

velocity

Sybase® PowerBuilder® 9.0
Open IDE at Light Speed



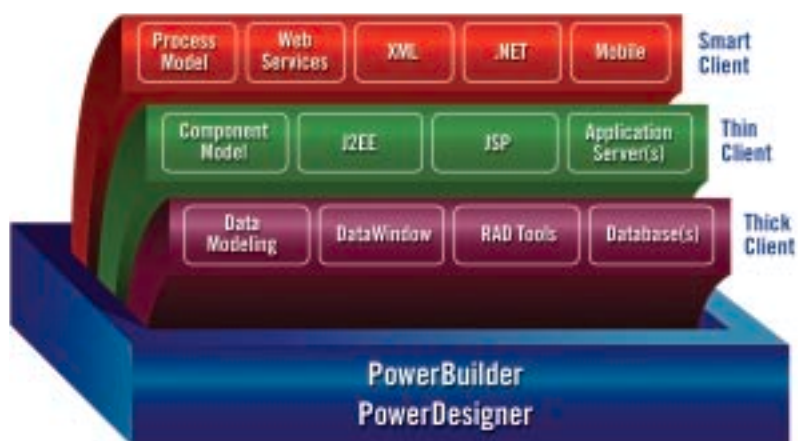
New Frontiers for Strategic Enterprise Applications

New generations of application development technologies continue to evolve—yet your goals remain unwavering:

- **Support Mission-Critical Applications** – You need to build new, innovative, applications that drive your enterprise as well as enhance and extend the current application portfolio.
 - **Embrace New Paradigms** – You need *sensible* strategies to adopt new technologies and platforms—without abandoning reliable, dependable client/server architectures. You need the freedom to choose the *right* platform for the right application and user base.
 - **Synchronize Development and Design** – Complex computing environments require structured, effective development practices that support a myriad of application servers, Web servers, browsers, Web services, business rules—and constant change.
- **Drive Down Development Costs** – Economic pressures are compressing budgets and staffing—but the demands on IT professionals are only increasing. How can you lower initial and ongoing development costs?

The bottom line for enterprise and commercial application developers is unyielding. You need a rapid IDE that gives you maximum productivity, reliability, functionality, and flexibility—all while supporting multiple client options, changing business processes, and rapidly evolving technical platforms and paradigms.

The answer is Sybase PowerBuilder, the open RAD integrated development environment (IDE) for all application architectures.



Comprehensive Architecture – You can build and generate many object models, communicate with standard protocols, and deploy to a variety of platforms.

open

"I am having so much fun with PowerBuilder 9.0. It is extremely fast and easy

to program for both the Windows and Java worlds within one IDE."

— Paul Feighan, Senior EAI Consultant,
Systems and Computer Technology Corporation

Sybase PowerBuilder 9.0: "Foundations for 4GL^{PLUS}"



Continuing its mission to remain the industry's best open integrated development environment, Sybase PowerBuilder 9.0 once again defines the new standard for rapid, productive, and rich applications development. The future for PowerBuilder has never been brighter, stronger, or clearer.

PowerBuilder 9.0 extends its legendary and unsurpassed IDE and drives a stake in the ground through the first phase of the next-generation development environment: "4GL^{plus}". 4GL^{plus} will be a rich and productive solution for the entire application development lifecycle. PowerBuilder 9.0 offers the first capabilities of 4GL^{plus} with a host of new development and integration features for:

J2EE™

Microsoft .NET™

Client/server

Web Services

Language integration

Design/modeling synchronization

n-Tier

Version control

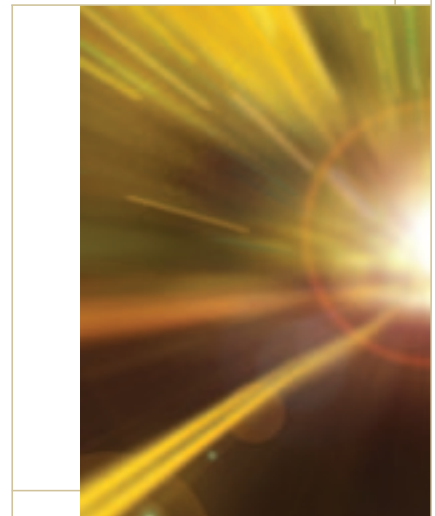
Scripting

The result is an unsurpassed level of developer flexibility to adopt the right architecture and development paradigm for the right application. PowerBuilder lets you rapidly create and deploy the enduring enterprise-

class or commercial-grade applications that transform businesses through increased revenue, improved user productivity, enhanced customer service, and tighter partner collaboration.

