

Three interlocking gears of different sizes, rendered in a light gray color with a slight 3D effect, positioned behind the main title text.

Crystal Converter User Guide

Crystal Converter v2.0

Overview

The Crystal Converter will take a report that was developed in Crystal Reports 11 or lower and convert the supported features of the report to an RDL file. The RDL of Report Definition Language is an XML file that is the standard for Microsoft SQL Reporting Services Reports.

The Crystal Converter will convert all items, functions and formats to the best of its ability on the original report that are supported in SQL Reporting Services. The converter will in most cases convert 80-90% of the report with some manual corrections/changes made to the reporting services report after conversion. On simple reports the converter will most likely allow you to convert and upload directly to your report manager with little or no manual intervention.

Supported Crystal Report Features

Data Sources:

OBDC	Yes
OLEDB	Yes
OLAP	Yes
ADO.NET	No
Outlook	No

NOTE: At this time the Crystal Converter does not support using Command objects in crystal to access your data. If a command is used the query in Reporting Services will not be created correctly.

Only data sources of these types will be converted into the RDL file. Only reports that connect to Microsoft SQL Server or MS Access can be converted. All formula fields and selection formulas from the Crystal Report must be written in Crystal Syntax in order for them to be converted to Vb.net by the crystal converter. Authentication type such as user prompting or windows authentication will need to be set in the report manager manually after report upload.

Stored Procedures

In Version 2.0 and higher of the Crystal Converter enhanced support for stored procedure based reports has been added. Crystal Reports that use a single stored procedure to generate their data will now convert properly.

Note: All columns returned from the Stored Procedure must have unique names.

Report Fields:

Database Fields	Yes
Formula Fields	Yes
SQL Expression Fields	Yes
Parameter Fields	Yes
Running Total Fields	Yes

Group Name Fields	Yes
Special Fields	Yes *

Sections:

Report Header	Yes
Report Footer	Yes
Page Header	Yes
Page Footer	Yes
Group Header	Yes
Group Footer	Yes
Details	Yes

At this time The Crystal Converter does not handle sorts that are added outside of the default groups sorts automatically added. This will cause an error to be generated and the report will not convert. To work around this remove the added sorts from your Crystal report, convert it, then add the sorts back in manually to your converted reporting services report.

Report Layout Objects:

Text	Yes
Hyperlink	Yes
Summary	Yes
Cross-Tab	No
OLAP Grid	No
Sub Report	No [†]
Line	Yes
Box	Yes
Picture	No, will add place holder
Chart	Yes *
Conditional Formatting	

Please note that many crystal features not handled by the conversion utility are also not supported by SQL Reporting Services.

Product Activation

The Crystal Converter is a product of KTL Solutions and is protected by KTL's software activation process. When you purchase the converter you will register a company or individual name and email address with KTL. You will then be sent a product key that can be used in conjunction with the name you provided to activate the application.

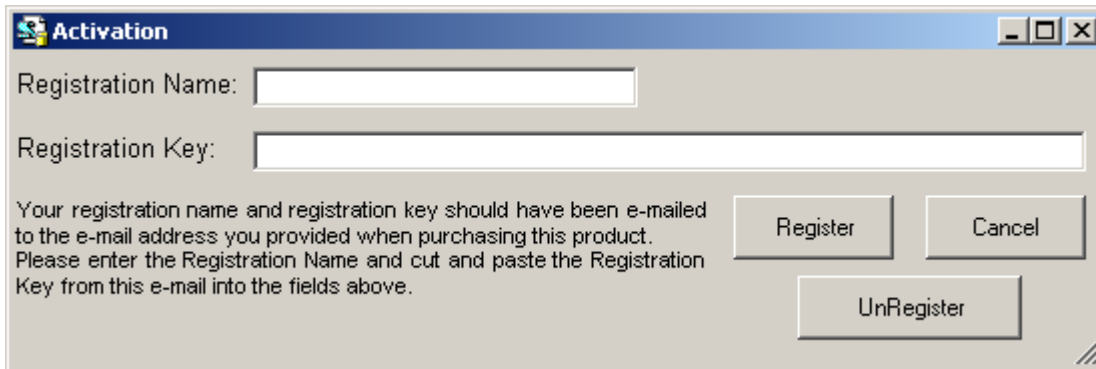
You may reach the activation screen though the Help menu by clicking the registration option. **Not activating the converter will cause it to run in trial**

* See Appendix A for all supported special fields

† Sub reports will be converter, but to require some manual modification to function in Reporting Services

* See Appendix B for all supported chart types

mode. In trial mode you may converter up to 3 reports with full converter functionality. After the 3rd report you will no longer be able to save or copy out the RDL text converted and may only view it. Sub reports also cause the counter to increase. That means a report with a sub report counts as 2 conversions.



