

Crystal Reports

Using Compiled Reports in Crystal Reports 7 and higher

Overview

This document describes creating and using the compiled reports functionality in Crystal Reports. Also discussed are the steps for distribution, how to install a distributed compiled report on a client computer, some limitations of compiled reports and an appendix to valuable Knowledge Base articles that can be used for troubleshooting known issues.

This document is for use with Crystal Reports 7 and higher. In versions 8 and 8.5 of Crystal Reports, the Crystal Report Distribution Expert does not ship with the product. You can download the utility by searching the file SCR8_distr_expert.exe at <http://support.crystaldecisions.com/updates>.

NOTE	<p>Compiled Reports and the Report Distribution Expert are being phased out in Crystal Reports. We encourage users to distribute reports using the Web Reporting features of Crystal Reports.</p> <p>For information on using the Web Reporting features of Crystal Reports, please refer to the Crystal Reports User's Guide and the Web Reporting Administrator's Guide</p>
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IMPORTANT	<p>Using Compiled Reports and the Report Distribution Expert with version 8 or 8.5 of Crystal Reports is ONLY supported when used with the Developer Edition.</p> <p>Using Compiled Reports and Report Distribution Expert with either the Professional or Standard Editions of Crystal Reports 8 or 8.5 is a violation of your license agreement and is not supported..</p>
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Introduction

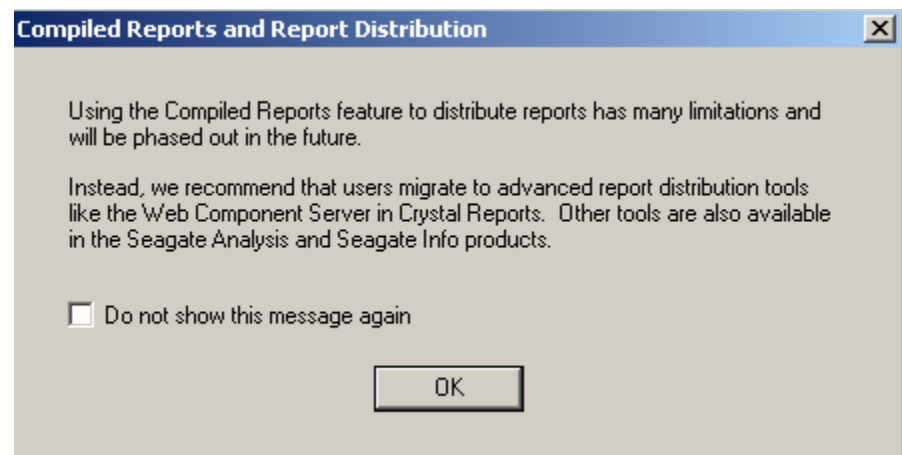
A compiled report is an executable (*.exe) version of your report. This executable report can be printed on demand (to printer, window, or file) by simply clicking an icon without the need to first open the Crystal Reports designer.

You can create reports and share them with others, even if they do not have a copy of Crystal Reports installed on their computer. This is a useful utility for MIS departments who want to create reports for company wide distribution.

Furthermore, you can schedule the executable to print the report immediately (on demand) or at a later time. In addition, you can modify the compiled report's selection formula.

Once the Report Distribution Expert has been successfully installed on the computer, there will be two(2) new menu options on the Report menu in the Crystal Reports designer. 'Compile Report...' and 'Report Distribution Expert...'

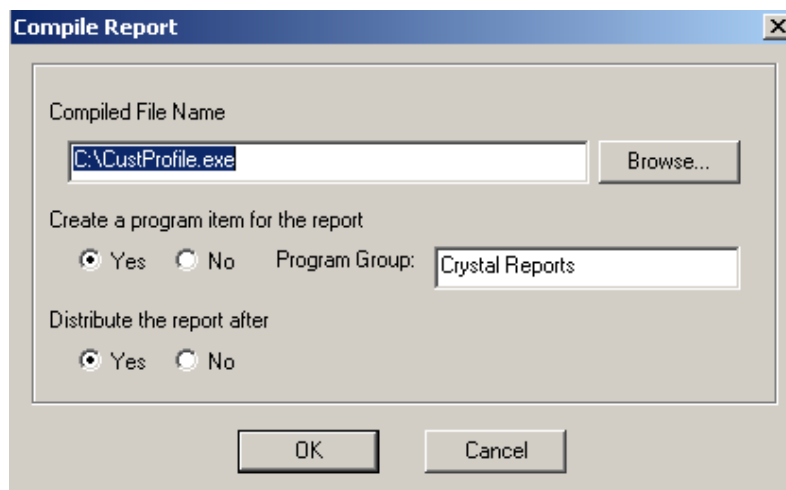
Each time the Compile Report process is run you will be presented with this dialog box. If you do not wish to see this each time, simply check the 'Do not show this message again' box and click OK.



