Universal Description, Discovery and Integration

Margaret van Steenderen
Margaret.vansteenderen@commercequest.co.za

Introduction

Continuing with looking at XML and the latest standards being built around XML this column takes a brief look at the Universal Description, Discovery and Integration specification (UDDI). With the need for business to tie in more and more to each other, there needs to be a way for them to discover and integrate with each other, and a standard for this will of course be useful. Enter UDDI, created by Ariba, Microsoft and IBM.

What is UDDI?

According to uddi.org, “The Standard creates a platform-independent, open framework to enable businesses to:

1. Discover each other
2. Define how they interact over the Internet
3. Share information in a global registry that will more rapidly accelerate the global adoption of B2B eCommerce.”

UDDI is platform-independent and open because it uses HTTP, XML and SOAP (see previous columns) and therefore shares the benefits that the above standards provide. Otherwise, how does this standard fulfill the other 3 points mentioned above? Through the UDDI Business Registry.

The UDDI Business Registry

The business registry allows any company to register its business, products and services and to make these available to others. It provides a specific standard for the way that this information is provided. This means that businesses can link together more easily as currently the Internet is flooded with different standards for doing business and up to now there has been no industry-wide standard. So, essentially this is a big database, which uses SOAP to store and retrieve the data provided. UDDI allows for:

- General business information to be captured into the White Pages
The business categories to be captured into the Yellow Pages
- Business rules and other information on how to “do business” with each other into the Green Pages
- What programmers need to know for business interaction is available in the Service Type Registration section.

These registries are run by multiple operators, are freely available, and can be used by anyone. UDDI not only provides a description of the business and it’s services, but also what the technical programming interfaces (or API’s) are that the business has available for doing B2B trade. This allows compatible business partners to be discovered automatically.

Uddi.org provides a comprehensive picture of how UDDI v1 works:

1. SW companies, standards bodies, and programmers populate the registry with descriptions of different types of services
2. Businesses populate the registry with descriptions of the services they support
3. UBR assigns a programmatically unique identifier to each service and business registration

Marketplaces, search engines, and business apps query the registry to discover services at other companies. Business uses this data to facilitate easier integration with each other over the Web.

Business Benefits

Also according to uddi.org the problem that UDDI is solving goes as follows:

- “Making it possible for organizations to quickly discover the right business out of the millions that are currently online
- Defining how to enable eCommerce to be conducted once the preferred business is discovered
- Creating an industry-wide approach for businesses to reach their customers and partners with information about their products and Web services, and how they prefer to conduct business and integrate systems with those trading partners.”

And some of the immediate benefits are:

- “The ability for UDDI-enabled businesses to quickly and dynamically discover and interact with each other on the Internet via their preferred applications, which will ultimately drive financial benefit to their bottom line (and to provide the potential to be discovered by organizations with whom they are not currently doing business)
- An easier roadmap for businesses to rapidly participate in the global Internet economy
- A way for businesses to programmatically describe their services and business processes in a single open environment
A set of specifications that enable business to invoke services over the Internet to provide additional value to their preferred customers

**Conclusion**

UDDI provides a single access point that will enable businesses to discover each other using one standard. It continues to build on already available standards (such as HTTP, XML and SOAP) allowing companies to build on their current software and to use their current Internet infrastructure. Don’t delay … register your business today. Registration procedures are already available. To register go to [http://www.uddi.org/register.html](http://www.uddi.org/register.html). To find out more about this process first have a look at the registration FAQ ([http://www.uddi.org/faqs.html#registration](http://www.uddi.org/faqs.html#registration)).

**The UDDI site**

[http://www.uddi.org](http://www.uddi.org)

There are white papers (technical and executive) available, along with a comprehensive FAQ and of course, a link to register.

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