The Registration Name is the name you provided when purchasing the software. The Registration key can be found in the e-mail you received from KTL. It is recommended that the key be copy and pasted into this field as it can be quite long.

By pressing the registration button you will be sending the Registration name and key over the internet to KTL Solutions. No other information will be sent from your computer. In order for this process to function and for you to be able to use the Crystal Converter you must have an active internet connection from the computer that you are installing on.

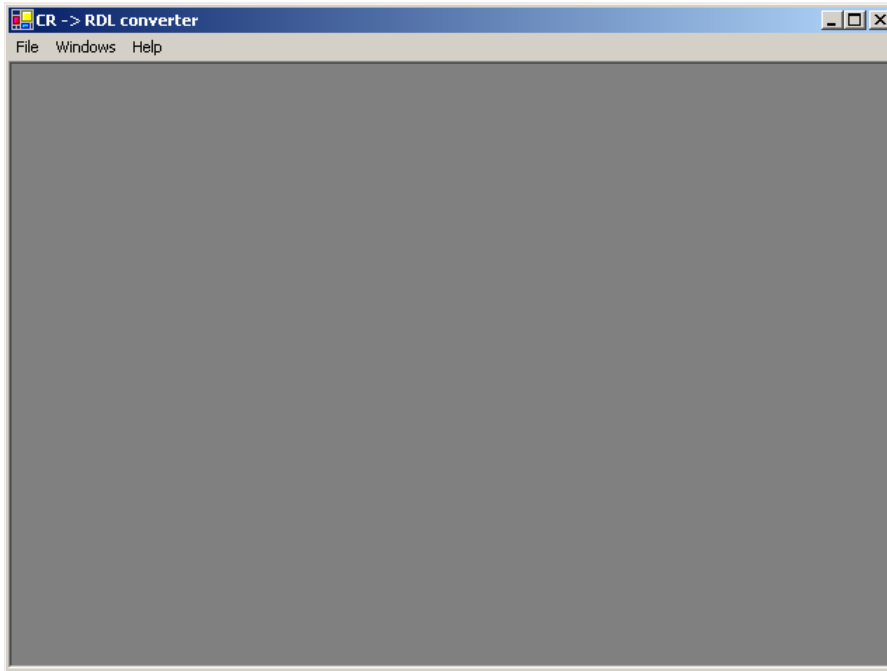
If you do not have and internet connection you will not be able to use this application. Once activated, you will not see this screen again. You may re-install on this computer later and find that you are presented this screen. If this happens simply follow the above instructions again entering the same key and name for the registration. It is recommended that you save the Registration key in a safe place for future needs.

The Converter may be installed on as many computers as you select when purchasing the software from KTL Solutions. If you need to add the ability to install this application on more computers you may call KTL Solutions for assistance. 1-866-960-0001.

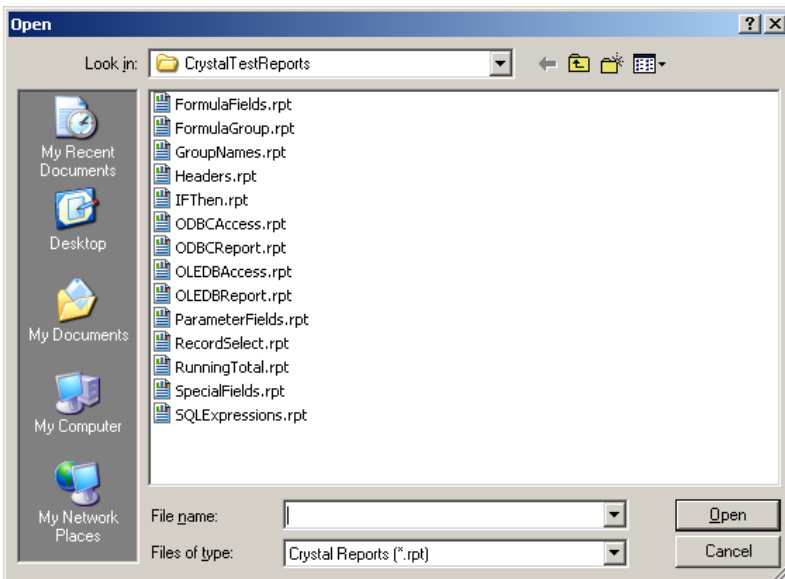
If at some time you wish to move the converter to another computer, you may use the UnRegister button. This will allow you to re-register the product on another computer using the same registration key and name that you received when purchasing the product.