Compiling a report

Accessing the Compile Report dialog box

1. Open your report in the Crystal Reports designer. Click the **Report** menu then click **Compile Report**.
2. The Compile Report dialog box appears.



Using the Compile Report dialog Box

Compiled File Name text box

This text box displays the file name for the compiled report. By default, Crystal Reports uses the report name, changing the extension from .RPT to .EXE. For consistency it is recommended to accept the default name so your report and compiled executable share the same name. This will make it easier to keep your compiled reports together.

To compile the report and save it under the default name to the specified drive and directory, click the **OK** button.

To create the compiled report under a different name, type the new name (including path) in the Compiled File Name text box.

NOTE	<p>For a compiled report to run successfully, the report file, the compiled report and the CRF file must have the same name prefix. For example, Sample.rpt, Sample.exe and Sample.crf.</p> <p>This is also a good rationale to keeping your compiled reports' file name the same as the original report (.rpt) file.</p> <p>Avoid using the file name 'setup' for any of your reports that will be compiled in the future. This would result in a setup.exe for the compiled executable and cause problems.</p>
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Create a program item for the report

This option allows you to create an icon and program group for your compiled report.

If you want to create a program item (icon), select **Yes** under **Create a program item for the report**. If you do not want the program to create a program item, select **No**.

If the program group you specify already exists, the compiled report icon is added to that program group.

If the program group you specify does not exist, the program will create it for you.

This process differs in Windows 95. The icon will appear as a shortcut in the Taskbar | Start option, in the folder you choose.

Distribute the Report After

Under the **Distribute Report Expert after** option, select **Yes** or **No** to start the Report Distribution Expert after the report is compiled. If you plan on sending the compiled report(s) to a client machine that has not previously had a distribution package installed, you should choose **Yes** to create the distribution package.

Distributing a Compiled Report

The Report Distribution Expert

The Report Distribution Expert is only shipping in version 6 and 7 Professional editions of Crystal Reports, however for Crystal Reports versions 8 and 8.5 you can download the Report Distribution Expert add-in (search for SCR8_distr_expert.exe at <http://support.crystaldecisions.com/updates>).

Use the Report Distribution Expert to:

- Ship data with the compiled report by enabling the **Database file(s) used by report** check box in the **Include** box.

Compress the runtime files, and build a SETUP.EXE file. You can use the resulting SETUP.EXE file to install the report(s) and runtime files just like any other setup program. The install program decompresses and installs the runtime files and creates an icon (if chosen) for calling the report.

To distribute your compiled report:

1. Access the **Report Distribution Expert** using one of these methods:
 - From the Compile Report dialog box, select **Yes** under **Distribute the report**.

- From the **Report** menu, select **Report Distribution Expert**.
2. The **Report Distribution Expert** appears. Under the **Options** tab select the report(s) you want to distribute, as well as specify a destination for the runtime files (for example, a network directory).

You may also want to include the database files and export DLLs with your compiled report. Click the **Next** button to advance to the **File List** tab.

This will invoke an analysis of the report you are distributing. This may take a few seconds to a few minutes depending on the size and complexity of the report. This process actually runs the report in the background and gathers information on all of the files the report has accessed and used in the process. The results will be displayed in the '2. File List' tab and the '3. Third party DLLs' tab.

The screenshot shows the 'Report Distribution Expert' dialog box with the 'Options' tab selected. The dialog has four tabs: '1. Options', '2. File List', '3. Third Party DLLs', and '4. Distribution'. The 'Options' tab contains the following elements:

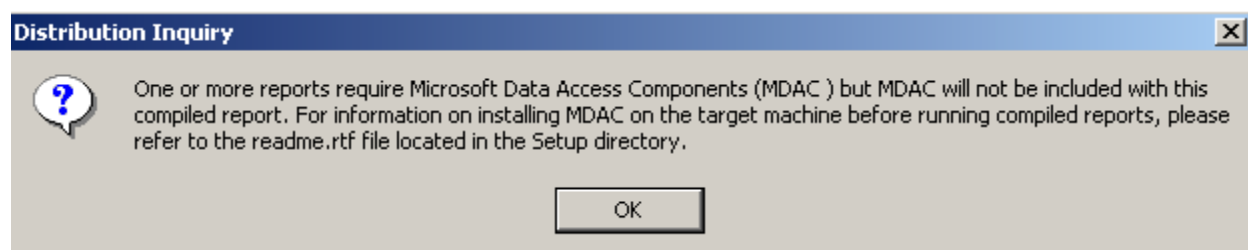
- Reports:** A text box containing 'C:\CustProfile.rpt' with 'Add...' and 'Remove' buttons to its right.
- Include:** Two checked checkboxes: 'Database file(s) used by report' and 'DLLs for exporting'.
- Destination Directory:** A text box containing 'C:\Compile Report\Distribution\' with a 'Browse...' button to its right.
- Navigation:** '<<Back' and 'Next>>' buttons at the bottom left, and 'Cancel', 'Build', and 'Help' buttons at the bottom right.

