

# PRODUCTS

# **Embedded Reporting with Crystal Reports**

#### **Crystal Reports**

#### Design

The intuitive visual designer in Crystal Reports makes it easy to transform data into dynamic information.

#### Integrate

Flexible SDKs give you the control you need to tightly integrate report interactivity including viewing, exporting, printing, and drill-down into web and Windows applications.

#### Deploy

Powerful report-processing engines and flexible viewers for Java, .NET, and COM let you easily deploy high-quality presentation layers that can scale as requirements evolve.

Crystal Reports is available in different editions to meet the needs of developers, report designers, and business users. Features discussed will vary based on edition and language purchased.

# Design, Integrate, and Deploy Reports Within Applications for Faster Data Presentation and Easier Maintenance

Do the applications you design generate or rely on data that you must present to users in a clear format? Is it easy to connect to the data when designing your applications? How much code must you write to format and arrange data within your presentation layer? Can you re-use the results? How much time do you spend on presentation-layer maintenance to address ever-changing user requirements?

Designed for use across development, deployment, and data environments, Crystal Reports<sup>®</sup> is an intuitive reporting toolkit that helps address the challenges associated with presenting dynamic data in applications. It provides developers with a faster way to access data, transform it into dynamic information, and integrate it into web and Windows applications. With minimal coding, you can provide end users with a variety of flexible interactivity options including report viewing, printing, exporting, drill-down, and modification.

With Crystal Reports, you can design reports to encapsulate data access and formatting relationships separately from your application's core business logic. You can easily modify or add reports to your application without impacting core business logic or having to recompile and regression test your application. This helps reduce presentation-layer maintenance requirements that result from ever-changing end-user specifications.

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Tightly integrate dynamic reports into custom web applications.

Crystal Reports allows you to:

- ▶ Easily access and format data into dynamic information
- ▶ Tightly integrate reporting functionality into web and Windows applications
- > Deploy interactive presentation layers that can scale as requirements evolve

Design, Integrate, and Deploy Reports Within Applications for Faster Data Presentation and Easier Maintenance

"Using Crystal Reports in our application saved us two months of development and increased the adoption and satisfaction of our applications within customer deployments."

Mike Bacinschi, President, Ensemble Systems Inc.

## Simplified Data Access and Formatting

The intuitive, visual design environment in Crystal Reports helps simplify data connectivity and formatting by providing a flexible alternative to code-intensive design. Reports are authored separately from your application's core business logic. This makes it easier to maintain the presentation layer and application code when user requirements change. You can also delegate report design to other teams to free up your time to focus on core development tasks.

#### **Visual Designer**

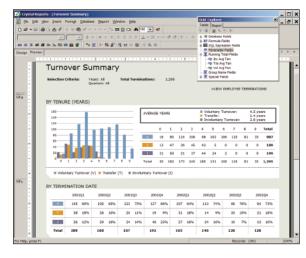
The Crystal Reports visual designer operates in a point-and-click, drag-and-drop manner. Use it to connect to multiple data sources and format data into dynamic content. Optional experts and wizards are included to help simplify common reporting tasks, including table linking, field selection, grouping, sorting, and summarizing.

#### **Comprehensive Data Connectivity**

Whether your application requires access to databases, files, logs, packaged application systems, or application in-memory data, you can use Crystal Reports to connect to the data you need. Crystal Reports supports major data access standards like ODBC, JDBC, and OLE DB for connectivity to over 35 data sources including XML, OLAP, enterprise, and relational data. You can also access user-defined or custom data through JavaBeans, ADO.NET, and COM Data Providers. For greater control over how data is queried, Crystal Reports also gives you the flexibility to write your own SQL statements.

#### **Rich Formatting Options**

With more than 100 formatting options, Crystal Reports gives you a high degree of flexibility and control over how data is presented in your applications. Add charts or maps for more visual impact. Create and apply custom templates to reports rather than formatting each one individually. Define cascading style sheet (CSS) styles so reports can automatically reflect the design of your web applications. Use Crystal Reports and Crystal Enterprise<sup>™</sup> together to centrally store key report objects—including formulas, SQL commands, text objects, and bitmaps—for re-use across multiple projects and updating from a single place.



