COGNOS®

Cognos
PowerHouse®

**High-Productivity Application
Development Solutions**

Productive. Reliable. Flexible.

■ FAST DEVELOPMENT.
FLEXIBLE DEPLOYMENT.
WORLD-CLASS REPUTATION.

Cognos PowerHouse

"Thanks to Cognos, I now have more time to concentrate on the problems I am trying to solve, not how the solution will be coded."

Denis Perreault, President, Arcane Corporation

Cognos PowerHouse® equips your organization with high-productivity development environments for creating your data-driven business solutions faster—whether for Web-based, client/server, or traditional terminal-based access. PowerHouse has gained a worldwide reputation with thousands of customers for productivity, reliability, performance, and flexibility.

Now that Y2K issues are firmly behind you, your IT team needs to get back on track with the solutions your users have been demanding for months—or even years. Just like before, your developers need to build and maintain applications quickly and with diminishing resources—but it is time for a change. In today's fast-paced world of the Internet, traditional programming tools are not adequate to deal with the massive backlog of user requests for Web-based and thin-client solutions. You need high-speed, high-productivity development tools—and you need them now.

With PowerHouse, your developers can conquer both quality and time-to-deployment challenges through simplified programming requirements and open access to multiple databases and file systems. Flexible PowerHouse design tools enable business solutions to be built quickly and modified easily, often delivering time and cost savings of up to 90% when compared with programming languages such as COBOL, BASIC, C, C++, or Java. This enables your developers to focus on what the applications need to do—not how they will do it.

The PowerHouse family is currently in use worldwide by thousands of customers, and is used by many partner organizations to create both off-the-shelf and customized solutions across many industry sectors—including finance, HR, manufacturing, distribution, logistics, telecommunications, and customer service.

> **"PowerHouse is still the most cost-effective database reporting and data entry tool available today."**
>
> *Martin Tallett, MIS Director, Industrial Computer Contracts*

At the heart of the entire PowerHouse solution—which includes PowerHouse 4GL, PowerHouse Web, and Axiant® 4GL—is the PowerHouse application server engine. Refined and performance-tuned over many years of ongoing research and development, this engine contains sophisticated processing models that encapsulate Cognos' extensive knowledge of data-driven business applications. It knows how to access and update various types of files and databases; it knows about the relationships between data in business applications, and how they affect processing; how data is validated on entry and formatted for display; and how to handle exception conditions when they arise.

Access to Corporate Data Resources

The foundation of PowerHouse is the data dictionary, where developers define, once, the corporate data that applications will read or write. Each PowerHouse component then uses the data dictionary whenever a developer references data within an application. Data definitions, including record layout and data validation rules, are specified in the data dictionary for file systems or non-relational databases, or are read directly from relational databases. PowerHouse also supports simultaneous access to leading databases and popular file systems through their native APIs, and to many others through ODBC.

Time-Saving, Specification-Based Development

Using just a few statements of the PowerHouse 4GL high-level specification language, your developers can create programs that control how the default PowerHouse business processing models are applied to your data. This allows them to concentrate on what the application is to do, rather than how it will do it. Specification-based programming not only enables developers to focus on functionality specific to your business requirements, but because there is simply less code to write, you benefit from significant time and cost savings in both initial development and ongoing maintenance.

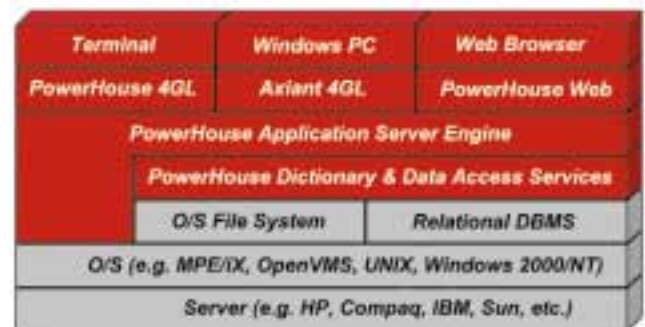"I have been sold on your product for close to 20 years and advise everyone to get your product whenever I'm asked."