PowerBuilder 9.0 is significantly stronger and more powerful than ever, providing a higher level of language abstraction through integrated modeling with Sybase PowerDesigner® as well as support for heterogeneous environments. It embodies the Sybase vision that best-in-class, open, RAD IDE extends far beyond programming interfaces and integrated debugging to an environment where application development and application modeling are thoughtfully and thoroughly planned, developed, integrated, tested, and deployed.

With PowerBuilder, you're ready for today's development challenges — and tomorrow's.



Client/Server, Web, .NET, and J2EE— PowerBuilder Delivers

Extend Your Client/Server Portfolio

There's no such thing as a static application for a mission-critical process. How can you handle inevitable changes? With the PowerBuilder Native Interface (PBNI), a new and powerful application programming interface. Use PBNI to extend the functionality—and vitality—of your existing PowerBuilder applications to C++ and Java applications, opening them to a whole new world and market. Now you can bring “maintenance-status” client/server applications to new and previously unreachable environments.

Succeed With N-Tier and Web Architectures

Leverage the precision, power, speed, and simplicity of PowerBuilder for Web and distributed applications. You don't need to compromise—bring your applications, your users, and your skills to Web and distributed computing.

Reuse sophisticated DataWindows you've already created in new Web applications or build entirely new ones. Create complex SQL statements with point-and-click ease, and generate robust thin-client applications that provide the data manipulation, validation, formatting, and presentation capabilities to which you're accustomed.

Now, you can support a heterogeneous mix—a sensible mix—of client/server n-tier, and Web applications with a single, powerful IDE: PowerBuilder.

You're Ready For Microsoft .NET and J2EE

PowerBuilder 9.0 marks the debut of support for Microsoft .NET and a higher level of integration with powerful J2EE capabilities. As a first phase of integrating with .NET, PowerBuilder 9.0 can produce and consume Web Services, enabling .NET developers to take full advantage of the DataWindow and DataStore paradigms. Future plans for .NET integration include the ability to compile into MSIL code, and enabling developers to create .NET applications using native .NET controls such as previews, tabs, and more.

Through tight integration with Sybase EAServer, PowerBuilder already supports J2EE development and deployment. In this latest release, PowerBuilder lets you

create applications that access Enterprise JavaBeans on any J2EE™ compliant application server—including IBM® WebSphere® Application Server, BEA WebLogic™ Server, and other J2EE-branded application servers—as well as consume PowerBuilder Web Services. You can also use PowerBuilder for RAD-style creation of JavaServer Pages™ (JSP) applications. And to integrate your PowerBuilder applications with either the J2EE or .NET frameworks, you can use PowerBuilder's Web Services capability.

Superior Results with Development and Design Integration

PowerBuilder's tighter integration with PowerDesigner delivers new levels of sophistication, speed, and smarts to your client/server development efforts. Reverse-engineer your existing application logic, make changes to support new business requirements in PowerDesigner, and return those changes back to your PowerBuilder application. That reduces the time and cost of maintaining and extending your client/server applications.

PowerDesigner includes new functionality to extract all objects and code from PowerBuilder 9.0—no longer just NVOs. That greatly simplifies the maintenance of your existing applications, even if the original developers are no longer at your company. Even more significant, PowerDesigner lets you extend older PB applications to new architectures—even those that were not written to object-oriented principles. PowerBuilder and PowerDesigner work better together than ever before, and more is planned as the 4GL^{plus} evolves.



An Expanding Range of Powerful Features

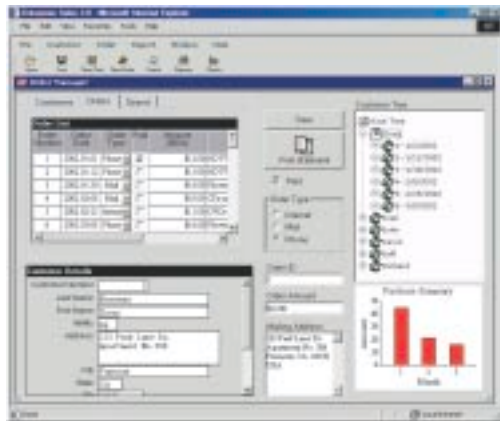
PowerBuilder 9.0 is packed with a host of cutting edge next-generation development capabilities. Here are just a few of the powerful features that will propel your development to higher levels.

PowerBuilder Document Object Model

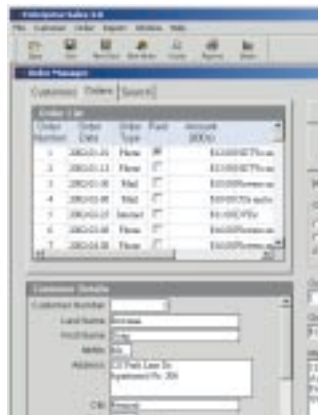
PowerBuilder's Document Object Model (PBDOM) is a complete API for creating, reading, writing, and manipulating XML documents using standard PowerScript. PBDOM is based on a collection of non-visual classes and is built using PowerBuilder Native Interface technology.

