

Frequently Asked Questions and Answers

Crystal Reports Training Seminar for ESRI Customers

2003

BUSINESS OBJECTS/ESRI RELATIONSHIP

Question: What ESRI products is Crystal Reports shipped with?

Answer: Crystal Reports comes as a separate CD with all of ESRI's ArcGIS Desktop products (ArcView, ArcEditor, and ArcInfo).

Question: Does Crystal Reports come with ArcGIS 8.3 or 9.0?

Answer: Crystal Reports 9.0 is included with both the 8.3 and 9.0 versions of ArcGIS.

Question: Is Crystal Reports available through ArcInfo 8.3?

Answer: Yes, Crystal Reports 9 is included at no additional charge with ArcInfo. 8.3

Question: What version of Crystal Reports do I have with ArcGIS 9? Version 9 or 10?

Answer: Crystal Reports 9.0 is included with all the ArcGIS desktop products. ESRI is working on upgrading their integration to include Version 10 of Crystal Reports in a future ArcGIS product release.

Question: What is the OEM Version?

Answer: The OEM Version of Crystal Reports is the version that ESRI users receive with ESRI's ArcGIS Desktop products. It is a full-functioning version; however, it is restricted to accessing ESRI data-only. To access other data sources users should purchase a full license use version of Crystal Reports from Business Objects directly.

Question: Can you explain briefly the general overview of GIS?

Answer: GIS stands for geographic information systems. For more information on ESRI, the world leader in the nearly \$2 billion GIS industry, please visit www.esri.com.

Question: Is Crystal Reports also available with ArcIMS suite of products? Are they presentable via the Web?

Answer: Crystal Reports can be presented via Crystal Enterprise over the Web. We are working with ESRI to provide integration with ArcIMS and there are a number of customers that have done custom integrations. Please contact Peter Harborow peter.harborow@businessobjects.com, at Business Objects at 640-647-8656 for more information.

Question: Do the Crystal Reports update releases coincide with the ESRI update releases?

Answer: ESRI is currently shipping Crystal Reports version 9 and is planning to move to Crystal Reports version 10 later this year.

CRYSTAL ENTERPRISE

Question: Is Crystal Enterprise included with ArcGIS?

Answer: No, Crystal Reports is included with ArcGIS. Crystal Enterprise is a separate product available for purchase (by contacting ESRI Telebusiness at 800-447-9778).

Question: What is Crystal Enterprise?

Answer: The Crystal Enterprise product allows users to distribute and manage Crystal Reports over the Web. For more information, visit <http://www.businessobjects.com/products/reporting/crystalenterprise/default.asp>.

Question: What does it cost to purchase Crystal Enterprise?

Answer: **Crystal Enterprise** is licensed according to scalability. Crystal Enterprise can be purchased on a Named User, Concurrent User, or CPU model.

Question: Is Crystal Enterprise a server application?

Answer: Yes, it is as server based Web application

Question: When you refer to Crystal Enterprise are you only speaking of online activity?

Answer: Yes, Crystal Enterprise is a 100% Web-based tool. All interaction with Crystal Enterprise is done through a browser.

Question: Can you publish to your own Web site?

Answer: Yes, with Crystal Enterprise technology. Please see <http://www.businessobjects.com/products/reporting/crystalenterprise/default.asp>

Question: Once a report is built, what is the best way to place it on an intranet system for an organization?

Answer: The best way is through Crystal Enterprise which is a Web based server application. This provides an interactive report in the browser (zero client).

TRAINING

Question: Is there, or will there be either an instructor-led or virtual campus course for GIS and Crystal Reports for ESRI customers?

Answer: Not currently, but we are looking at this. Currently, users may take Crystal Reports specific training courses through Business Objects both online and classroom led. Please see www.businessobjects.com/training for details.

Question: Are there any suggested books for beginners?

Answer: George Peck: Crystal Reports(R) 9: The Complete Reference is a fantastic book.

Question: ESRI's documentation does not cover Crystal Reports. What manuals or books are available?

Answer: There is a Crystal Reports focused electronic manual on the Crystal Reports CD included with ArcGIS.

Question: Does Business Objects offer training specific to using Crystal Reports in conjunction with ESRI software?

Answer: On an ongoing basis, no, Business Objects does not offer specific ESRI training. The training currently provided by Business Objects covers the Crystal Reports product in general. Please see www.businessobjects.com/training for details.

TECHNICAL

Mapping:

Question: I am interested in displaying a dynamic map on Crystal Reports - is that possible and if yes - how?

Answer: At present, the only way of getting a map on to a report is via exporting the map to an image file and adding that to the rpt. You could automate this process via ArcObjects. Crystal Reports can embed maps only as a static image. We are working on extending the integration to make the mapping from within Crystal Reports more robust.