NOTE

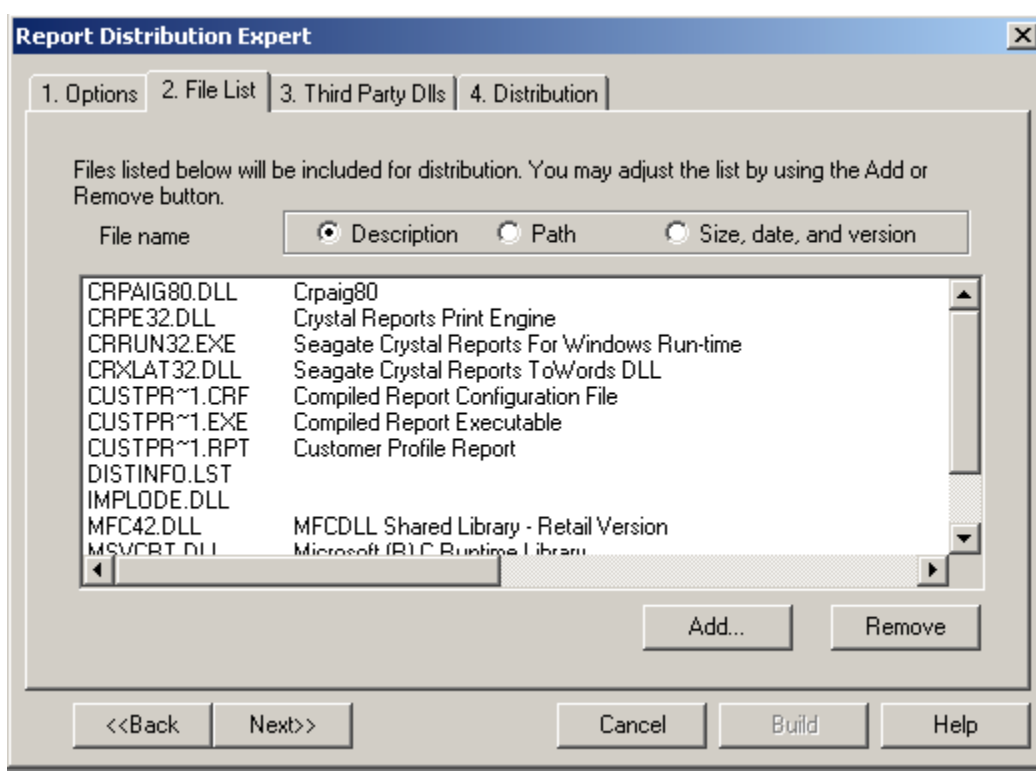
If a report is using an ODBC connection to a database, the client computer must have the ODBC data source (DSN) already set up. The Report Distribution Expert **will not** setup or configure ODBC at the site of installation.

The Distribution Expert will notify if Microsoft's MDAC components will be required. It is the responsibility of the developer to include/install MDAC as the Distribution Expert **will not** by default include these files. The dialog box is shown below.

If you need to include any DLL's not listed on either '2. File List' or '3. Third Party DLL's' You can manually add them on this tab by clicking the ADD button and locating the file.



- Under the **File List** tab, the Report Distribution Expert builds a list of the required runtime files (Crystal related). Review the list and add or remove any runtime file. Click the **Next** button to advance to the **Third Party DLLs** tab.



