

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 lot of hands-on practice. In addition, you will cover custom function, advanced formulas, and report efficiencies techniques. This course incorporates a number of hands-on exercises that reinforce the learning process.

Course Objectives:

- Use multiple sections in reports for advanced formatting techniques.
- Underlay graphics and charts to print beside data.
- Calculate running totals in reports.
- Develop parameter fields to prompt users for information.
- Limit user entry into parameter fields.
- Solve table link problems with advanced linking techniques.
- Understand Crystal Reports data handling and evaluation time functions.
- Comfortably make use of variables in formulas.
- Work with arrays and control structures in formulas for more flexible decision making.
- Use additional reports within a main report as subreports.
- Create linked subreports to tie data from another report to the current report.
- Format subreports to display on demand only.
- Customize groups in the report with formulas and custom names and create hierarchical groups.
- Perform group selection based on summary field values.
- Create and format cross-tab reports and create charts from cross-tabs.
- Working with report alerts.
- Creating and using report templates.

Audience: Administrators, developers, and end-users who need to create dynamic reports from varying data sources.

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

Number of Days: 2 days

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| <p>1. Refresher Exercise
 Review of Planning a Report
 Creating the Report
 Placing Fields on the Report
 Advanced Grouping
 Selecting Certain Records
 Group Sorting
 The Report Header
 The Group Chart</p> | <p>What is a Custom Function
 Custom Function Arguments
 When to use a Custom Function
 Creating Custom Functions
 Creating a Custom Function
 using the Custom
 Function Editor
 Using Crystal Syntax
 Using Basic Syntax
 Custom Functions Properties</p> |
| <p>2. Custom Functions</p> | |

- Using the Formula Expert and Custom Functions
- Using the Formula Extractor
- Custom Function Limitations
- 3. Using Advanced Formula Features**
 - Advanced Formula Syntax
 - Review of If...then...else... Expressions
 - Alternatives to the IF THEN ELSE Function
 - Select Case Statement
 - Immediate If Function
 - IIF (expression, truePart, falsePart)
 - For Loops
 - Exit For
 - While Do Loops
 - Join Function
 - The Split Function
 - Crystal Formula Sizing Limitations
- 4. Crystal Reports, Data Access and SQL**
 - What is SQL?
 - Direct Database Driver
 - ODBC
 - OLE DB
 - Viewing the SQL
 - SQL Commands
 - Creating a SQL Command
 - Adding a Parameter to the Command
 - SQL Expressions
 - Creating a SQL Expression
- 5. Advanced Database Concepts**
 - Using the Database Expert for Linking
 - Order Links Dialog
 - Index Legend Dialog
 - Link Options Dialog
 - Adding and Removing Databases/Tables from the Report
 - Adding Tables to a Report Multiple Times
 - Changing the Join Type for a Link
 - Database Changes
 - Database Verification
 - Set Data Source Location
 - Re-mapping Database Fields
 - Views
 - Stored Procedures
- 6. Non ODBC Connection Types**
 - Running Reports Efficiently**
 - Understanding What Crystal Can Pass to the Database and How That Affects Report Performance
 - Strategies for Efficient Report Performance
 - Interpreting the SQL Query
 - Using an SQL Statement to Make a Report More Efficient
 - Record Selection and Performance
 - Performance Information
 - Report Definition
 - Saved Data
 - Processing
 - Latest Report Changes
 - Performance Timing
 - Server Based Grouping
 - Requirements for Server Based Grouping
 - Select Distinct Command
- 7. Manual Cross-Tab Reports**
 - Creating a Cross-Tab Object
 - Creating a Cross-Tab without the Expert
- 8. Tips and Tricks**
 - Formatting Subreports
 - Parameter Tips and Tricks
 - Conditional Formatting
 - Formatting Page Headers
 - Using Fonts to Enhance Readability of your Report
 - Windows Character Map
 - String Fields and Dates
 - Dates Activity
- 9. OLAP Reporting**
 - OLAP Explanation
 - OLAP Servers
 - Creating an OLAP Report
 - OLAP Report Formatting