

Panther

Panther: A Development Framework
from Prolifics, A JYACC Company

Development
Framework

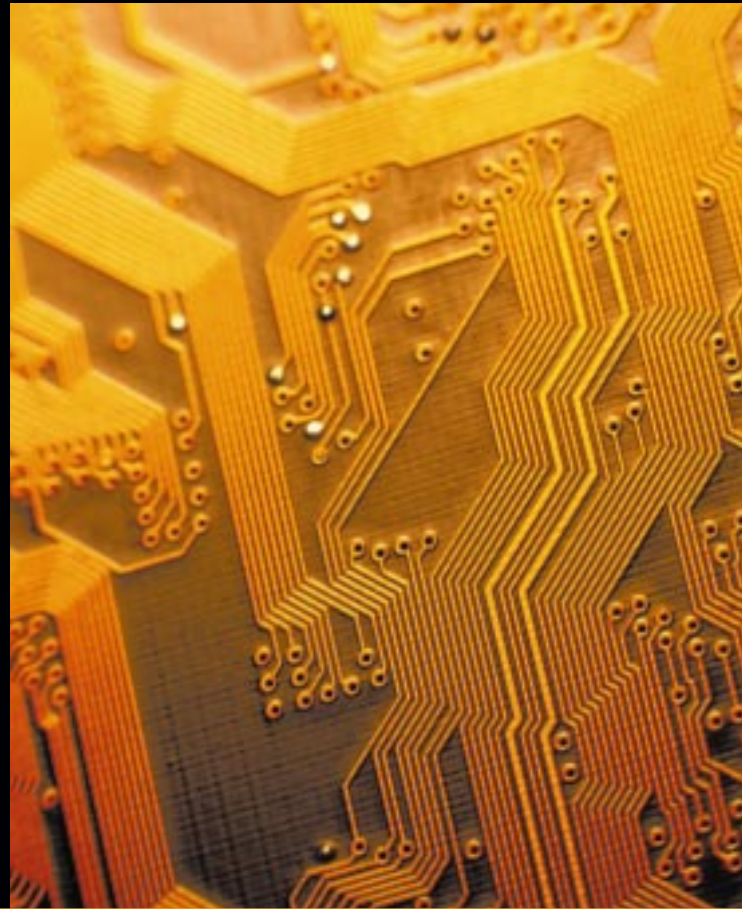
Component
Based
Development

Building
Components

Building the
Future:
E-Commerce
& Java

Building
Relationships

Experts in
Transactional
Applications



Building for Today
and Tomorrow

Panther

Panther

UNLEASH THE POWER OF PANTHER

In today's fast-paced business environment, delivering new applications in a timely manner is more challenging than ever before.

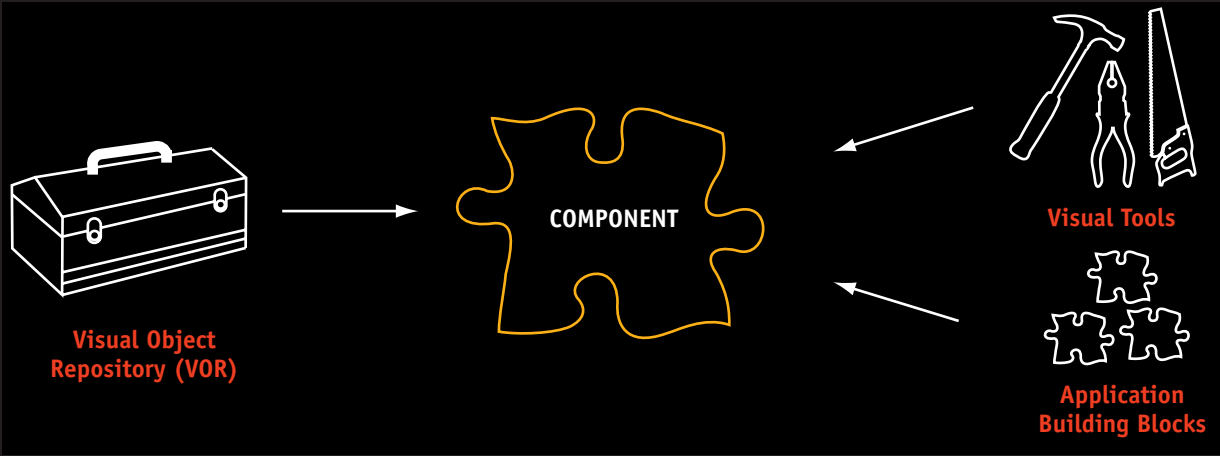
To succeed, you need a development framework that helps you assemble multi-tier transactional and distributed applications more efficiently...a framework that can preserve the substantial investment you have already made in your legacy systems...a framework that gives you the freedom to use the programming language of your choice. This is the power of Panther.

