

Notes from the HEKATE Web Services API Project Conference Call December 19, 2002

HEKATE Executive Director Amanda Antico arranged for me to participate in the first conference call of the Web Services APIs project steering committee. HEKATE Director Mark Resmer represented the HEKATE Board on the project Eric Shepard from QuestionMark led the discussion. Stephen Forth of Recombo, Inc., John DuBois of Microsoft, and Prashant Chopra of Peesh Inc. participated.

Key Points

Some of the points from the discussion:

- A Web Services API defines the transactions necessary to support a business process—sometimes called the “choreography”. This differs from current standards in the sense some standards describe data, but not the series of transactions needed to support a business function. As discussed, Web Services are used to exchange data between systems. Implicit in the conversation are SOAP messages with XML content. An example was the IMS specification. It describes the data, but not the transactions. For example: In what courses is this student enrolled? Or, this student has completed this course with a grade of A.
- Many Web Services data exchanges take place now as vendor A “integrates” that product with the product of another vendor using messaging. This is a Web Services API. Others have been proposed during design. The HEKATE project can leverage this work by (1) publishing the Web Services API and/or (2) suggesting which one or combination is preferred. Mark Resmer observes this is a descriptive route to a standard rather than a prescriptive approach. (Mark Resmer has a practical “free market” approach to API definition—find out which ones are most frequently used, and let the community make an informed decision about which to implement).
- Some of Web Services APIs will be on the boundary with higher education—SIF for high schools, HR-XML for academic certifications used by businesses, and IFX for financial transactions.

Implicit in the discussion: All of these Web Services APIs are built upon the basic W3C and OASIS standards for XML, SOAP, WSDL, UDDI, and WS-Security.

Eric Shepard and Stephen Forth had developed a process for recording Web Services APIs under the name uList. The prototype Web page www.uList.com illustrates how they perceive current Web Services APIs could be solicited and used. Mark Resmer observed the scope of uList is broader than that of HEKATE, which is limited to higher education.

Comments

Some of the industry standards, such as IFX for financial transactions, HR-XML for human resources, and OTA for travel do have the complete definitions of transactions and transaction choreography. The standards are defined by business function: Transferring funds between two accounts, requesting and obtaining an enrollment certification or response, or requesting a hotel reservation and confirmation. Some of the higher education standards, such as the IMS specifications, do not provide this level of specification, but do define data that could be used in the transaction messages. HEKATE is focusing on the more detailed Web Services API using existing standards; HEKATE is not duplicating work that has or is being done, but is filling in the gaps that software developers and integrators need to develop and deploy real-time applications.

The uList approach is based on recording current practice. As Stephen Forth observed, web services is now frequently used for Enterprise Application Integration (EAI). System integrators are therefore defining the APIs as they are needed. They would benefit significantly if aware of the Web Services APIs that were already being used. Based on the collective experience, Web Services APIs for the same business process could be refined and defined (prescriptive) or the market could choose the best practice based on known APIs (descriptive). The project steering committee seems to prefer a descriptive approach. Hence a “directory” of APIs so informed decisions can be made by software developers and integrators.

As uList demonstrates, there are issues of scope (of the industry), intellectual property, and governance that HEKATE is now addressing.

The discussions will continue by teleconferences to be scheduled.