

# Crystal Reports XI Designer 1

**Summary:** This two day interactive workshop was designed for new users of Crystal Reports XI. Some of the topics covered include a review of the software features, report design and the creation of presentation quality reports. The course incorporates a number of hands on exercises to reinforce the learning process.

**Prerequisite:** Working knowledge of Windows 2000/XP environment is required. Familiarity with relational database concepts (tables, fields and records) is strongly recommended.

## Basic Reporting

### Before You Begin

- Defining the Purpose of the Report
- Determining the Layout of the Report
- Finding the Data
- Organizing the Data for the Report

### Creating a Report

- Starting the Crystal Reports Program
- Starting a New Report
- Choosing a Data Source
- The Main Components of the Design Window
- Exploring the Toolbars
- Managing Resources with Explorers
- Placing Fields on the Report
- Selecting and Sizing Objects
- Browsing Field Data Moving and Aligning Objects
- Using Guides and Guidelines to Move and Align Objects
- Creating Text Objects
- Saving the Report
- Auto-saving the Report
- Previewing the Report
- Refreshing the Data
- Getting Help
- Challenge Exercise - Creating a Basic Report

### Formatting Features

- Quick Formatting with the Template Expert
- Using the Format Painter
- Formatting Objects
- Inserting Lines and Boxes
- Drawing a Line
- Drawing a Box
- Inserting Graphics
- Working with the Page Commands
- Changing Page Orientation
- Changing Margins
- Working with Text Objects
- Adding Fields into a Text Object
- Formatting Part or All of an Object
- Inserting Special Fields

### Database Filters

- Filtering Data with the Select Expert
- Selecting Records with Multiple Criteria
- Viewing and Editing the Select Formula
- Case Sensitive vs. Case Insensitive
- Record Selection Formula Templates
- Challenge Exercise - Selecting Specific Records
- Challenge Exercise - Selecting a Range of Values

### Report Grouping

- When and Why to Group Records
- Creating a Group
- Group and Sort Direction
- Customize Group Name Field
- Modifying Groups
- Creating Multiple Groups in a Report
- Using the Group Tree to Navigate the Report
- Reordering Groups
- Summarizing Groups
- Additional Summary Options
- Grouping Data in Date/Time Intervals
- Calculating Percentages
- Ordering Groups Based on Their Subtotals Using the Group Sort Expert
- Challenge Exercise - Grouping, Sorting, Summarizing
- Challenge Exercise - Calculating Percentages

# Adding Flexibility to Reports

## Multiple Table Joins

- Understanding Tables, Records, and Fields
- Learning About Linking
- Adding Multiple Tables to a Report
- Challenge Exercise - Using the Database Expert to Link Tables

## Creating Formulas

- Understanding Crystal Formula Syntax without Being a Programmer
- About the Formula Workshop
- Using the Formula Workshop
- Using the Formula Editor
- The Formula Editor Toolbar
- Performing Simple Number Calculations
- Manipulating Dates with Formulas
- Creating Boolean (True/False) Formulas
- Creating String Formulas
- Using Bookmarks to Navigate Through Formulas
- Challenge Exercise - Creating String Formulas Challenge
- Exercise - Doing Calculations
- Challenge Exercise - Subtracting Dates
- Challenge Exercise - Using Nested If Statements

## Conditional Formatting

- The Highlighting Expert
- Setting Highlighting Priorities
- Formatting Sections
- Formatting Sections Conditionally
- Formatting Fields
- Challenge Exercise - Section Formatting and Conditional Formatting

## Summary Reports and Charts

- Creating a Summary Report
- Applying the Drill Down Feature
- Applying the DrillDownGroupLevel
- Producing Charts
- Editing Charts
- Formatting Charts
- Using the General Chart Options
- Modifying Individual Objects in the Chart
- Using Auto-Arrange Chart
- Applying Chart Templates
- Challenge Exercise - Creating a Summary Report
- Challenge Exercise - Charting

## Exporting Reports

- Understanding Export Formats and Destinations
- Using an HTML Format for Crystal Reports
- Exporting to Windows Applications
- Exporting to a Report Definition Format

## Default Options

- Setting the Default Layout for Design and Preview Views

## Report Wizards

- What are the Report Wizards?
- Create a Report Using the Standard Report Creation Wizard
- The Data Dialog Box
- The Fields Dialog Box
- The Grouping Dialog Box
- The Summaries Dialog Box
- The Group Sorting Dialog Box
- The Chart Dialog Box
- The Record Selection Dialog Box
- The Template Dialog Box
- Challenge Exercise - Create a Report Using a Report Wizard

## For After the Class

### **APPENDIX A - Mapping**

- Understanding Maps
- Map Layouts
- Map Types
- Formatting the Map
- Drilling Down on Maps
- Using the Analyzer Tab for Advanced Mapping
- Changing the Geographic Map
- Using the Map Navigator
- Changing Map Layers
- Resolving Data Mismatches

### **APPENDIX B – Creating an ODBC Data Source to Attach to a Database**

- Creating an ODBC Data Source to Attach to a Database
- Creating an ODBC Connection to Any Database

### **APPENDIX C - Pre-Qualification Exercise for the Power User Workshop**

- Why Should You Pre-qualify Yourself for the Power User Workshop?  
Pre-qualification Exercise

### **APPENDIX D – The Xtreme Sample Database**

- A relational diagram of tables existing the Xtreme Sample Database provided on the Crystal Reports Installation CD

### **APPENDIX E - Installation and System Requirements**

- Review the necessary hardware and operating system requirements to make Crystal Reports operate correctly

### **APPENDIX F - Function and Operator Locations**

- A complete listing of all the available Formula Functions and an explanation of the new Custom Functions

### **APPENDIX G – Glossary**

- A complete glossary of terms used throughout the book