Question: Can you embed a map displaying the report data into the report?

Answer: Yes as an object.

Question: If I have a report based on features on a map, can I create a link to that feature on the map, or imbed a snapshot of the feature within the map on the report page?

Answer: Not out of the box. There are some possible solutions via ArcObjects.

Question: Can you embed a map (live or static) in your report like the charts and graphs?

Answer: Yes, as an object or with a link to the mapping server as necessary.

Question: Can you embed a map from ArcGIS in a Crystal Report and will it be a live link? If not is this a future consideration?

Answer: Yes, as long as there is connectivity to interact with the map. We are exploring tighter integration of the ESRI mapping.

Question: Is there any way to embed a map into Crystal Reports?

Answer: Yes, as an image with a link.

Question: Can you explain what you mean by 'as an image with a link'. Is there no way to directly connect to ArcGIS and the mapping?

Answer: Unfortunately, no. Crystal Reports is simply connecting to the database being used behind the scenes with ESRI. We are working to strengthen the integration from within Crystal Reports to include more mapping capabilities out of the box.

Question: Can the graphs/chart results from Crystal Reports be added to a layout in ArcMap and are they updated as the database changes?

Answer: No - that level of integration does not yet exist between Crystal Reports and ESRI's applications. ESRI simply uses Crystal Reports to present the data from the GIS database or the personal geodatabase. Currently, there is no way to embed a fully functional report on a map layout.

Question: Is it possible to show the Active Extent of the map within a report? For example, if I have a report of 100 homes that meet my criteria, I would like to show a map of each home's surrounding area.

Answer: Unfortunately, no. Crystal Reports can embed maps only as a static image. We are working on extending the integration to make the mapping from within Crystal Reports more robust.

Question: We have a Business Objects intranet. How can we include ESRI maps in our Business Objects reports?

Answer: You can embed this into your reports as an object.

Installation:

Question: If the Crystal Reports option in ArcMap is grayed out, does that mean Crystal Reports was not installed?

Answer: Yes, that is correct. You may need to go through a reinstall process, or repair process to reinstall Crystal Reports.

Question: Is the latest version of Crystal Reports backwards compatible with reports created in earlier versions?

Answer: Yes, absolutely.

Question: ...But you can't save back from CR 9 or 10 to the CR 8.5 format, correct?

Answer: That is correct.

Question: Do I have to uninstall Crystal Reports 8.0 before installing 9.0?

Answer: No, this is not necessary.

Question: If I just need Crystal Reports 9.0 to be installed, where do I get it?

Answer: You would have received Crystal Reports 9 when you purchased the ESRI ArcGIS Desktop products. It will simply be a separate CD that comes with the ArcGIS.

Features:

Question: Do you get to drill down capability by going to the main menu, selecting INSERT menu, Group menu then Sub Level?

Answer: Drill-down is always active with the Crystal Reports application unless turned off depending on how the report is written. The user would just click on the data that they wish to see details on.

Question: What is drill-down exactly?

Answer: Drill-down allows end-users to see additional data in a report by clicking on a line item to get to the underlying data. In other words, it is interacting with the report data, pulling parameterized requests, and mining the data.

Question: Can you base a field highlighting or conditional formatting on a value in another field?

Answer: Yes.

Question: Is data linking / grouping maintained when exported to PDF/Word/XLS formats?

Answer: Unfortunately, no.

Database:

Question: How do you set the path of a database to Crystal Reports?

Answer: This is in the connect to dB interface in the Crystal Reports file menu.

Question: What is the data source for the ArcGIS data (if you open Crystal Reports without creating a study area in ArcMap)?

Answer: Typically, the database is the personal geodatabase that you have created through ArcMap. If you do not have a personal geodatabase, you can connect directly to your ESRI database (DBMS).

Question: Do you use the "Access" option when you want to report on a Personal Geodatabase?

Answer: Correct.

Question: Will a previously developed report reflect changes in the database it accesses?

Answer: Yes although if there are new fields involved they would need to be configured.

Question: Can you connect to a Microsoft Exchange (Outlook) data source with Crystal 9 ESRI OEM?

Answer: With the OEM Version that ships with ESRI products, you cannot connect to MS Exchange (the OEM version is full-functioning; however there are license restrictions to access ESRI data only).

Question: Does the data in Crystal Reports come from the ArcView tables that underlay the maps?

Answer: Yes,

Question: If I change the data in ArcMap, will the data in the report be automatically updated?

Answer: Yes.

Question: Does the data have to be in a geodatabase to create a report?