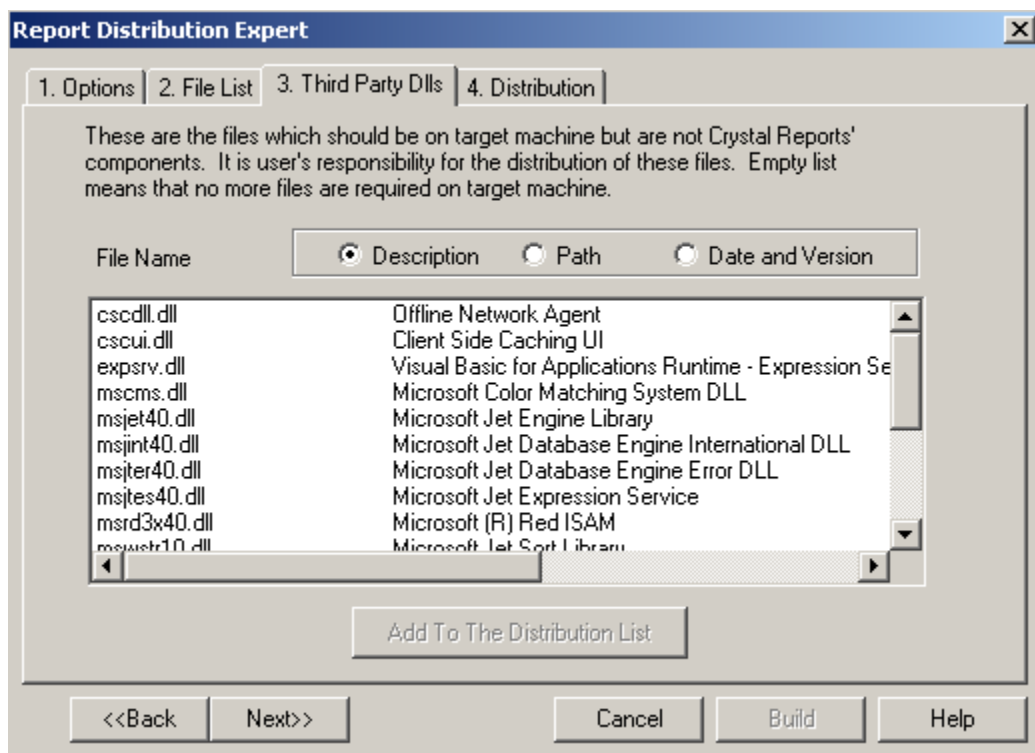
- Under the **Third Party DLLs** tab, files from third party applications (like database clients) are displayed. You have the option of including these DLLs by clicking the **Add To The Distribution List** button.

Click the **Next** button to advance to the **Distribution** tab.

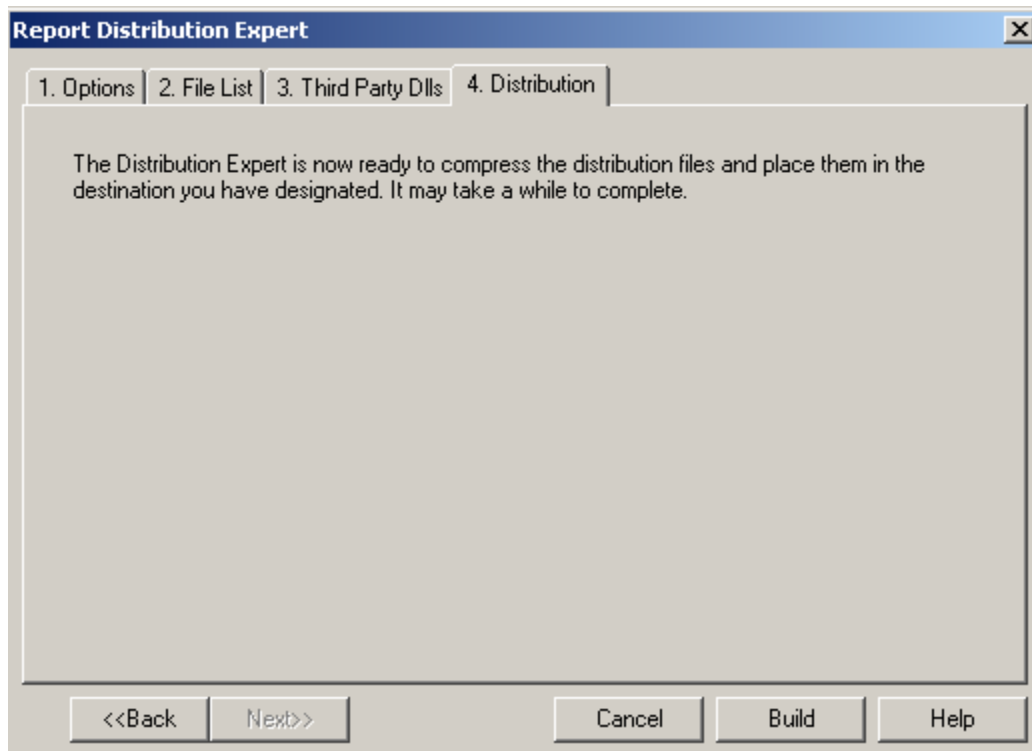
NOTE

Third Party DLL's are defined as those DLL's that are not shipped (included on the CD) with Crystal Reports. The Report Distribution Expert will identify Third Party DLL's that are required, but **will not** by default include them in the distribution package.