Panther helps simplify the development process by providing an open and extensible framework for building the next generation of transactional business applications. It removes the technical complexity from server side development by providing you with visual tools, an object repository, and application building blocks that simplify the creation of server side interfaces. As a result, you focus your efforts on the business logic that gives your organization a competitive advantage.

You also benefit from the active support of Prolifics, a company with over 20 years of experience in creating and maintaining transactional applications. We can assist you in all phases of the development process, from assessment to training, support, and even complete development of your application.

With Panther and Prolifics Business Systems Services, you have a fully integrated tool set and the services you need to create applications that are reliable, scalable, flexible and manageable. So your organization has the resources to realize its true potential in today's market.

PANTHER DEVELOPMENT FRAMEWORK



Development Framework

Above: Panther provides all the tools you need to construct high-quality, maintainable systems more efficiently, and reduce your time to market in the process.

The Many Pieces of Panther

Visual Object Repository (VOR)

The VOR is the central storehouse of object hierarchies, relationships, properties and business rules, as well as the various business objects associated with your organization (customers, products, employees, equipment, etc.). The objects in the VOR are used to form the components of an application.

Visual Tools

Panther's visual tools are used to construct:

Service Components

Developers use a graphical editor to drag business objects out of the VOR and into Service Components in order to create new business components. Panther automatically maintains inheritance links between these objects, so that changes in the VOR will be reflected in all components of an application.

User Interface Components

Drag objects from the VOR into User Interface Components to define screen layouts. Render your screens in a graphical environment, such as Windows or Motif, or create HTML for Web deployment. Alternatively, you can use the HTML editor of your choice, or use Java or Visual Basic to create user interfaces. When using HTML, you can easily encapsulate server side processing components built by Panther.

Application Building Blocks

Panther provides high-level abstractions of complex technologies, including:

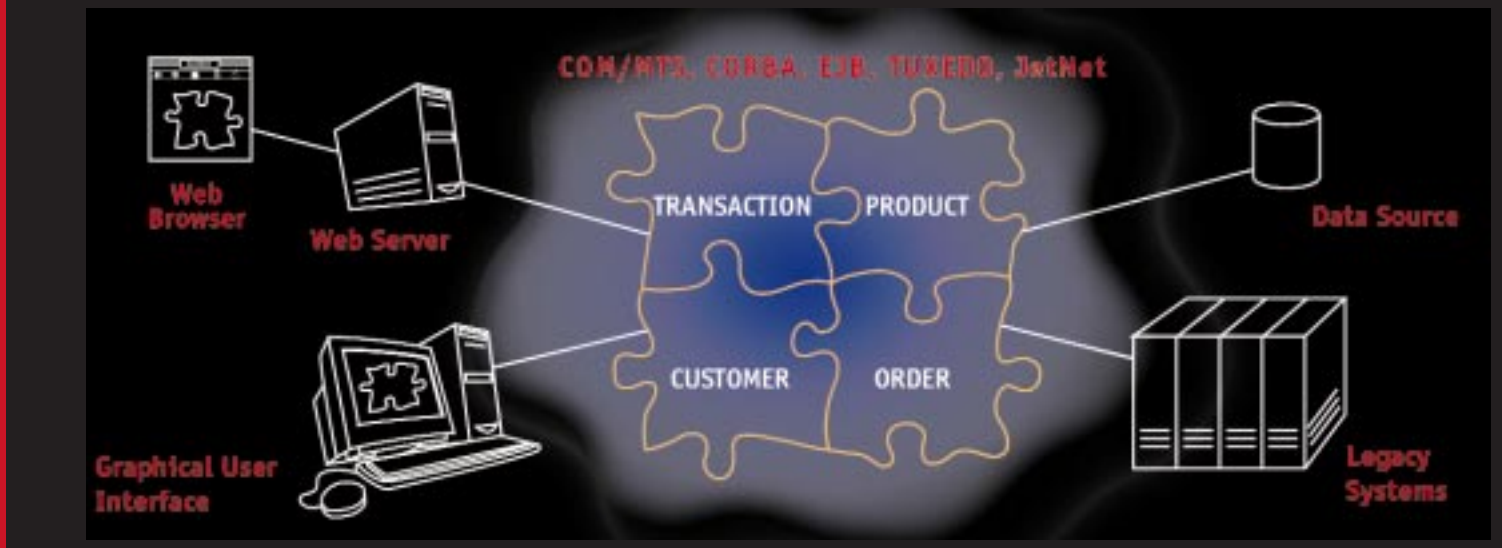
Application Server Integration

Most development tools require intimate knowledge of an application server technology (e.g., TUXEDO, COM/MTS, CORBA, or EJB). Panther's framework incorporates this knowledge, thereby eliminating the need for the specialized programming traditionally required to build applications in these environments.

Database Integration

Using the Panther framework, you can perform high-level database operations (insert, update, etc.) at the transaction level, rather than at the table level. Panther automatically decodes high-level operations into specific database commands, even if they span multiple database engines (e.g., Oracle, Sybase, and SQL Server).

A COMPONENT BASED ARCHITECTURE



Component Based Development

Above: Like pieces of a puzzle, components from a variety of different sources and environments can be linked together in a CBD environment. As a result, you decrease time and programming effort reducing ongoing maintenance costs and gain greater control of scalability and fault tolerance.

Opposite: Rules, business logic, relationships and other properties defined within Panther's Visual Object Repository are used to form the components of an application and are automatically inherited when new components are created or changed.

Panther and Component Based Architecture

A major paradigm shift is under way in the world of application development. Known as Component Based Development (CBD), this design philosophy divides an application's business functionality and rules into a series of discrete modules, which are linked together to create new applications.

The tremendous advantage of this architecture is that components from one application—the transactional component of an on-line bookstore, for example—can be used in another transactional application. This dramatically decreases the time and programming effort involved, and lowers the cost of ongoing application maintenance. As a result, you can respond to competitive pressures or shifting market needs quickly and gain a vital competitive edge. This approach, in conjunction with an application server, also provides you with the critical level of scalability and fault tolerance required by today's enterprise applications.

Application Integration

A component based architecture allows you to integrate enterprise systems by assembling applications from components built and purchased.

Panther's framework enables you to build components quickly, incorporate off-the-shelf components, and integrate existing components. Furthermore, as technologies and your business needs evolve, you can count on Panther's integration capabilities to help you preserve your technology investments.



PANTHER COMPONENT BENEFITS

VISUAL DEVELOPMENT: Panther provides an easy-to-use, familiar environment that features drag-and-drop, wizards, dialogs and the automatic setting of edits and validations.

INHERITANCE: Server side business components inherit information from Panther's Visual Object Repository so that implementation changes are automatically propagated across all your components.

DATA AWARE: Programming details are handled for you, such as automated result set management and mapping data between the user interface and the database, without intensive manual programming. Opt to use Panther's powerful Transaction Manager to automatically generate SQL.

OPEN LANGUAGE SUPPORT: Leverage the skills of your development team with Panther. Write business logic in the language of your choice, C/C++, Java, or our 4GL scripting language. All of the functions provided by the Panther Framework are available to you, even when you choose to code in a 3GL.

TRANSACTION AWARE: Since Panther components work in harmony with an application server, they are "aware" of when and how they are involved in a transaction. This provides high-level control over your application and ensures data integrity across your application.