Answer: Crystal Reports can report from any relational database although the license is restricted to ESRI data for the OEM version. If you would like to report from additional data sources you can purchase a full-use license of Crystal Reports.

Question: Can calls to Crystal Reports be made from VBA within ArcMap?

Answer: Yes.

Question: Can this reporting be run from shapefiles instead of the geodatabase?

Answer: Yes. The shapefile will be listed as a layer in the first screen of the wizard.

Question: Does Crystal Reports use the domain descriptive values in a geodatabase or does it only "see" the code numbers straight from the geodatabase table? e.g., does it see "Florida" in the domain or the domain code of '1' which is stored in the geodatabase?

Answer: Crystal Reports uses which ever fields you WANT it to use. As long as the fields are in the geodatabase, Crystal Reports can read them. If you want your Crystal Report to use the code, then use the domain code field - if you want Crystal Reports to use the description, use the domain description field. The choice is entirely yours.

Question: If I want to refresh this report or run a new instance against the ESRI data, what database connection info (e.g. ODBC) do I have to have configured on the CE server?

Answer: You don't necessarily have to use ODBC here. But, if you are using ODBC, then you simply have to have a System DSN set up at the Crystal Enterprise server that points to your ESRI database.

Question: In ArcMap, whenever you open the wizard, a mdb is created. What is this mdb? Can we open this mdb outside of the ArcMap?

Answer: This mdb is the personal geodatabase, which is an MS Access database. Yes, you can open this in MS Access.

Question: What would be the advantage of connecting via ODBC to a database?

Answer: For certain databases, the data transfer rates are vastly improved by using ODBC, as opposed to a third-party native driver. ODBC is now an industry standard for database connectivity, so using ODBC makes it easy to move a database and its reports from machine to machine, if necessary.

Crystal Versions:

Question: We have Crystal Reports Developer version. What are the limitations of it?

Answer: The developer edition is more fully featured than the Professional version included with ArcGIS. This includes server components (Crystal Enterprise) allowing reports to be deployed over the web or in a client server environment. Please see the www.businessobjects.com/products for more details.

Question: I have Crystal Report Professional version. What Web publishing options do I have?

Answer: There is nothing specifically within Crystal Reports Professional to allow you to publish to the Web. When you have Crystal Enterprise available, you can save your reports directly to Crystal Enterprise. Crystal Enterprise will then allow you to publish reports directly to the Web, for zero-client browser-based viewing and interactivity.

Charting:

Question: Is the charting expert based on the chart options found in ArcGIS or are there additional chart options?

Answer: There are additional charting options found in Crystal Reports.

Question: Were the scatterplot and graphs created in ArcGIS or Crystal Reports?

Answer: All of the graphs and charts were created in Crystal Reports.

Question: Can you select a point on the pie chart report and have it display the point in the GIS?

Answer: Not out of the box. You could potentially write ArcObjects to do this, but it wouldn't be a simple process.

Question: Can the graphs/chart results from Crystal Reports be added to a layout in ArcMap?

Answer: Unfortunately, No.

Other Technical:

Question: Which Crystal patches do I download and install? I am now using ArcView 9.x and the associated version of Crystal. How do I obtain patches for Crystal?

Answer: Please see our technical support Website at www.businessobjects.com/support for details.

Question: What is Crystal syntax?

Answer: Crystal generates sql, this can also be entered direct in report design.

Question: Is it possible to customize the report, so I can create modules or VBA?

Answer: Yes you can completely design a report from scratch.

Question: Can we build transpose (cross tab reports) where values stored by row in a database can be printed across the page (spreadsheet style).

Answer: Yes.

Question: Is there a hands-on demo available for Crystal Reports?

Answer: Yes, there is a demo and 30-day trial available at www.businessobjects.com/devzone.

Question: Is there a free trial version available for download? Is there a Trial period?

Answer: The full use version of Crystal Reports is included with all ArcGIS desktop products. If you do not have this, a trial version of Crystal Reports is available on www.businessobjects.com.

Question: I need to place a table into an MXD document and print the table and associated data frame from within ArcGIS/ArcInfo. I need the table to update automatically when changes are made. Is this possible with Crystal Reports? Will the Crystal Reports table that is embedded into the MXD then be available to a client if the MXD is published as a Web page using ArcIMS?

Answer: There is no way to embed a report directly into an MXD document.

Question: How is grouping handled when reports are exported to pdf, doc, and xls formats?

Answer: Once a report is exported to a format other than Crystal Reports, the groups will still show on the exported file, but you will not be able to drill-down on the information.

Question: How in depth does Crystal Reports deal with formulas? MS Access allows visual basic programming to be able to tailor reports further. Does Crystal Reports have that capability?

Answer: Yes, in depth.