



Business Objects Reporting

Powerful, Open, and Scalable Reporting Products





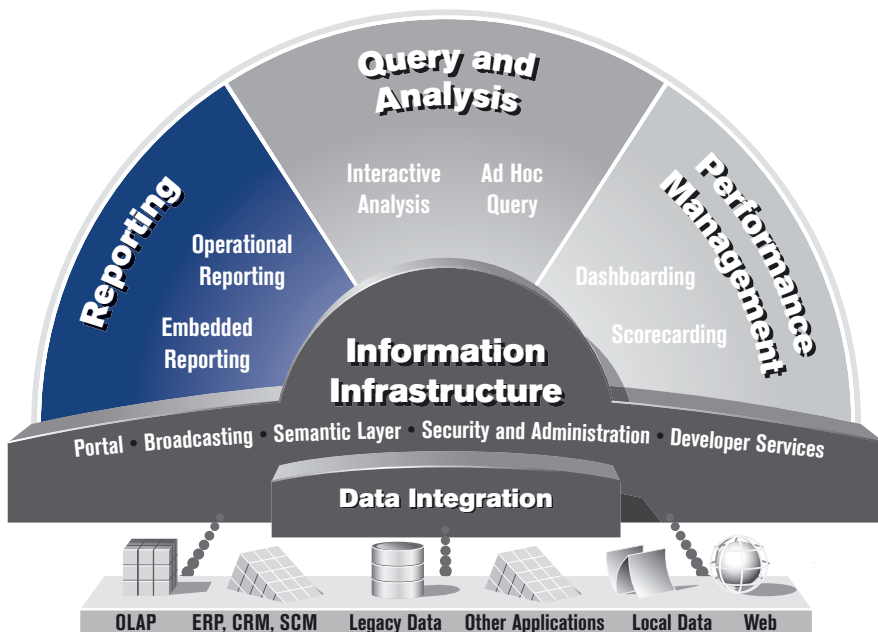
Operational and Embedded Reporting for the Enterprise

Most organizations will benefit from a mixture of reporting styles to suit different user needs.

- ▶ Enterprise reporting provides a central architecture for delivering information to employees, customers, and suppliers—both securely and in the right format (web, portal, print, email).
- ▶ Embedded reporting provides reusable components for integrating reports directly within another enterprise application.

While enterprise reporting and embedded reporting suit different needs, the core requirements are similar.

Business Objects provides a powerful, open, and scalable reporting solution that includes Crystal Reports® and Crystal Analysis® for report authoring and Crystal Enterprise™ for web-based report management and delivery.



The Business Objects product line provides the industry's leading suite of business intelligence products.

With business intelligence (BI), your organization can effectively shrink the gap between the data you have—and your ability to analyze and understand it. Your enterprise BI framework should address your end users' needs for reporting, query and analysis, and performance management:

Reporting is the process of accessing, formatting, and delivering data as information inside and outside the organization. It serves as the foundation of a broader BI strategy by providing the most-requested pieces of information securely—via the web or embedded in enterprise applications.

Query and Analysis tools allow end users to interact with business information and answer ad hoc questions with minimal knowledge of the underlying data sources and structures.

Performance Management products help users track and analyze key business metrics via management dashboards, scorecards, and alerting.

Using our proven reporting technology, organizations can:

- ▶ Meet any reporting requirement
- ▶ Leverage existing IT investments
- ▶ Ensure information availability

Meet Any Reporting Requirement with Powerful Authoring



Crystal Enterprise is the foundation for highly-graphical, formatted reports from virtually any data source.

Enterprise Data Access

The most valuable reports are often the ones that combine data from multiple sources into a single view.

Crystal Reports helps IT organizations simplify access to enterprise data sources. Administrators can combine data from multiple systems and expose these as reporting data sources in Crystal Enterprise.

While data access can be simplified for report designers, this does not mean that designers must relinquish control. Crystal Reports allows designers to write custom SQL statements and directly access data in operational systems.

Rich Report Formatting

Reporting involves providing information in a format that is clear and easy to understand. Proper formatting is key to meeting user expectations and satisfying regulatory requirements.

With Crystal Reports, report designers can create many different report types, including: replicas of existing reports and forms, graphical summary reports, cross tabs, and Top N or Bottom N reports. A rich formula language and set of layout controls allow extensive control over data manipulation and report design.

Interactivity

Crystal Reports takes a report beyond the limits of a printed document to help users better understand complex information.

Designers can define navigation paths through reports, allowing users to drill down or explore a set of related reports.

