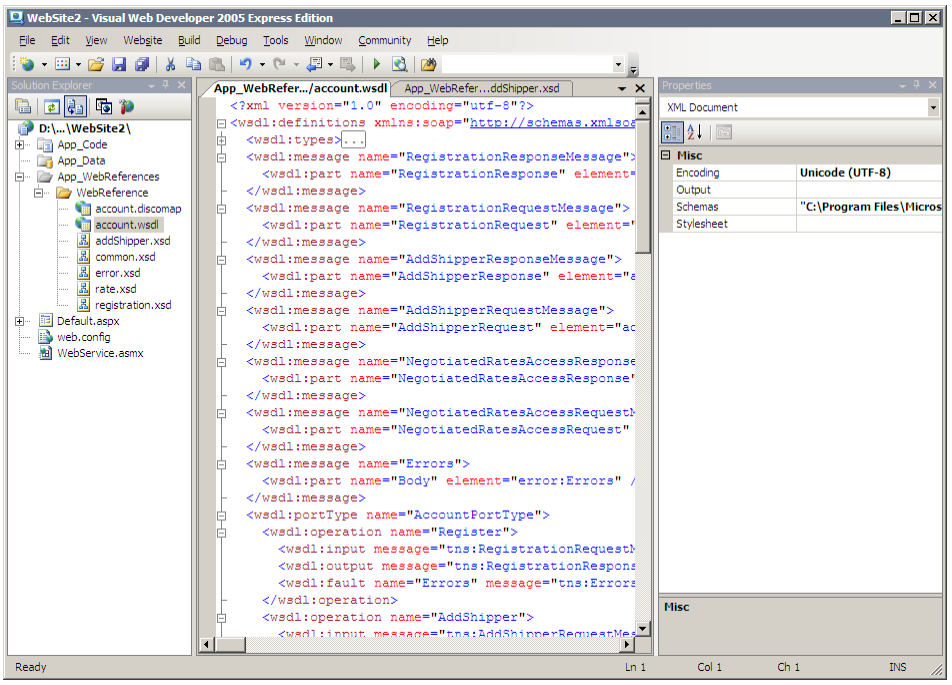

Figure 6: Microsoft's Web Visual Developer 2009 can create client applications for Web Services.

With any particular development environment, key parts of the development process will be similar or the same. Web Services development relies on a

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technology known as Web Services Definition Language (WSDL). This technology is a formal language based on the Extensible Markup Language (XML). WSDL precisely and completely describes Web Services, and standard Web Services documents themselves by "publishing" one or more WSDL files.

The UPS Developer APIs support three different Web Services, each of which it documents in a separate WSDL file. These WSDL files are included in the UPS Developer Kits, and can be imported directly into a software development environment. Note, though, that the default behavior of some tools is to retrieve WSDLs from a central repository accessible on the Internet, most often the Universal Description, Discovery and Integration (UDDI) at http://uddi.xml.org/ . UPS does not publish its WSDLs through these repositories. As a result, the development tool should be directed to import the WSDL locally rather than through a public directory.

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.

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.

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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.
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.

Keeping Up-to-Date

As UPS adds new services and features, UPS Developer API Web Services will evolve, offering more features and service benefits. Once you register to use UPS Developer API Web Services, UPS will notify you by e-mail of updates and changes to the Developer API Web Services. 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 occur or responsibilities for the Developer API Web Services shift within your company. You can also return to the UPS Business Solutions area of ups.com for the latest updated information about UPS Developer API Web Services.

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