

Script for Lotus Sametime and DB2 pureXML Integration Recording

This demonstration illustrates the use of Lotus Sametime instant messaging with DB2 pureXML. The benefits of displaying and modifying business information as part of instant messaging include speedier decision making with a record of the way decision was made. Ad hoc groups of decision makers can be pulled together quickly and easily, using a friendly user interface as it is provided through the IBM Lotus Sametime instant messenger without the need to launch a separate query or reporting tool. Collaboration is enhanced because people are looking at the same business data stored in DB2 pureXML at the same time. Moreover, it becomes easier to analyze the way decisions are made by examining the instant messaging transcripts which of course can also be stored in an IBM DB2 database using pureXML technology.

We will show you an example in the medical environment on how IBM Lotus Sametime instant messaging can support medical practitioners in their daily work with patients. But before showing you the Sametime demo itself we will explain briefly the environment that this demo is based on. Assuming that you are not familiar with the IBM DB2 pureXML industry formats demo please note that there is a demo publicly available on alphaWorks showing the XML capabilities of IBM DB2. You can access this demo by doing a Google-search on “pureXML alphaWorks”, choosing the first hit and clicking on “View demo”. We will not cover details on the DB2 pureXML demo other than to point out that HL7 Clinical Document Architecture XML documents representing Electronic Health Records are stored natively in an XML column in a table in a DB2 database – i.e. stored intact as XML that can be queried. Looking at the HL7 CDA demo you will find a section called “Technical Information” providing the link “HTTP binding”. If you click on this link you will see a list of services available to query, insert, delete, update XML data in any of the industry formats demos. In our case the XML Electronic Health Records natively stored in the DB2 pureXML database. Client applications that access or modify the stored XML data can be built using the services listed. Regardless of the type of client application, e.g., Atom Feeds viewer, XForms, Lotus Workplace Forms or even a Java Desktop application, in order to modify data all those applications access and modify the data through the same set of services. And so does our Lotus Sametime demo which we will show you now.

So let us assume following situation: the patient Sully Van has visited Doctor Durenda Flor at the local hospital due to a painful and ongoing headache. After being released again by the hospital, the doctor Durenda Flor adds the new information, gathered by examining Sully Van, to Sully Van’s Electronic Health Record stored in a DB2 database. Sully Van was also told to meet up again with his local practitioner one week after being released from the hospital for a final check-up. So one week has passed by and Sully Van visits his local practitioner Chuck Smart and tells him about the incident. Of course it would be better if the local practitioner Chuck Smart could see the findings his colleague Durenda Flor had recorded a week earlier. Luckily all doctors are connected through Lotus Sametime which allows them to communicate with each other through instant messaging. Therefore Chuck Smart is going to message Durenda Flor asking her if she can provide detailed, preferable electronic, information on their patient Sully Van.

Sametime not only sends Durenda Flor the message from Chuck Smart, it will actually recognize the patients name in the text, search the database for medical data on Sully Van (remember, the data in the database is being accessed through the services). And if data is found it will be provided to Chuck Smart in his Sametime chat-window. The chat-window displays the search results, allowing Chuck Smart to click on each of those records, and triggering a new window to open that displays the Electronic Health Record of their patient Sully Van in both sides of the chat. So now both doctors, Durenda Flor working in the hospital and Chuck Smart sitting in his local office, can look at the same information at the same time, consult, discuss in a new, easy and convenient way of collaboration. Chuck Smart could simply call Durenda Flor and request patient information, but instant messaging has advantages: Chuck Smart can tell immediately if his colleague Durenda Flor is available and they both get instant access to the requested patient data. Moreover, a written record will be created automatically through the messaging transcript which can also be stored in DB2 as part of the solution, making it possible to share the discussion and its conclusions with other experts at a later date. We hope that this has given you an idea of the power of Lotus Sametime, DB2 pureXML and a simple set of services allowing you to access data can be while working together.