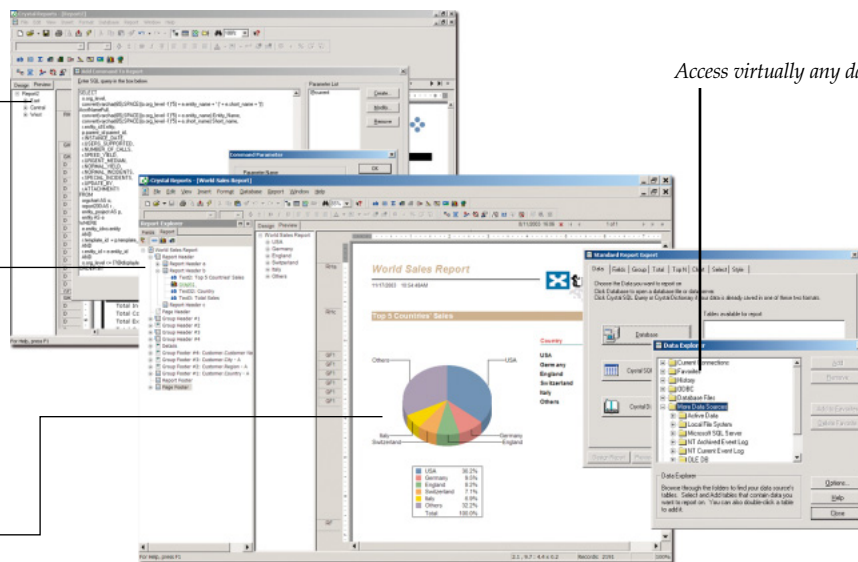
Users can also sort and filter information, refresh reports, print reports, and embed live report data in Microsoft® Office documents.

Write complex SQL for total control

Control every aspect of report layout and formatting

Crystal Reports gives you the flexibility you need to connect to any data source and the power to build rich reports for end users

Add charts and graphics to visualize data



Access virtually any data source



Open Architecture to Leverage Your Existing IT Investments

"We are especially impressed with the ease-of-use and open architecture of Crystal Reports and Crystal Enterprise, which allow us to leverage and scale our existing technology investments."

Lyndal Hanna, Senior Vice President of Information Technology, Grubb & Ellis

With Crystal Enterprise, you can deliver more value from your existing IT investments by providing easier ways to access and present data to users. Crystal Enterprise integrates seamlessly with industry standard data, the web, and other application and security systems.

Ease of Integration

Crystal Reports and Crystal Enterprise provide a full range of data access, presentation, and information delivery capabilities that can be integrated into any web application.

You can access all of our functionality through rich developer interfaces so that you have complete control over report listing, processing, modification, viewing, and administration.

Open Standards Support

Crystal Enterprise provides tight integration with leading platforms via native COM, .NET, and Java Software Developer Kits (SDKs). Delivered as a set of robust components, sample applications, and documentation, these SDKs can be installed directly on BEA Weblogic, IBM® Websphere®, or Microsoft Internet Information Server (IIS). They provide a high-level API to control every aspect of Crystal Enterprise using popular programming languages (Java, C#, or Visual Basic). Crystal Enterprise also provides tight integration with third-party security systems such as LDAP, Active Directory, Windows NT®, and SAP.

Heterogeneous Platform Support

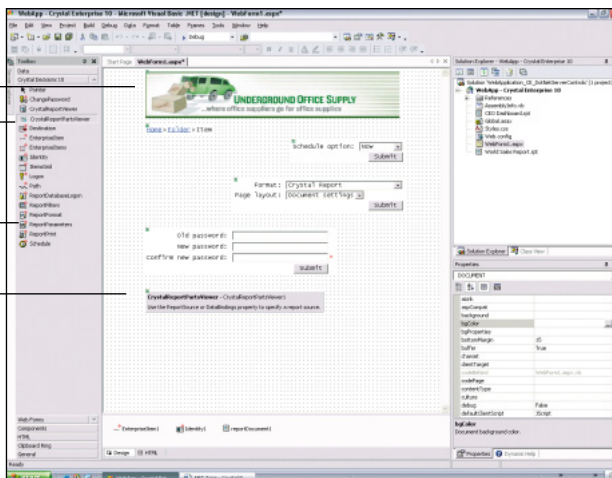
Most organizations' IT infrastructure includes multiple operating systems, databases, and web application servers.

Crystal Enterprise is designed for heterogeneous IT environments. Available on Windows 2000®/NT, Sun Solaris™, and IBM AIX®, Crystal Enterprise acts as a common architecture for any reporting project. It also allows organizations to leverage different elements of their IT stack to meet specific project requirements. For example, custom development is done in Java on a UNIX application server, but some system databases run SQL Server on Windows NT. This flexible approach allows you to easily fit Crystal Enterprise into your existing IT infrastructure.

