IBM WebSphere Studio Application Developer is available now: increasing your productivity, leveraging open, industry standards, and utilizing industry partnerships. From building JavaBeans™ to laying out graphics on a Web page, Application Developer provides a wealth of tools--all integrated into a cohesive development environment.

In the next few minutes, we'll go through a scenario that gives Web users access to employee information that exists on a DB2® Universal Database. We'll start by creating an Enterprise JavaBean™ (EJB™) to access the DB2 Universal Database, then we'll generate a Web service based on the EJB. During the course of this demonstra tion, we'll use several (but not all available) perspectives from Application Developer.

01.
First, we'll use a wizard to create an enterprise application. The wizard walks the user through all of the steps necessary to create an EJB project or a Web project.

04.
Next, we'll select the newly created EJB and let the mapping editor create a connection to the database containing the employee information. Productivity is increased because this process automatically generates the EJB components corresponding to the tables we need in the database. Since this new EJB project has not yet been associated with a database, the wizard now prompts us to create a database connection. Application Developer supports many databases including DB2, Informix®, Sybase, Oracle, and SQL Server. In this example, we are using DB2 Universal Database, Version 7.2. Since the fields are already automatically filled in, all we have to enter is the connection and the database name.

05.
Notice how Studio Application Developer automatically reads the database and gives us a list of available tables for this application. We simply select "Department" and "Employee."

06.
Now we have the database information we wanted, and the Department and Employee EJBs were created automatically. Look at the different views available in WebSphere Studio Application Developer. Users can get an overview with the Outline view, see the Java code in the EJB view, or look at the database tables in the Tables view. These views are dynamic. In other words, if you select a data item in one view, the other views dynamically change to focus on that item. We can even modify the database mappings and see Application Developer automatically generate the corresponding Java code. If you ever need help along the way, use the F1 key to pop up the context-sensitive help for that particular view. By providing customizable views and perspectives, WebSphere Application Studio Developer let's developers choose how they want to organize their tasks, thus improving their efficiency and improving the overall developer experience.

07. One of our last steps in getting the employee information out of the database is to create a Java (RMIC) or Remote Method Invocation Compiler code. In this case, all we have to do it select Generate->Deploy and RMIC code.

09. We're now in the Servers Perspective of Application Developer. From here we can manage the WebSphere server to use for unit testing. The wizard allows you to automatically configure the unit test environment for a WebSphere server or an Apache Tomcat server. It's important to note that Studio Application Developer comes with an embedded copy of the WebSphere Application Server Developer Edition. That means developers don't have to install any server software on their systems! Application Developer provides a complete development environment right out of the box.

11.
Application Server's openness enables us to easily switch to the Java 2 Enterprise Edition, or J2EE™ perspective. All we have to do is select the project and "Run on Server". Our project is automatically deployed and the test server is started.

13a.
In addition to being a first-class Java development environment, Studio Application Developer also includes a world-class Web site development facility. In the Web perspective you can control style sheets and Java Script, and use simple drag-and-drop to add things like graphics and audio.

13.
While we're in the Web perspective, we'll also create a Web service. Simply select the Web project that was previously created by the wizard, and select 'Create new webservice'. This kicks off the wizard for Web service creation.

15.
The Web services wizard guides us through all relevant choices in creating this new Web service, including selecting precisely which JavaBeans will be used in creating the Web service. It's also giving us the choice to generate a sample application employing the Web service, then launching it in the Application Developer Web service test facility, and even optionally deploying it to a UDDI server. In this case, we'll only launch the sample application within the test facility.

17.
Here's the sample application running within the test facility. By simply entering the required information, the results from our DB2 database are displayed. Application Developer gives us a quick and efficient way to unit test the new Web service we created. Application Developer can also be extended beyond standard capabilities by leveraging partner technologies.

You've just seen for yourself: IBM WebSphere Studio Application developer is available now to increase your productivity, leverage open, industry standards, and utilize industry partnerships. From building JavaBeans™ to laying out graphics on a Web page, Application Developer provides a wealth of tools--all integrated into a cohesive development environment.

IBM WebSphere Studio Application Developer
New tools. New environment. And a new way of working.