If these files are to be included, they must be manually added to the package. This process can be handled easily on the Third Party DLL's tab of the Distribution Expert.



5. The **Distribution** tab is the last step in the building process. To build your distribution setup, click the **Build** button.



NOTE

For more information on which runtime files to distribute, refer to the Crystal Reports Runtime Files Requirement help file (RUNTIME.HLP), which is located on the development computer.

Installing a Compiled Report

Once you have built your report distribution setup using the Report Distribution Expert, you can install the compiled report to a client computer.

To install the compiled report, **ALL** of the files contained in the folder location specified during the distribution build process must be transported to the target client computer.

Once this has been accomplished, run the Setup.exe the Report Distribution Expert created (find the Setup.exe in the destination you copied the distribution files to).

The compiled report installation is a two-step process:

1. The decompression of the runtime files.
2. The installation of runtime files.

NOTE

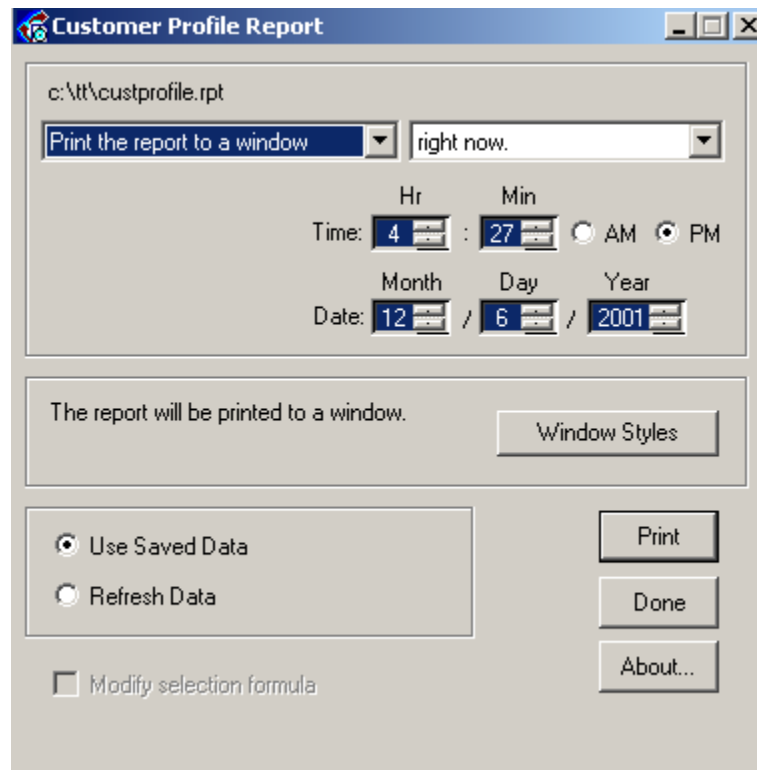
You do not need to run the Report Distribution Expert each time you compile a report. The report distribution process only needs to be run once, then for subsequent compiled reports, only compile the report(s) and distribute the resulting *.rpt, *.exe and *.crf files.

However, you may need to distribute additional runtime files if you change databases or add functionality to your report (such as exporting). In this case, it would be advisable to rebuild the distribution and repeat the setup process. Be sure to use the same locations for setup and install as in the original process.

Running a Compiled Report

Run the compiled report by either clicking the report executable, or clicking the compiled report icon in your program group.