Use Crystal Reports intuitive visual designer for easy data connectivity and formatting.

# Flexible Application Integration

Crystal Reports can help reduce the complexity of integrating dynamic reporting functionality into your applications. You can use comprehensive Java, .NET, and COM reporting components as a common cross-platform standard for tightly integrating dynamic reports into applications. Whether you need to build a web, Windows, XML web service, or mobile application, you can use Crystal Reports for your data presentation requirements.

#### **Available in Leading Integrated Development Environments**

Crystal Reports is the embedded reporting standard in leading Java and .NET integrated development environments (IDE) including Microsoft Visual Studio .NET, BEA WebLogic Workshop, Borland JBuilder, Borland C#Builder, and Microsoft Visual Basic. This means that you can embed reports into your applications right from within the familiar environment of your preferred IDE. A Visual Control Library is also included for Delphi development.

#### **Comprehensive SDKs**

Crystal Reports includes comprehensive SDKs for use in J2EE, .NET, and COM applications. With programmatic access to a common report object model, you can empower end users to create and modify reports from within the application at runtime. Implement report exporting to popular formats including PDF and XLS. From static report processing/viewing to complex runtime report creation/modification, you have the flexibility to easily implement a range of report interaction capabilities.

#### **Online Developer Community**

To help you quickly overcome common reporting roadblocks, Business Objects provides developers with access to an online development community. It includes a variety of technical resources including sample applications, troubleshooting tips and tricks, white papers, and forums. You can access the DeveloperZone at: www.businessobjects.com/devzone.



Use Crystal Reports from directly within leading Java and .NET IDEs.

# Embedded Reporting with Crystal Reports

# **Design, Integrate, and Deploy Reports Within Applications for Faster Data Presentation and Easier Maintenance**

# Powerful Deployment

Data Access

>35 database drivers

**Technical Specifications** 

 Access to JavaBeans, COM Data Providers, and ADO.NET

#### Browsers

- Internet Explorer 5.x, 6
- Netscape 6.2, 7.0
- Safari 1.0 on OSx

#### **Development Environments**

- Microsoft Visual Studio .NET
- BEA WebLogic
   Workshop 8.1
- Borland JBuilder X
- Borland C#Builder
- Microsoft Visual Basic 6
- Microsoft Visual C++ 6

Application Servers

- Microsoft IIS 5, 6
  BEA WebLogic 7 (SP1), 8.1
- IBM WebSphere 5 (Fix-pack 2)
- Apache Tomcat 4.1.27

For complete details please review the Platforms.txt document on our web site.

# With Crystal Reports powerful report-processing engines and range of interactive viewers, you can deploy high-quality presentation layers that exceed end-users expectations.

## **Powerful Report-Processing Components**

You can use Crystal Reports powerful reporting components to process a report based on a report definition that is either loaded from a definition file or dynamically described programmatically. Based on your application requirements, you can select from three included core reporting components. Use the 100% Java Reporting Component to render reports within JSP pages for your J2EE applications. Embed the .NET Reporting Component to process and render reports within ASP/ASPX pages for your .NET applications. For COM development, there's also a Report Design Component (RDC) for Visual Basic developers to integrate reporting into thick-client or client-server applications.

## **Interactive Viewers**

A Crystal Reports viewer can be easily integrated into applications so end users can read and interact with reports. Choose from a variety of zero-, thin-, and thick-client viewers including a DHTML page viewer, a DHTML interactive viewer, a WebForms .NET viewer, an ActiveX viewer, a WinForms .NET viewer, and a Report Part (Portlet/Mobile) viewer. Based on your application requirements, you can customize a range of interactivity options in the viewer. These include advanced searching, one-click printing, and exporting to popular formats including PDF, RTF, XLS and HTML.

## **Scalable Architecture**

Business Objects reporting technologies are built using the same underlying object model. This common reporting platform can help minimize the development effort required to scale and extend applications as requirements evolve. With minimal recoding, you can easily update your applications to use Crystal Enterprise as a centralized reporting architecture for more efficient report sharing and maintenance.

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Choose from a variety of interactive viewers for Java, .NET and COM applications.

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