Usage

The Crystal Converter consists of a single screen. When you launch the application you are presented with an empty window.



To select the crystal report to be converted select Open from the File menu and browse to the .rpt report file that you wish to convert to SQL Reporting Services.

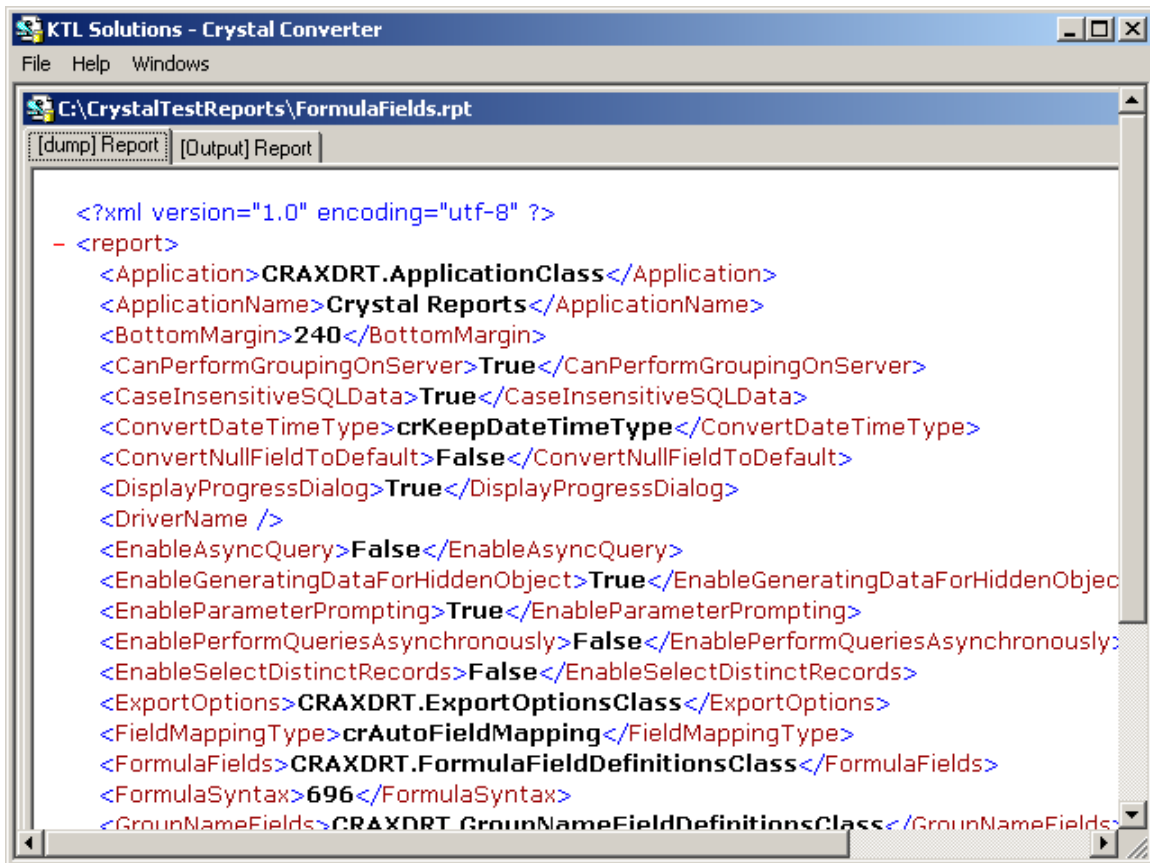


The application will begin analysis and conversion of the crystal report as soon as the Open button is pressed on the Open file dialog seen above.