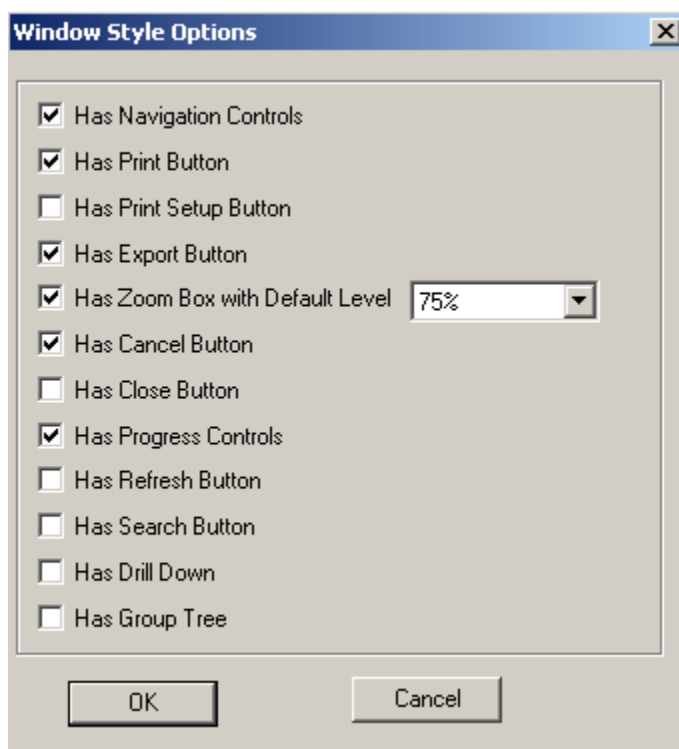
The Compiled Report Setup dialog box appears with the title bar displaying the report name of the selected report.



Compiled Report Dialog box options

The dialog box is divided into three specific areas

- The top area sets the print destination and the time and date you want the report to print.
- The center area displays the print destination you have selected and the **Window Styles** button. Using the various Window Styles, you can control what functionality the compiled report preview window has.



- The bottom area allows you to select either the **Use Saved Data** or **Refresh Data** options. There are also check boxes for **Modify selection formula** and **Modify stored procedure parameters** (if application).

CAUTION

Although you can schedule a compiled report to print, you cannot pass parameter values to the report at time of scheduling. You will be prompted for the parameter values when the compiled report prints.

Modify selection formula check box

The **Modify selection formula** check box is on by default if the report contains a selection formula. If the report contains a selection formula, you can modify the selection formula before the report prints.

Modify stored procedure parameters check box

The **Modify stored procedure parameters** check box is not checked by default. If you run a compiled report that contains a stored procedure, you can enter new stored procedure parameters.

NOTE

If you get multiple prompts for parameters, open the report in the Crystal Reports Designer and Deselect the "Verify On Every Print" option under the Database menu item. Save and then re-compile the report.

Changing Database, Server or Data source (DSN)

Changing Databases

You can change the database of the compiled report if you are connecting using ODBC.

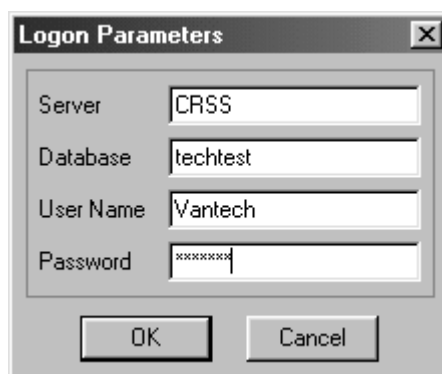
To change a SQL database when using ODBC:

1. Open the report file in the Crystal Reports Designer. Go to the **Database** menu and select **Set Location**.
2. The **Set Location** dialog box appears. For each table in the Databases window, remove the reference to the database and owner. For example, 'pubs.dbo.table1' is now 'table1'.
3. Save the report and re-compile it.
4. When you run the compiled report, a **Logon Parameters** dialog box appears. In the **Database** text box, enter the following:

```
<Crwdc>database=new_database_name
```

For example, to change the SQL Sever database **pubs** to the SQL Server database **master**, type:

```
<Crwdc>database=master
```

**NOTE**

You cannot change the database location of a compiled report, if the report is using a native database driver (i.e. P2SSQL.DLL).

Changing Servers

To change the Server Name of a compiled report (using a native database driver):

1. Open the report file in the Crystal Reports Designer. Go to the **Database** menu and select **Set Location**.
2. The **Set Location** dialog box appears. For each table in the Databases window, remove the reference to the database and owner. For example, 'pubs.dbo.table1' is now 'table1'.
3. Save the report and re-compile it.

When you run the compiled report, a **Logon Parameters** dialog box appears. In the **Server** text box, type in your new Server name.

Changing Data Sources

To change the Data Source of a compiled report (using an ODBC connection):

1. Open the report file in the Crystal Reports Designer. Go to the **Database** menu and select **Set Location**.
2. The **Set Location** dialog box appears. For each table in the Databases window, remove the reference to the database and owner. For example, 'pubs.dbo.table1' is now 'table1'.
3. Save the report and re-compile it.

When you run the compiled report, a **Logon Parameters** dialog box appears. In the **Server** text box, type in your new **Data Source** name.

Limitations of Compiled Reports

Some limitations of compiled reports include. For other known issues, please refer to the *Finding More Information* section below.