Control look and feel

Access core system functionality

Drag and drop visual components



Crystal Reports is already included in many major development environments. You can also use the Crystal Enterprise SDK to access advanced features and gain complete control over report integration, processing, and management.

Scalable Infrastructure to Ensure Information Availability



Crystal Enterprise ensures the constant availability of business-critical information.

Built-in distribution capabilities can automatically alert users of critical information via email, portals, or a variety of report formats to specific destinations (e.g., email, FTP sites, network printers).

Fault-Tolerant Architecture

Automatic load balancing, 8th-generation clustering technology, and a completely fault-tolerant architecture ensure your deployment will remain available under a wide range of load scenarios. Third-party tests have confirmed that Crystal Enterprise can deliver 99.999% uptime.¹

Flexible Administration and Management

Crystal Enterprise provides a central repository for organizing content. This ensures that users can readily access the latest information, as well as historical snapshots.

Unlike other reporting systems, Crystal Enterprise is also designed to support the central management of distributed reporting applications. Change management technology, a unified data access model, and delegated administration allow Crystal Enterprise to support multiple applications running on a single infrastructure.

Performance Tuning

Crystal Enterprise is designed to scale up on a single machine or out over multiple machines. While you can schedule large reports at regular intervals, smaller, time-sensitive reports run on demand—with the information streaming back to the user's browser piece by piece to reduce response time. A broad range of configuration options is also available for tuning individual servers and entire deployments.

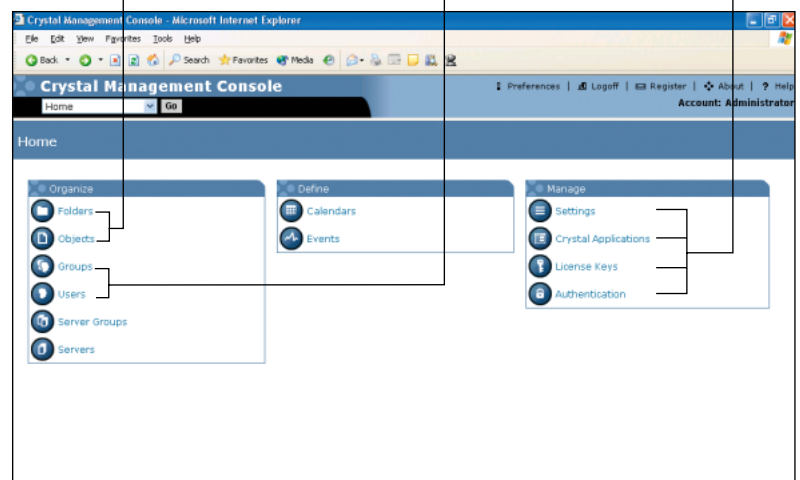
Efficient Processing

Crystal Enterprise delivers linear scalability, allowing you to take full advantage of available hardware and grow your system with confidence. Custom memory management features and intelligent report processing mean that you can maintain response time despite heavy data volumes or unexpected peaks in user activity.

Manage and organize reports

Tune and configure your deployment

Apply security at the group, user, and data levels



The Crystal Management Console provides a web-based administrative interface.

¹See http://www.veritest.com/about/news/press/pr_2002-08-27.asp



Proven Reporting Solutions

A Common Platform

Crystal technology provides your organization with the power you need to understand your corporate information, in one integrated solution for reporting and delivery.

We deliver a powerful, open, and scalable reporting solution for your enterprise. Designed to access and integrate data from virtually any source, and build interactive reports from relational and OLAP databases, our solution will enable any organization to consolidate its reporting and information delivery requirements into a single, flexible standard. Because it is a zero-client, web-based solution, user training requirements are minimal and upgrades are handled on the server to save time and money. The result is a more effective use of IT budgets and staff, and the freedom to address more projects in a timely, proactive manner.

Using the proven Crystal reporting technology from Business Objects, you can:

- ▶ Meet any reporting requirement
- ▶ Leverage existing IT investments
- ▶ Ensure information availability

"With more than 15 million licenses shipped, our opinion is that, with the possible exception of spreadsheets, the Crystal toolset is the most ubiquitous offering in the business intelligence marketplace."

Mike Schiff, Vice President of Data Warehousing and Business Intelligence at Current Analysis, Inc.

Industry-Leading Reporting

Our understanding of the challenge of report creation, management, and delivery for large organizations is unparalleled.

With tens of thousands of customers and more than 15 million reporting and information delivery licenses shipped worldwide, we know our business. This experience—coupled with thousands of years of research and development—provides the rock-solid foundation upon which we deliver Crystal Reports and Crystal Enterprise.

