



# Crystal Reports - Advanced 2 Day Course

### Overview

This course is designed to increase report design skills and discover the reporting power of Crystal Reports. Topics covered include grouping options and sub reports, formulas such as variables and functions, querying using SQL reporting and charting.

#### Audience

Report designers who want to further develop their basic report design skills using Crystal Reports.

## **Course Objectives**

At the end of this course, delegates will have learned how to:

- Use advanced formula techniques including variables
- Create running totals in a report
- Understand and optimise the three stage processing of reports
- Learn basic SQL and ODBC techniques to expand data source capabilities
- Create data dictionaries for use as report sources
- Use advanced parameter techniques and create "alerting" reports
- Use advanced section techniques and create sophisticated paging reports
- Use sub -reports (active and passive)
- Use advanced cross-tab techniques in reports.
- Graph single and multiple data series

#### Prerequisites

Delegates must have taken the Report Design Introduction course and/or understand basic report design concepts such as linking, record selection, sorting, grouping, summarising, basic formulas, conditional reporting and section formatting. Relational database knowledge is recommended. Knowledge of programming and/or SQL would be helpful.

## Course Contents (2 days)

- Recap
  - Course Files & Report Types reviewed
  - Default Options & Settings
- Formulas
  - o Understanding formula language & syntax
  - $\circ$   $\;$  Using functions and operators
  - o Using variables
  - Creating, Declaring, & Assigning Formula Variables
  - Using control structure
  - Creating Running Totals

- Multiple-Pass Reporting
  - o Multi Pass Explained
  - Evaluation Time Functions
  - o Using Multiple Variables
- Parameters
  - o Defining parameter fields
  - o Referencing a parameter
  - Responding to a parameter
  - Using values
  - o Deleting parameters
  - o Using Parameter Fields to select records
  - Parameter Fields to sort records & set conditional formats





- Advanced Formatting (Conditional)
  - Conditional On/Off Formatting
  - Conditional Attribute Formatting
- Grouping
  - Applying specified order grouping
  - Using the Group Sort Expert
  - Creating a group selection based on summary
  - $\circ$  Information
  - Grouping data hierarchically
- Cross-tabs
  - Create a Cross-tab using the Expert
  - o Filter Cross-tab by group
  - Format Rows and Columns
  - Multi-Level Cross Tabs
  - Cross Tab Summary Operations
  - Cross Tabs & Parameter Fields / Formula Fields / Group Headers
- Subreports
  - Insert & Edit a Subreport
  - Linked/Unlinked Subreports
  - Format a Subreport Object
  - Share Formulas Between Main and Subreports
  - o Create an On-demand Subreport
  - o Adding captions to subreports
  - o Updating subreports
  - $\circ$   $\;$  Using shared variables in a subreport  $\;$



- SQL/ODBC & SQL Designer
  - o SQL Introduction & SQL Statements
  - ODBC Data Source Introduction
  - SQL Designer Introduction
  - $\circ~$  Create a SQL Expression
  - $\circ$   $\,$  Select Records on the Server  $\,$
  - Write/Edit a SQL Query
  - $\circ~$  Build a Report on a SQL Query
  - Create SQL Commands in the Crystal Report Environment
- Crystal Dictionaries
  - Create a Crystal Dictionary
- Charting Data
  - Modify/Format a Chart
  - o Create a Top N Chart
  - o Create a chart Template
  - o Chart Data, Text and Calculations
  - $\circ~$  Charts from Cross Tabs
- Report Alerts
  - What Are Report Alerts
  - Creating, Modifying and using Alerts
- Multiple Sections
  - Manipulating multiple sections, and general uses for multiple sections
  - o General section formatting (Reviewed)