

# Crystal Reports 2013 Designer 3 Workshop

## Summary

This two-day workshop is designed to expand your working knowledge of Crystal Reports and move you into creating more complex reports. Time will be spent walking you through the tips and tricks of advanced report writing along with a good amount of hands on practice. In addition, you will cover custom functions, advanced formulas and report efficiencies techniques. This course incorporates a number of hands on exercises that reinforce the learning process.

## Prerequisite

Successful completion of the Designer 1 and 2 Workshops is strongly recommended.

## Advanced Database Topics and Formulas

### Refresher Exercise

- Review of Planning a Report
- Creating the Report
- Placing Fields on the Report
- Advanced Grouping
- Selecting Certain Records
- Group Sorting
- Group Charting

### Advanced Database Concepts

- What is SQL?
- Native Database Driver
- ODBC
- OLE DB
- ODBC, OLE DB or Native
- Using the Database Expert for Linking
- Adding a table Multiple Times
- Changing Join Types
- Database Changes
- Database Verification
- Set Data Source Location
- Re-mapping Database Fields
- Views
- Stored Procedures
- SQL Commands
- Creating an SQL Command

### Using the Advanced Formula Features

- Select Case Statement
- For Loop Control Structure
- While... Do Loops
- Do... While Loops
- Building Arrays
- The Split Function
- Array Sizing Limitations

### Custom Functions

- What is a Custom Function
- Function Arguments
- When to use a Custom Function
- Using the Custom Function Editor
- Using Crystal Syntax
- Using Basic Syntax
- Custom Function Properties
- Using the Formula Expert and Custom Functions
- Using the Formula Extractor
- Custom Function Limitations

### Running Reports Efficiently

- Understanding What Crystal Sends to the Database
- Strategies for Efficient Report Performance
- Using the SQL Statement
- Record Selection and Performance
- Performance Information
- Report Definition
- Saved Data
- Processing
- Latest Report Changes
- Performance Timing
- Server Based Grouping
- Select Distinct Command

# Tips, Tricks and Special Features

## Advanced Cross-Tab Design

- Dissecting a Cross-Tab Grid
- Cross-Tab Parts Listing
- Row and Column Indexes
- Summary Indexes
- Grid Value Functions
- Embedded Summaries
- Conditionally Formatting Embedded Summaries
- Calculated Members

## Tips and Tricks

- Manual Cross-Tabs
- Formatting Subreports
- Parameter Tricks
- Using Unique Fonts in the Report

## Appendix A: Setup Instructions for Crystal Reports 2008

- Crystal Reports 2008 application installation instructions
- Installing required class files

## Appendix B: Setup Instructions for SQL Server 2005 Express Edition

- Installing SQL Server 2005 Express Edition
- SQL Server 2005 Express Edition installation instructions
- Installing the AdventureWorks database
- Attaching the AdventureWorks database

## Appendix C: The AdventureWorks Database