In order for the application to run it's analysis of the crystal report the report must be able to run from the computer doing the conversion. This means that the data source used by the crystal report must exist on the local computer. It is also highly

recommended that the Crystal report be set to use windows authentication or trusted connection for the conversion as some versions of Crystal will cause error messages while attempting to prompt for a login to the database. The Crystal report must also not be open by any other processes such as the Crystal Reports editor as this will cause the conversion to fail when it attempts to open the report. Because the crystal report will actually be run within the converter it may prompt for database credentials and report parameters as necessary.

Once the conversion has completed a new window is displayed inside the converter screen. This window consists of two tabs [dump] report and [Output] report. The dump report is an xml representation of the crystal report and not related to the RDL. The Output report is the actual XML and VB.net code that will comprise the SQL Reporting Services report.



```
<?xml version="1.0" encoding="utf-8" ?>
- <report>
  <Application>CRAXDRT.ApplicationClass</Application>
  <ApplicationName>Crystal Reports</ApplicationName>
  <BottomMargin>240</BottomMargin>
  <CanPerformGroupingOnServer>True</CanPerformGroupingOnServer>
  <CaseInsensitiveSQLData>True</CaseInsensitiveSQLData>
  <ConvertDateTimeType>crKeepDateTimeType</ConvertDateTimeType>
  <ConvertNullFieldToDefault>False</ConvertNullFieldToDefault>
  <DisplayProgressDialog>True</DisplayProgressDialog>
  <DriverName />
  <EnableAsyncQuery>False</EnableAsyncQuery>
  <EnableGeneratingDataForHiddenObject>True</EnableGeneratingDataForHiddenObject>
  <EnableParameterPrompting>True</EnableParameterPrompting>
  <EnablePerformQueriesAsynchronously>False</EnablePerformQueriesAsynchronously>
  <EnableSelectDistinctRecords>False</EnableSelectDistinctRecords>
  <ExportOptions>CRAXDRT.ExportOptionsClass</ExportOptions>
  <FieldMappingType>crAutoFieldMapping</FieldMappingType>
  <FormulaFields>CRAXDRT.FormulaFieldDefinitionsClass</FormulaFields>
  <FormulaSyntax>696</FormulaSyntax>
  <GroupNameFields>CRAXDRT.GroupNameFieldDefinitionsClass</GroupNameFields>
```

