

Unix®

SQL

XML

Oracle®

RAD

Java™

GUI

MySQL®

DVM

Mac®



Go Further.

Improve Your Productivity...



HTML

SOAP

IDE

Web Services

Postgre SQL

SQL Server™

Linux®

Informix®

MS Windows®

DB2®



## ... And Beat The Competition With Genero®.

### **A business application infrastructure that enables the rapid and cost effective creation of highly responsive enterprise class software.**

Why invest the majority of your software engineering effort in something that has nothing to do with your business? This can happen when you depend on one of the many traditional development and deployment solutions available for creating high performance, data-driven applications.

Genero® is purpose built for business applications, which means you will save time, money and resources by focusing on what really counts—the business logic that will deliver value and a competitive advantage to your enterprise.

#### **Genero® offers a simple, powerful alternative – One business logic fits all**

Genero® enables the deployment of an application developed from a single code stream across multiple operating environments whether they be industry leading databases, a variety of graphical user interfaces or heterogeneous operating systems. One binary distribution of the software works with Oracle, IBM, Informix, MySQL, Windows, Linux and HTML, which means you only need to manage one build, one test cycle and one version when rolling out new releases.

Are you worried about being locked into Java, Microsoft, Oracle, or IBM? Genero® lets you keep your options open. What's more, your application keeps pace with new technology improving time-to-market for updates and new deployments, which means you can better respond to market needs by being vendor independent.

Genero® isolates the developer from costly infrastructure dependencies—you don't have to be an expert on multiple platforms or communication technologies. The fact is, you don't even have to learn the Genero® architectural implementation.

#### **Genero® takes care of the details**

Genero's® end-to-end approach manages the infrastructure from the end-user to the corporate database. This frees the developer from costly middleware integration and licenses that impair performance and complicate deployment.

#### **Write once, deploy anywhere**

Genero® separates application business logic from the underlying physical layer for maximum versatility in meeting the enterprises' ever changing deployment needs.

The writing process is simplified. Developers need only to provide a high level definition of a user interface and interaction with a database, requiring little coding.

#### **A single source code stream to support multiple interfaces**

Genero's® XML-based Abstract Presentation Layer separates user interface development from the business logic making it independent of the display device ensuring a single source code stream can simultaneously support interfaces such as Windows, Mac OS X, the Web or handheld devices.

Business logic development is simplified, dramatically improving productivity as code length is reduced, making applications more compact with fewer bugs, which allows for increased reliability and greater performance throughout the lifecycle. It's also more flexible, running without the need of reconfiguration for each platform.

## Fewer display screens to create and maintain

Since the presentation layer is represented in a synchronized hierarchical XML tree structure, interfaces can be manipulated as objects at runtime. As a result, interfaces can be dynamically modified at a local or global level depending on the user's status or grade, state of the application and user's interaction, reducing the need as in many industry solutions for multiple screens to accommodate each possible variation—a savings in development and maintenance.

## Optimizing communications

With Genero's® Dynamic Virtual Machine (DVM), a highly efficient application server, the time and effort often required for running applications on multiple databases can be avoided. The DVM automatically manages and optimizes communications between clients and servers.

The DVM also synchronizes the logical representation of the user interface between the server and client based XML tree and only sends data incrementally as the application updates. This improves scalability and data integrity in the event of a system failure.

An application can run on a platform against any database without having to be recompiled, saving development, testing and deployment time. The DVM's Open Database Interface uses native database drivers to provide the highest possible connection reliability, speed and scalability.

## Seamless communication for Web Services

Genero® makes it easy for applications to communicate and integrate in real-time with applications written in other languages and across heterogeneous environments using established Web Services standards. It does this without requiring extensive developer effort and a familiarity with all the various Web protocols.

Genero® takes the confusing technology out of Web Services. It allows developers to automatically generate clients and to easily create and deploy highly scalable servers, opening up, with minimum effort, the world of Web Services to diverse applications.

## Making development easier, faster

Genero® comes with an easy-to-use, yet highly sophisticated Integrated Development Environment, Genero® Studio. This integrated, multi-user, graphical set of tools can fast-track application development. There is a smart text editor that can assist developers in building applications and learning the language. With the graphical form designer, a developer can easily build structural forms, and drag and drop database information to the forms. In addition, a graphical debugger simplifies the process of testing.

## For a wide variety of organizations

These are just a few of the advantages that have made Genero® the preferred applications development and deployment choice for specialized ERP applications catering to retail, telecom, health, media, education, government and other industries requiring high-performance, data-driven applications.

The applications can be developed and deployed under Windows, Unix, Linux or Mac OS X (client) interchangeably.

# Highlights:

### GUI INDEPENDENT BUSINESS LOGIC:

An XML-based *Abstract Presentation Layer* ensures that user interface development is completely separated from deployment. A single source code stream can be written to support simultaneously HTML, Java, Windows, X.11, WML and Macintosh OS X interfaces.

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### DATABASE INDEPENDENT BUSINESS LOGIC:

Using native drivers, an Open Database Interface provides support for simultaneous access to multiple databases including IBM, DB2, Informix (Genero® is fully compatible with Informix 4GL), Oracle, MS SQL Server, Sybase, MySQL, etc. for bindingly-fast concurrent throughput.

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### OS INDEPENDENT BUSINESS LOGIC:

Write once, deploy anywhere. One production release supports all major versions of Unix, Linux, Windows NT/2000/XP and Mac OS X.

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### INTEGRATED WEB SERVICES:

Web Services complexity is hidden from the developer and is seamlessly integrated into the business logic.

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### RAPID DEVELOPMENT, SCALABLE & SECURE PERFORMANCE:

Rapid, predictable development and deployment of high performance, mission critical, internet-enabled applications across a variety of server, database, and end-user platforms.

Secure, thin client, 2 to n-tier architecture automatically manages and optimizes communications between client and server, reducing network traffic and optimizing performance without developer effort.

## Time you focused on your business logic

With Genero®, you'll get a solution that delivers unparalleled developer productivity, platform flexibility and application deployment reliability and performance—just what you need to put your focus where it belongs.



**DVM** = Dynamic Virtual Machine  
**HAL** = Hardware Abstraction Layer  
**ODI** = Open Database Interface

**WfM** = Wired For Management  
**SCM** = Supply Chain Management  
**SFA** = Sales Force Automation  
**?** = Future Technologies

To learn more contact Four J's online at: [www.4js.com](http://www.4js.com).

