

**Crystal Reports training topics – advanced workshop**

***Crystal Reports Enterprise  
Training Topics  
Advanced Workshop***

# Crystal Reports training topics – advanced workshop

## Introduction

This is a one day advanced workshop, building on the basics learned on Days I and II. Pre-requisites are attendance on Days I and II or appropriate experience with Crystal Reports, or database application development experience.

## Brief revision of Crystal basics

### Advanced topics

- Building reports from participants' own data sets.
- Extracting data.
  - Crystal can be your front end to data extracts, important in today's world of data interchange.
- Crosstab object
  - An extremely powerful tool for management reports.
    - Summarising data across records and columns.
- Advanced formula fields.
  - Tapping the full power of the Crystal operators and functions.
  - Crystal formula language.
  - BASIC formula language.
    - Similar to MS Visual Basic with extensions to handle reporting.
    - Tips on learning Basic syntax.
    - Returning a value from a formula.
- Dictionaries.
  - Crystal Dictionaries enable us to provide meaningful descriptions for field names, set default alias names for tables, set default display formats for fields and define calculations that will be available across reports.
- Embedding objects.
  - Crystal can hold embedded/linked objects from any OLE server-enabled application which then become part of the report. If the linked source changes, the changes are reflected in the report.
- SQL specifics.
  - Views
    - Crystal reads views as if they were tables. Views simplify complex schemas.
  - Stored procedures.
    - Parameter passing.
  - Crystal SQL designer
  - Query testing.
    - Making simple reports to test queries.
    - Importing queries from other environments.
- More on databases.
  - Direct connection.
  - ODBC
  - OLEDB.
- Parameter fields.
  - Prompting the user for values to be used in queries.
  - One report, many purposes.
- Sub-reports
  - A report within a report.
  - Combining data in a single report.

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- Linking disparate data .
- Varying the view of data.
- One-to-many joins where there is index on the lookup field.

### **Optimising reports**

Today's bigger databases call for faster, more responsive reports. How can our reports be configured to meet that need?

- Efficient query strategy.
  - Pushing queries to the server.
  - Use of indexes

### **Application development**

Developing reporting suites within applications. Calling the report runtime from a variety of environments. Reporting from a web server.

- Crystal Report Design Component.
- Crystal report viewer control.
- The Crystal runtime
  - Distributing stand-alone reports.
  - Deploying the runtime.
  - Trapping and reporting errors.
- Supported application development environments.
  - Visual Studio
    - .NET
    - VB.NET/VB6
    - C#
    - C++
    - Other
  - Delphi
- Crystal Web Component server
- Web reporting, calling and viwing reports from a web pages.
  - Optimising web reports.
  - XML support.

### **Tips and tricks**

Free-form discussion of personal experiences.