SECURITY AWARE: Panther components are also cognizant of the security features provided by the application server. This makes it easy to support different levels of authentication based on group and role definitions.

Building Server Side Components

A development effort that could take years to complete from scratch can be done in a matter of weeks or months by turning to Panther!

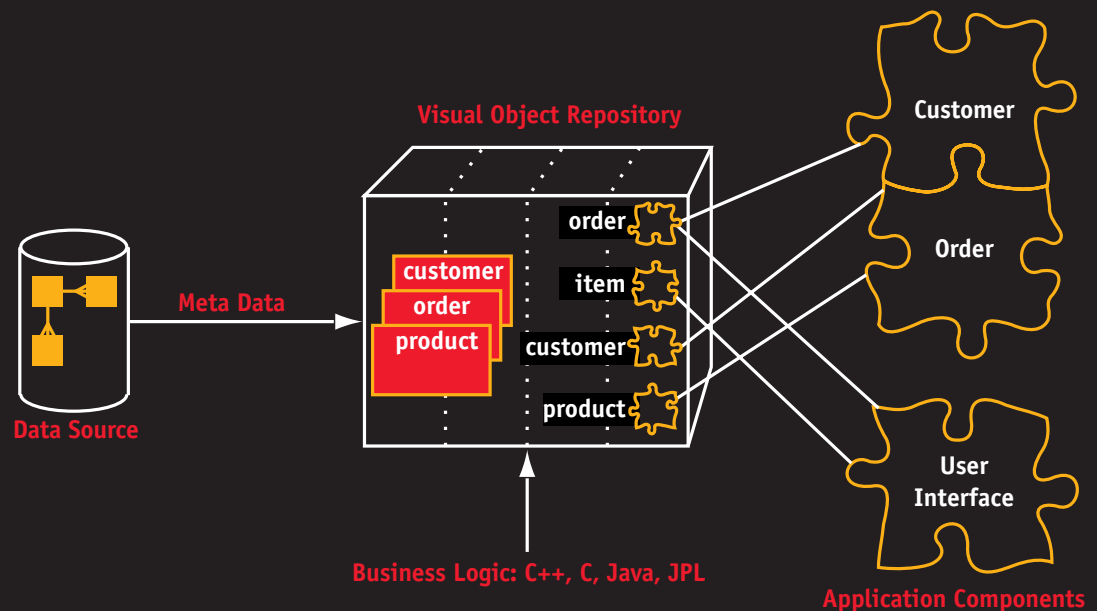
Most of our competitors leave you hanging when it comes to writing server side components, forcing you to write from scratch using C/C++, Java, or Cobol. But Panther abstracts the underlying technology and automates the necessary low-level programming (e.g., message buffers and error handling). This frees your developers from the tedious and time-consuming complexities inherent in application server integration, and allows them to put their time and focus into the business logic that drives your application and runs your business.

There are five steps to building Panther server side business components:

1. Import objects from the data source (e.g., Oracle, Sybase, DB/2, and SQL Server) into Panther's Visual Object Repository (VOR).
2. Add business logic to the objects in the VOR.
3. Model, design, and generate your business components. (Panther provides tight integration with Rational Rose.)
4. Populate components with objects from the VOR.
5. Add custom logic to your components in the language of your choice: Java, C/C++, or JPL (Panther's 4GL scripting language).

The beauty of Panther lies in its remarkable ability to help you keep up with today's fast-changing technologies. At Prolifics we recognize that component based architecture is the future—and that's why the future is Panther.

COMPONENT BUILDING



Panther and E-Commerce

According to the Gartner Group, three out of every four e-business projects are destined to fail. The reason? Most companies are ill-equipped to integrate a web front-end and an on-line transactional component within their existing software infrastructure.

But the fact is, a successful e-business application *must* be a distributed transactional application. This is what Panther excels at building. And this application may be required to link a number of components across a variety of platforms—which is one of Panther's greatest strengths.

- With Panther, you can leverage your existing assets by modernizing legacy applications and integrating them into your new e-commerce environment.