Roger Hicks, Senior Software Engineer, Investor's Business Daily

As Simple or as Sophisticated as You Need

With PowerHouse, developers can start with a default application as their core code. As they become more familiar with PowerHouse, they can override the defaults using simple English-language keywords. Finally, if the default processing and non-procedural specifications they have added do not provide exactly what is needed, they can take full control and make use of the robust PowerHouse procedure language to tailor a sophisticated application to your precise business requirements.

Portability Across Platforms

PowerHouse has been designed to run on the application server platform of your choice—MPE/iX, OpenVMS, UNIX, Windows 2000, Windows NT, and more—protecting your existing platform investment and providing flexibility for the future.

The PowerHouse Application Server Engine interfaces with the host operating system and the PowerHouse data dictionary and data access services, insulating both developers and users from differences in the underlying hardware and software infrastructure. This provides a high level of portability to PowerHouse applications, while still offering developers the ability to tightly integrate with operating system facilities, files, databases and other non-PowerHouse applications if required.

> **"PowerHouse Web has clearly enabled us to leverage the productivity of PowerHouse 4GL and the robust nature of our HP e3000 servers and IMAGE databases to quickly deliver reliable Web-based solutions to our users."**
>
> *Blair Combs, Manager of Information Systems, Idaho State University*

The Web browser is fast becoming the user interface of choice because it is much easier for users to master than typical Windows-based applications, and because it is the only requirement at the desktop—which greatly simplifies traditional client/server computing. Applications reside on centralized servers where they are more easily maintained, saving both time and money in IT administration activities.

Executive decision-makers are also attracted to the Web as a channel for extending the organization's reach. Through the Internet, an organization can selectively open up its information and application resources for improved customer service, additional sales channels, or alternate communication channels.

PowerHouse Web satisfies all of these requirements by enabling you to deploy advanced data-driven solutions to the Internet or intranets quickly and easily. Select features of enterprise applications, such as Human Resources, Sales Order Processing, Inventory Management, Customer Service, and Billing can be presented to users, customers, and suppliers through an intuitive Web interface.

No Time for New 3GL-Based Tools

When users are knocking on the door your development team does not have time to learn one of the many new 3GL-based Web development tools that are now on the market. With PowerHouse Web, your team can be productive immediately. They can develop applications and generate an HTML interface with PowerHouse 4GL or Axiant 4GL, benefiting from the renowned productivity of these tools, and then deploy the application to the Internet or intranet with PowerHouse Web.

Increased Reliability and Scalability

PowerHouse Web's scalable, distributed architecture allows you to locate your Web server, application server, and data server anywhere you want in a heterogeneous network. PowerHouse Web handles user requests through a distributed processing environment that minimizes or eliminates failure points and spreads the processing workload across multiple application server machines. Because processing can be distributed across many machines, the system can handle increasing numbers of users or greater workloads without affecting response times.

■ **CLAMORING**
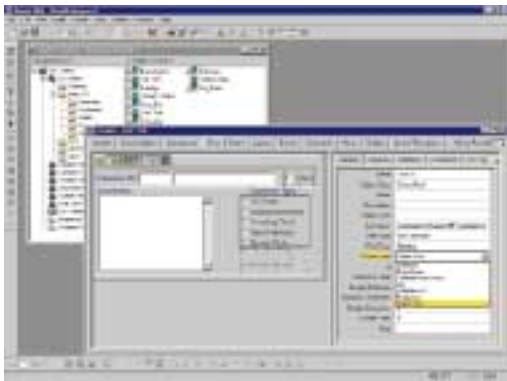**FOR THE WEB**

■ VISUAL INTEGRATED DEVELOPMENT ENVIRONMENT

> "Using Axiant to develop new OpenVMS-based thin-client applications, we have seen system construction time savings of better than two-to-one. In only four months we rewrote a number of critical, but non-Y2K compliant, applications. We couldn't have delivered the replacements that quickly with our other development tools."
>
> *Bob Blackmore, Project Leader, Newfoundland Power*

PowerHouse 4GL provides the traditional terminal-based syntax-oriented development favored by many, while Axiant 4GL provides a robust visual IDE for PowerHouse solutions that fully utilizes the combined power of Windows PCs and MPE/iX, OpenVMS, UNIX, Windows 2000 and Windows NT servers.