The Value of a Standard Complete Information Infrastructure



Information Infrastructure

The Business Objects information infrastructure provides a set of common services to simplify deployment and management of BI tools, reports, and analytic applications. It helps enable BI standardization by reducing the total cost of ownership by centralizing security, scheduling, publishing, administration, management, and performance tuning.

An effective information infrastructure should be able to integrate directly with current and future data sources, application servers, web servers, and enterprise application environments. It must also be able to *stand alone* and provide a complete end-to-end BI solution on top of data marts, data warehouses, or directly on transactional systems.

Business Intelligence Standardization

Today's leading organizations are striving to manage the complexity and cost of information technology through standardization. While niche vendors may provide acceptable technology at the department level, the costs of integration and support at the enterprise level require the choice of a single vendor to provide a complete BI solution. Standardizing on a single BI infrastructure for the organization brings many benefits:

- ▶ Reduced deployment and training costs
- ▶ Improved manageability and control resulting in lower ongoing costs
- ▶ Elimination of information silos, thereby giving users access to a consistent shared view of enterprise data
- ▶ Increased flexibility to meet new requirements in a cost-efficient and rapid manner

Why standardize on Business Objects? That's simple—we're the proven leader.

Proven Leadership

Founded in 1990, Business Objects pioneered the modern BI industry by inventing a patented semantic layer that insulates users from the complexity of databases. Today, Business Objects products are used around the world, and available in 13 languages. Millions of users in over 24,000 organizations and in more than 80 countries rely on our products. In tandem with our hundreds of global business partners, we stand ready to meet your business intelligence needs. To learn more about reporting products from Business Objects please visit: www.businessobjects.com.



In a survey of DM Review Magazine readers, Business Objects was named among the Top 5 vendors based on market share, product quality, and customer satisfaction.



For the third straight year, readers of Intelligent Enterprise chose Business Objects as the best in business intelligence.



Crystal Reports 9 was selected by Java Pro readers as the best Java Reporting Tool in the fifth annual Java Technology Achievement Awards.

Americas

Tel: +1 408 953 6000
+1 800 877 2340

Australia

Tel: +612 9922 3049

Belgium

Tel: +32 2 713 0777

Brazil

Tel: +55 11 3443 1420

Canada

Tel: +1 604 681 3435
+1 416 203 6055

China PRC

Tel: +86 10 85251879
+86 21 51119020

France

Tel: +33 1 41 25 21 21
+33 1 41 10 16 00

Germany

Tel: +49 2203 91 52 0
+49 6196 95 59 0

Hong Kong

Tel: +852 2593 1122/1123
+852 2575 2576

India

Tel: +91 22 56309206

Italy

Tel: +39 06 518691

Japan

Tel: +81 3 5720 3570
+81 3 5226 3601

Korea

Tel: +82 2 6001 3080/81

Mexico

Tel: +52 55 9171 1666

Netherlands

Tel: +31 30 225 9000

Singapore

Tel: +65 6887 4228

Spain

Tel: +34 91 766 87 43

Sweden

Tel: +46 8 508 962 00

Switzerland

Tel: +41 56 483 40 50
+41 17 991 566

United Kingdom

Tel: +44 1628 764 600
+44 20 8566 2330

Distributed in:

Albania
Argentina
Austria
Bahrain
Bulgaria
Cameroon
Chile
Colombia
Costa Rica
Croatia
Czech Republic
Denmark
Ecuador
Egypt
Estonia
Finland
Gabon
Greece
Hungary
Iceland

Indonesia
Israel
Ivory Coast
Kuwait
Latvia
Lithuania
Luxembourg
Malaysia
Malta
Mauritius
Morocco
Netherlands Antilles
New Zealand
Nigeria
Norway
Oman
Pakistan
Peru
Philippines
Poland

Portugal
Puerto Rico
Qatar
Republic of Panama
Romania
Russia
Saudi Arabia
Senegal
Slovak Republic
Slovenia
South Africa
Taiwan
Thailand
Tunisia
Turkey
UAE
Venezuela

► www.businessobjects.com

The Business Objects product and technology are protected by US patent numbers 5,555,403; 6,247,008; 6,578,027; 6,490,593; and 6,289,352. The Business Objects logo, the Business Objects tagline, BusinessObjects, BusinessObjects Broadcast Agent, BusinessQuery, Crystal Analysis, Crystal Analysis Holo, Crystal Applications, Crystal Enterprise, Crystal Info, Crystal Reports, Rapid Mart, and WebIntelligence are trademarks or registered trademarks of Business Objects SA in the United States and/or other countries. Various product and service names referenced herein may be trademarks of Business Objects SA. All other company, product, or brand names mentioned herein, may be the trademarks of their respective owners. Specifications subject to change without notice. Not responsible for errors or omissions. Copyright © 2003 Business Objects SA. All rights reserved.