- As a RAD framework that specializes in transactional applications, Panther gives you a wealth of tools specifically designed to eliminate the complex low-level programming tasks that are so common in today's transactional applications.

- Define screen layouts using Panther, or choose the HTML editor of your choice. Thus, your screens can convey the look and feel you want, while still seamlessly integrating with the server side of your application.

Use Panther to help launch your e-business, and you will improve your performance, your time to market, and your confidence level. In today's competitive world of e-commerce, these advantages are priceless.



Panther and Java

A steady diet of Java can make the uninitiated programmer very jittery indeed. Like any powerful language, Java rewards those with the time and patience to learn its intricacies. And the perfect place to develop those skills is within the open architecture of Panther.

With Panther, you gain the tools to deliver complex applications using Java where appropriate. The entire Java platform is available to you—from Servlets to Applets to Classes to Beans to Enterprise JavaBeans. However, when your environment or your skill set dictates a choice other than Java, Panther accommodates you. For example, you can use Panther to:

- Create an EJB using logic written in C++
- Create a COM component using logic written in Java
- Create a TUXEDO service in Java, C++, and JPL
- Implement a Web Architecture using Java Servlets as the protocol

Panther's component-building benefits apply to the creation of EJB components. You gain advantages such as integration with database meta data, drag-and-drop editing, and the VOR that supports inheritance across your application components.

With Panther as your guide, you learn to unlock the true power of Java at your own pace and produce seamless Java-based applications in the process.





Building Relationships

Prolifics Business Systems Services

Prolifics Business Systems Services is a team of experienced consultants who unite real-world business acumen with a broad range of technical skills. We are available to provide virtually any level of support your organization requires throughout the application life cycle:

- Through our *Assessment Service*, we can evaluate your current and future needs and provide you with a road map for moving into the *n-tier* or e-business arena.
- If you would like to see your ideas realized, our *Proof of Concept Service* will provide you with a working model.
- Outsource the entire project, and one of our teams will implement the solution best suited to your needs.
- If you want to handle the project in-house but don't have the appropriate skill set on hand, turn to us to bring in highly skilled professionals.
- If your staff needs education, we offer intensive on-site assistance in mastering Prolifics' development environments. We also offer instructor-led courses in New York, Orlando, Paris, or wherever required.
- Once your system is deployed, turn to our *Application Maintenance Service* for support and enhancement.

Our goal is to provide you with the level of support you need, when and how you need it, to ensure that your team and your application are ready today and well-prepared for the future.



Migration from JAM and Other Environments

At Prolifics, we recognize the tremendous amount of time and effort invested in existing systems you may have developed using JAM 7 and other Prolifics products. With Panther's conversion utility, you can quickly and easily translate your JAM 7 application to Panther, allowing you to take advantage of Java, COM and other technologies. If you have an older version of JAM, Prolifics will assess your specific situation and recommend the appropriate migration path.

Current customers have our commitment to help them migrate to the benefits of Panther. We deliver quick and cost-effective ways to modernize current applications, providing the application framework to support integration with other systems. You can count on Prolifics to keep pace with technologies that will make your business successful.

Experts in Transactional Applications

Leading the market and exhibiting steady growth for over 20 years is a major feat in the software industry. Prolifics, founded as JYACC in 1978, has proven that quality products and a commitment to service can help a company thrive, even in this competitive arena. Today's Prolifics customers enjoy the rare advantage of working with a company whose stability and reputation for innovation have weathered the test of time.

For additional information about Panther or Prolifics Business Systems Services, please contact us or visit our website. At Prolifics, we look forward to facilitating your application development, today and tomorrow.

Worldwide Headquarters
116 John Street
New York, NY 10038
USA
Tel: 800-458-3313
212-267-7722
Fax: 212-608-6753
e-mail: panther@prolifics.com
<http://www.prolifics.com>

European Headquarters
7 Place de la Défense
92974 Paris La Défense Cedex
France
Tel: 33 1 46 92 72 72
Fax: 33 1 46 92 72 70

Prolifics®