- Compiled Reports will not prompt for any parts of the record selection formula that uses Crystal functions.

For example:

`Uppercase ({table.field} = "JO") and {table.field2} = 4`

If you run a compiled report with this selection formula (and **Modify selection formula** checked) you will only be prompted for the value of `{tablename.field2}`.

NOTE	The 'IN' and 'TO' Crystal functions are exceptions to this limitation.
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- You cannot use two different data sources in a compiled report. For example, your subreport and main report cannot log on to different ODBC data sources.
- Compiled reports will return error messages if a subreport is connected to a secured database as there is no way to pass the login information. For example, a secured Access database.
- Command line parameters cannot be passed to compiled reports.
- You can only schedule one instance of the report to run at a time. You cannot schedule recurring prints. For each subsequent print, you must open and schedule the compiled report.
- Scheduled Reports must be provided any required parameters at the time the report is actually run not at scheduling time.

Finding More Information

MDAC

- Microsoft's Data Access Components (MDAC) and Distributed Component Object Model (DCOM) can be downloaded from the following links;

You can download the Microsoft Data Access Components (MDAC) version 2.5 from:

http://www.microsoft.com/data/download_250rtm.htm

NOTE: If you are using a Windows 95 or a Windows 98 machine, you must install DCOM before the MDAC. You can download the latest DCOM from:

Windows 95:

http://www.microsoft.com/com/dcom/dcom95/dcom1_3.asp

Windows 98

http://www.microsoft.com/com/dcom/dcom98/dcom1_3.asp

If the MDAC dialog was presented as a part of the Distribution build process, it is recommended that MDAC be updated prior to the installation of the compiled report(s).

Report Distribution Expert

- To download the Crystal Reports Distribution Expert add-in (for Crystal Reports 8 or 8.5), go to <http://support.crystaldecisions.com/updates> and search for SCR8_distr_expert.exe.

Knowledge Base Articles

- The following Knowledge Base articles may be of interest and are available for reference at <http://support.crystaldecisions.com/kbase>. To locate the article in the knowledge base, search on the article ID number (i.e. c2003119).

For convenience the listed articles have been grouped by topic and are alphabetically listed by article title.

Creation of Package

c2001683 : Can't attach to DExpert.exe when distributing a compiled report
c2006637 : Distribution Expert ends unexpectedly
c2002607 : Distribution Expert ignores parameter fields when analyzing dependant files
c2004724 : Distribution Expert leads to the error "Failed to Create Compressed File"
c2001571 : Failed to open distribution file for compression
c2005538 : File distribution expert hangs when 'Analyzing report(s) for dependent files...'
c2005632 : Limitations of using Crystal Queries and Dictionaries for development purposes
c2003117 : Report Distribution causes an "Error opening file" error
c2002592 : Report Distribution error: 'Failed to create the compressed file at destination'

Data Access

c2002972 : Access Logon box when trying to run a report based on a text file.
c2002484 : Access session logon when running compiled report on client machine.
c2002250 : Access Session Parameters
c2003119 : Cannot Find SQL Server error on compiled report using two or more data sources
c2001222 : Cannot Find SQL Server error when running compiled reports
c2001686 : Changing DSN, Server, Database in a SQL compiled report
c2002910 : Compiled Report not prompting for Paradox Password
c2002976 : Compiled Report off of Trusted Connection not allowing logon
c2003047 : Compiled report using Access security prompts for password more than once...
c2002471 : Distributing a compiled report from a system with ODBC version 3.5
c2002067 : Distributing reports using the OLE DB (P2soledb.dll) driver
c2002648 : Distribution : Stack Overflow (16) - File I/O Error (32)
c2002534 : Distribution does not work when reporting off of a stored procedure
c2002838 : Distribution Expert attempts to include Borland Database Engine files
c2001859 : Error -956 Client or User is Not Trusted By the Database Server
c2002601 : Error 'Ordinal 6543 could not located in the dynamic library mfc42.dll'
c2001569 : Error: "The library 'Pdssql.dll' cannot be found" with Compiled Reports
c2007580 : Error: 'Error detected by database DLL' using a SQL Server stored procedure
c2001241 : File could not be opened... error using a secured Microsoft Access database
c2005115 : IBM Client Access ODBC Driver Allows a Successful Login Without a Password
c2005691 : Infinite logon from a Compiled Report using ODBC
c2002081 : Infinite logon screen when running distributed report on client
c2007204 : Infinite logon when running a compiled report using a Lotus Notes database
c2005905 : License error with Intersolv/Merant ODBC driver and compiled reports.
c2003340 : Microsoft Access Session Parameters box when distributing Access 2000 report
c2004705 : Multiple logon when executing a compiled report based on Informix database.
c2000464 : ODBC and the Report Distribution Expert
c2003311 : ODBC System Error Code 1157 when distributing a report using Access 2000
c2008660 : OLAP Compiled Report appears blank on the test computer
c2002155 : Report Distribution Setup error when using Sybase.