XML DataWindow

PowerBuilder's patented DataWindow technology brings the power of XML to development projects. A new view in the DataWindow painter builds XML templates graphically as part of the DataWindow object. These templates enable you to import or export XML data in a variety of custom structures. The DataWindow presentation can also be saved as XSL-FO, the XML language used for describing paged reports, printing, and XML-to-PDF applications.



The Export/Import Template view for XML in the DataWindow painter lets you customize the XML generated when you save a DataWindow as XML, and when you import XML to a DataWindow.

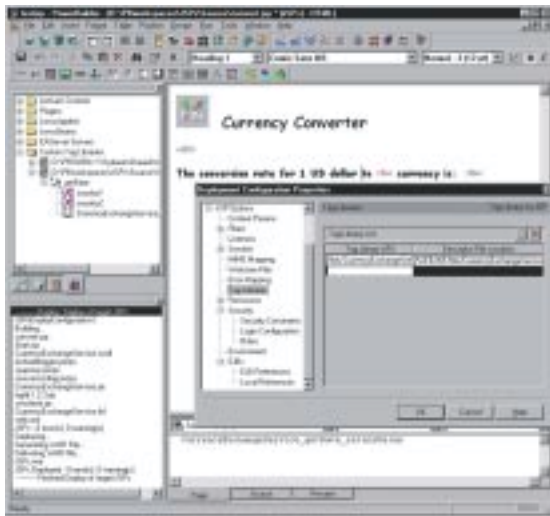


To use PowerBuilder extensions, add them to the target's library list—this target's library list includes the EJB client, PBDOM, and Web services SOAP client extensions provided by Sybase.

"I am thrilled about PowerBuilder 9.0," said Austin Durbin, technical services manager for Hawthorne Savings in El Segundo, California. "I used the PowerBuilder Native Interface (PBNI) to create an application that gives me access to scanned images and digital photos that I would not have been able to access otherwise. PBNI is an extremely powerful capability that allows me to extend my PowerBuilder applications to others. I also plan to use it to enable SMTP support from any PowerBuilder program. There's no limit to what you can do with PBNI."

RAD JavaServer Pages™

PowerBuilder 9.0 includes an easy development environment for building JSP Web applications, automating many development tasks, and enabling deployment of Web applications. You can deploy JSP Web targets directly from PowerBuilder to EAServer or Tomcat, and a command line option enables deployment to other popular JSP containers.



When you use the new JSP target feature, you can add a Web service to the JSP target by generating custom tags with the JSP Web Service Proxy wizard and using drag-and-drop to add the service to your page.

Web Services Wizard

Web Services Wizard in the PowerBuilder IDE creates a proxy object or custom tag library containing the information necessary to call Web Services from a PowerBuilder application or JSP page. Web Services is the first of several planned phases of support for the Microsoft .NET framework.



The Web Services Proxy wizard for SOAP clients makes it easy to write an application that consumes Web Services through SOAP and WSDL.

The IDE for the Next Generation

For years, Sybase has set the standard for IDE excellence. Now, with version 9.0, Sybase gives exponential power—IDE²—to span development processes, paradigms, and platforms and reaffirms its unwavering commitment to continued leadership of rapid application development.

For more information about PowerBuilder 9.0 visit www.sybase.com/powerbuilder.
Or call 1-800-8-SYBASE.

PowerBuilder 9 Family Feature Matrix

PowerBuilder Feature	Enterprise	Professional	Desktop
JSP target development	✓		
Web target development	✓		
EJB client development	✓		
Web Services for Windows clients	✓		
Web Services for JSP clients	✓		
XML Services (PowerBuilder Document Object Model)	✓		
PowerBuilder Native Interface software development kit	✓		
Web DataWindow	✓		
EAServer component development and deployment	✓		
COM/MTS component development and deployment	✓		
PowerBuilder Foundation Class Library	✓	✓	
SCC interface for source control	✓	✓	
OrcaScript utility	✓	✓	✓
ODBC support	full access	full access	desktop databases only
XML support in the DataWindow	✓	✓	✓
DataWindow save as PDF	✓	✓	✓
Adaptive Server Anywhere for Development	✓	✓	✓
Adaptive Server Anywhere Desktop Runtime Edition	✓	✓	✓
Stored procedure support	✓	✓	
OLE DB support	✓		
Native DBMS drivers	✓		
InfoMaker™	✓		

Solutions

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