Build Once, Deploy Many Times

Axiant enables your developers to create solutions in a Windows-based environment, but then deploy them to Windows, Web, or terminal-based users in a variety of flexible and scalable

Axiant 4GL provides a sophisticated visual PowerHouse IDE for creating applications in the familiar Microsoft Windows environment. These applications can then be deployed for access by users via the Windows-based Axiant Client, via traditional terminals using PowerHouse 4GL, or via a standard Web browser using PowerHouse Web.

thin-client, fat-client, mobile/standalone, and server-based topologies—according to application need and available infrastructure.

Time-Saving Object-Based Development

Axiant wraps a sophisticated object-based visual development environment around the PowerHouse engine—so your developers still benefit from the flexibility and speed of this high-powered Cognos environment. In addition, Axiant supports object-oriented techniques, such as inheritance and reuse, without the necessity to learn object-oriented programming languages. For example, because the user interface form for each interactive program inherits its visual appearance from a single such form, the style of the user interface for an entire application can be developed and modified by altering objects

Axiant provides Windows deployment options that include thin-client, fat-client and standalone/mobile topologies—all using the same robust PowerHouse engine as other PowerHouse solutions.

"As a company we're constantly looking for new ways of doing things, and the flexibility offered by Axiant 4GL and PowerHouse 8 will help us stay out in front."

Bill Oliver, Vice President of Operations, Infotech Solutions Inc.

in the one inherited form. PowerHouse data elements, tables and programs are represented graphically, enabling developers to create applications quickly and pinpoint errors easily.

Offline Development

Axiant utilizes a multi-user object repository to store data definitions, application logic, and user interface forms. This makes it easier to manage team development projects. It also enables developers to save selected portions of a development project onto their own PC and work disconnected from the repository for continued productivity away from the office.

Reuse Rather Than Replace

If you are already a PowerHouse customer, Axiant enables you to further protect your existing investments in solutions and developer skills, by re-deploying terminal-based PowerHouse applications as thin-client Windows solutions using your existing MPE/iX, OpenVMS, or UNIX servers and data. Axiant also contains sophisticated facilities that can advise on, and help automate, the migration of your server-based PowerHouse applications to new client/server or relational database environments.

PowerHouse Web enables PowerHouse applications to be accessed from any standard Web browser using an intuitive native HTML user interface. No special plug-ins, ActiveX controls, or Java applets need to be installed or downloaded to the browser.

Traditional terminal-based PowerHouse 4GL applications provide an efficient, easy-to-use UI with many of the features that users expect from modern applications—such as drop-down menus, pop-up picklists, and scrollable text areas.

About Cognos

As the world's largest and most successful vendor of enterprise business intelligence solutions, Cognos plays a mission-critical role in making our customers successful. Cognos solutions leverage Internet technology to make information easily accessible to everyone in your enterprise, as well as to your customers and across your supply chain. The results: decision-making that is better coordinated across the entire organization. More effective customer acquisition and greater customer retention. Improved business performance-at e-speed.

Cognos Web-based technology is a cornerstone of e-business. From the creation of data marts, to pre-built e-applications, to sophisticated reporting, analysis, and visualization, Cognos software delivers the breadth and flexibility organizations need to thrive in the Internet economy.

The Cognos PowerHouse family of advanced high-productivity development tools is used by thousands of organizations to quickly build, and easily modify, robust data-driven business solutions for Web, client/server, and terminal-based deployment.

Find out more about how your organization can benefit from Cognos PowerHouse.

www.cognos.com/powerhouse

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