c2002676 : Running a Compiled Report off a secured Act database.
c2003632 : Running the Report Distribution Expert using a Dataflex ODBC data source.
c2002656 : Running the Report Distribution Export using a Remedy ODBC driver.
c2000285 : Runtime Distribution of Reports based on ODBC\SQL Databases
c2009236 : Runtime file requirements for XML (ODBC) data sources
c2000966 : SQL Server Picture Field Does Not Display Properly in a Compiled Report.
c2006622 : Unable to connect to a secured Microsoft Access database through OLE DB

Exporting

c2007548 : A report with multiple charts exports to HTML 4.0 with only one chart
c2005079 : Exporting a report to a full destination at runtime
c2001080 : Exporting to Crystal Report from Compiled Report
c2006644 : Exporting to 'Crystal Reports 7.0 (RPT)' format causes Group Tree to disappear
c2007354 : Unable to repeatedly export to HTML format via Compiled Reports

Installation

c2007729 : Error 1704 when installing the Compile Report and Distribution Expert
c2007832 : Report Distribution Expert fails to install when Crystal Reports 8 is not found

Miscellaneous

c2000150 : CRRUN32 caused GPF in crxlat32.dll exiting Compiled Report
c2003319 : Cannot Initialize OLE error occurs when running a report on a client machine
c2006523 : Compiled Reports for Crystal Reports 8 and 8.5
c2000814 : General INF error
c2003069 : How to save a copy of a compiled report for later viewing
c2007579 : Hyperlinks do not respond at runtime
c2002582 : Not enough memory for operation
c2006638 : Report Distribution Expert Help file for Crystal Reports 8
c2006101 : Running a compiled report on a machine with WinQL causes Dr. Watson in CRRUN32
c2006216 : Using Store and Fetch functions in Citrix environments

Opening / Running Compiled Reports

c2007543 : Cannot Open Control File error running Compiled reports on Terminal Server
c2002700 : Cannot open control file... error message
c2007042 : Crrun32.exe file is linked to missing Crpe32.dll error running compiled report
c2002381 : DateTime Calendar Picker not working
c2003728 : Distribution Expert may crash when reporting on Parameterized Stored Procs
c2007279 : 'Generic Thunk' Error when running a compiled report
c2000346 : Invalid File Name When Launching Compiled Report
c2002577 : Item not found in this collection error with compiled report
c2002295 : Modify selection formula in compiled report
c2000212 : Prevent Users From Modifying Selection Formula in Compiled Reports
c2000344 : Report data is not refreshing
c2002567 : Report Distribution Expert and Parameterized Data

Printing

c2008841 : Cannot set Paper orientation when printing Compiled Report directly to printer
c2000056 : Distributed reports not printing correctly

c2002181 : Does a Crystal Report print when scheduled using NT's built in Scheduler
c2002156 : Maintaining the page orientation of compiled reports.
c2002837 : No default printer specified when destination is set to printer
c2003504 : Unable to schedule compiled report
c2002039 : Why is Printer Orientation not held when I print to a different printer?

Setup

c2007953 : 'Compile Report' and 'Report Distribution Expert' options not in Report menu
c2002135 : Compressed file corrupt... error when running Compiled Reports setup
c2000296 : 'Compressed file is corrupt!' error while installing a Compiled Report
c2008902 : CR 8.5 upgrade removes Compiled Report and Report Distribution Expert
c2002007 : Distribution to client machine through network
c2000645 : Error installing Compiled Report, "Bad Path String..."
c2001909 : Error: 'GPF in rptstp32' or Error: 'Disk is Full'
c2001659 : Installing a compiled report from a CD causes a 1024 setup error

Contacting Crystal Decisions for Technical Support

Along with this document, and the *Crystal Reports User's Guide*, we recommend that you visit our Technical Support web site for further resources.

For information on using the Web Reporting features of Crystal Reports, please refer to the *Crystal Reports User's Guide* and the *Web Reporting Administrator's Guide*.

For further assistance, visit us at the websites below.

Technical Support web site:

<http://support.crystaldecisions.com/homepage/>

Answers By Email Support:

<http://support.crystaldecisions.net/support/answers.asp>

Phone Support:

Tel: (604) 669-8379