Figure 1 [dump] Report

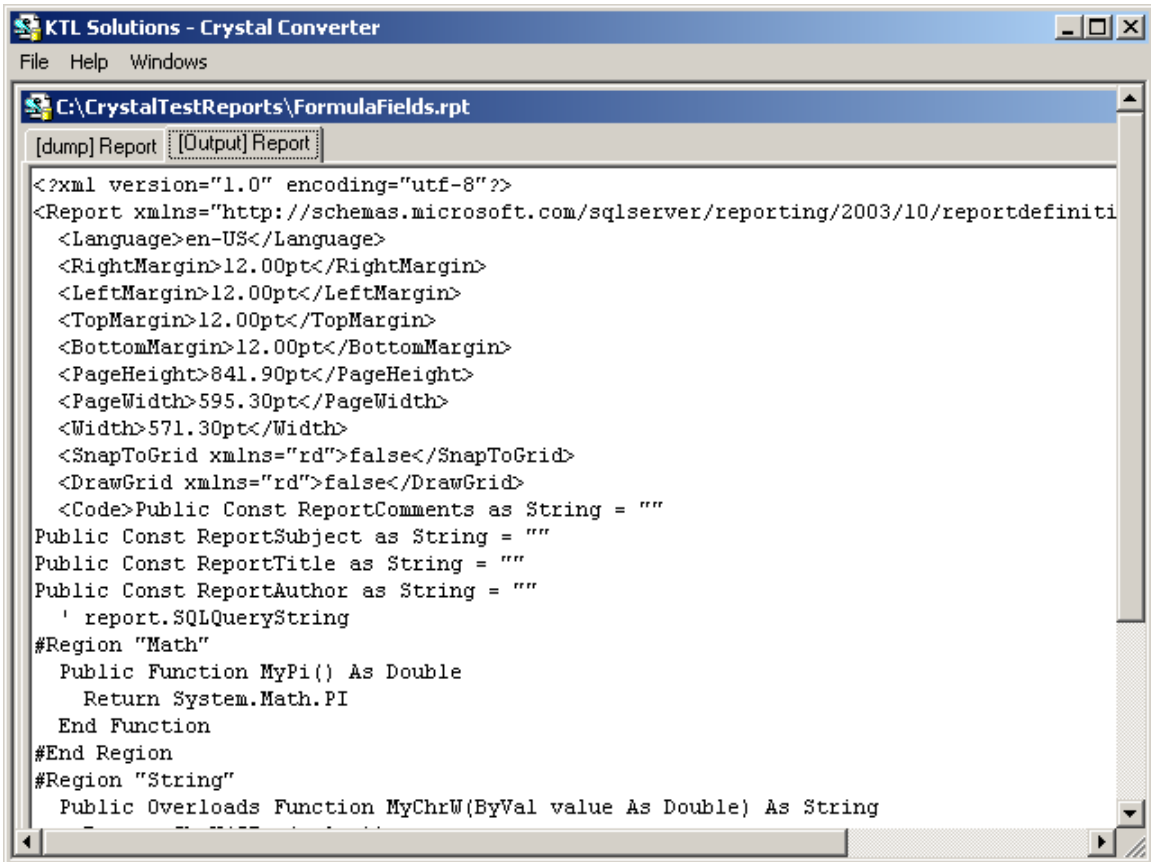
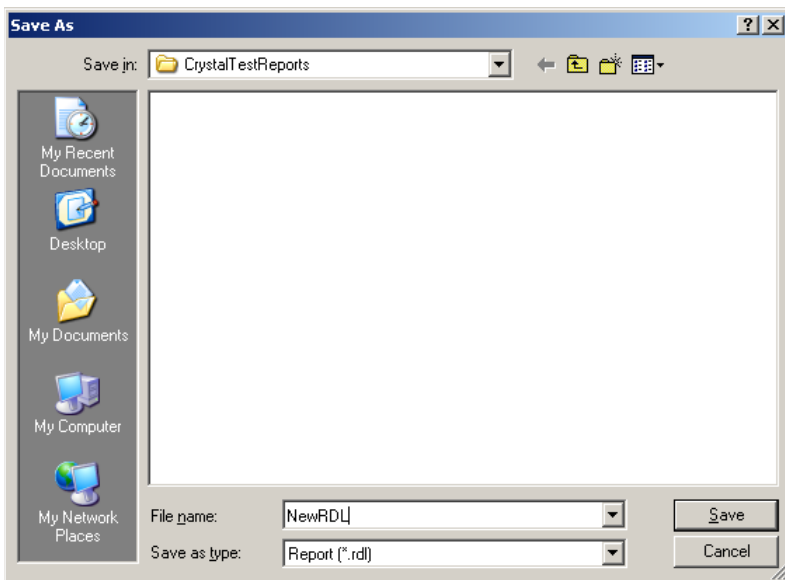


Figure 2 [Output] Report

Once you have the complete output in the output tab you may copy and paste the text into a Reporting Services editor such as Microsoft Visual Studio, or you may select the Save RDL option from the file menu in order to save the output to an .rdl file. You will be presented with the file save dialog and can browse and choose the name and location of the .rdl file created.



Appendix A (Special Fields)

Data Date	Yes
File Author	No
Created Date	No
Page N of M	Yes
Print Date	Yes
Record Number	Yes
Record Selection Formula	Yes
Report Comments	No
Report Title	No
Page Count	Yes
File Path	Yes
Group Selection Formula	No
Group Number	No
Modification Date	Yes

Appendix B (Chart Type)

Bar	Yes
Side by Side Bar	Yes
Stacked Bar	Yes
Line	Yes
Area	Yes
Pie	Yes
Doughnut	Yes
3-D Riser	No
3-D Surface	No
XY Scatter	Yes
Radar	Yes
Bubble	Yes
Stock	Yes
Numeric Axis	No
Gauge	No
Gantt	No
Funnel	No