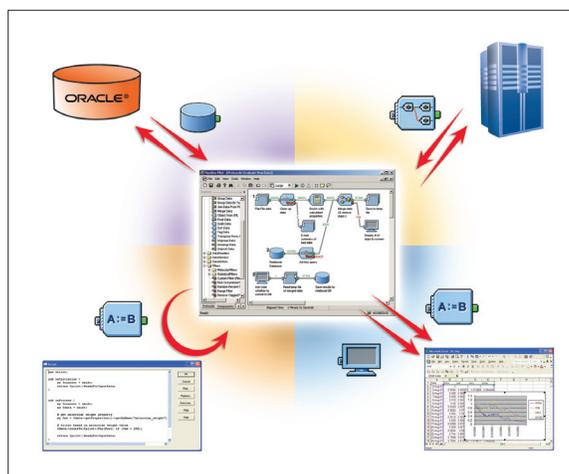accelrys®

INTEGRATION COLLECTION

A great strength of the Pipeline Pilot platform is that it allows you to integrate your existing computational resources within a single work environment. The Integration Collection provides numerous flexible mechanisms to seamlessly link external applications and databases into a Pipeline Pilot data processing protocol. After a tool is integrated and added to the library as a new component, end-users can employ it just like any other Pipeline Pilot component, regardless of where the external application resides or how the integration works behind the scenes. These powerful integration capabilities enable you to easily train end-users and employ robust functionality that might otherwise be difficult to manage without an appropriate user interface.

THE INTEGRATION COLLECTION ALLOWS YOU TO:

- Retrieve data and store results directly in your own corporate databases

- Integrate existing in-house or third-party programs as computational services

- Use standard scripting environments for rapid development of new components

- Integrate interactive desktop applications to both view and post-process data

ACCESSING EXTERNAL DATABASES

By configuring a Pipeline Pilot component with a path to your database, you can create, insert, select, join, and update your data. You can integrate industry-standard databases such as Oracle and SQL/Server with Pipeline Pilot using the Open Database Connectivity (ODBC) protocol. Templates are provided for the integration of molecular and biological databases, and cartridge technologies from Accelrys aswell as vendors such as MDL, Daylight, and IDBS.

Use these powerful components to integrate any external application and functionality or to write new components.

INTEGRATE EXTERNAL APPLICATIONS

You can use a variety of technologies to incorporate an in-house or third-party application as a component in Pipeline Pilot:

- Use the Run Program component to integrate command line applications that run on the Pipeline Pilot server. Specify the command line call to your application, include any command line flags, and specify the names of any input and output files. You do not need to write any code.

- Analogous to Run Program, use the Telnet/FTP component to integrate command line applications that run on a remote server on your network.

- Use the VBScript component to integrate and automate applications that expose a COM interface. These applications can have a graphical user interface (such as Microsoft Office applications) or they can be non-graphical.

- Use the SOAP (Simple Object Access Protocol) component to integrate applications exposed as a Web service. SOAP is an industry standard, platform-independent protocol for communication between applications running in a heterogeneous environment, using conventional internet technologies such as HTTP and XML.

- You can integrate external applications or write new components such as data readers, writers, viewers and manipulators in standard languages such as Java, Perl, or VBScript. These provide a natural way to integrate with applications written in, for example, BioPerl and BioJava. The components run in the same process as Pipeline Pilot and give you rapid and flexible access to data as it flows through a pipeline. Each of these languages is based on a well-documented object model representing the data and component interfaces.

DEVELOPER RESOUCES

The Integration Collection ships with detailed documentation and example applications. Consult our Web site for up-to-date documentation, tips, FAQs, and API references supporting the Pipeline Pilot developer's community. The website also provides a mechanism to interact with other Pipeline Pilot developers to share experiences.

To learn more about Pipeline Pilot, go to
accelrys.com/pipeline-pilot

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