

Crystal Reports

Compiled Reports – Creation, Distribution and Installation

Overview

This document covers issues around: the use of compiled reports in Seagate Crystal Reports, how to create compiled reports, the steps in distribution, how to install the distribution disks on a client machine and some of the limitations of compiled reports. This document is for use with Crystal Reports version 5 and 6.

For information on using Compiled Reports in Crystal Reports 7, 8 and 8.5 go to <http://support.crystaldecisions.com/docs> and search for 'compiled_reports.pdf'.

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Compiled Reports

Compile Report command from Report menu

Use the Compile Report command to create an executable version of your report. An executable version is a report that can be printed on demand (to printer, window, or file) by simply clicking an icon without the need to first open the Seagate Crystal Reports program.

This command enables you to create a report then share it with others, even if the others do not know how to use the program. In fact, you can create a report that others can use, even if they do not have Seagate Crystal Reports on their system. This is a useful utility for MIS departments who want to create reports to be distributed company wide, for individuals who want to send copies of reports to others who do not have the program, or for anybody who needs to create a report that appears at the click of a mouse.

You can print a compiled report to a window, a printer, or a file, just like any other report. Furthermore, for maximum flexibility, you can schedule the program to print the report immediately (on demand) or at a later time (i.e., when printers are more readily available). If you select a later time, the program monitors your computer's internal clock and prints the report at the time specified. Finally, if your report includes a record selection formula, the compiled version of the report gives you a chance to change certain values in the selection formula before you print the report. With a *carefully constructed* selection formula, many people in an organization will be able to tailor a single compiled report to their own individual needs.

To use the **Report | Compile Report** command

Using the **File | Open Report** command, open the report you want to compile in Seagate Crystal Reports designer

Select **Report | Compile Report**. The Compile Report screen (Table A) appears.

Compile Report Dialog box options

Compiled File Name edit box

This box displays the file name for the compiled report. By default, Seagate Crystal Reports uses the report name, changing the extension from .RPT to .EXE.

If you want to compile the report and save it under the default name and save it to the specified drive and directory, click the <OK> button.

If you want to compile the report and save it under a different name, type the new name in the Compiled File Name edit box. Include the path if different than the current path.

If you want to save the file under the name of an existing executable report, select the report name you want to use from the list of .EXE files that Seagate Crystal Reports displays in the Compiled File Name scroll box.

NOTE

Saving the executable report under the name of an existing executable report replaces the old executable report with the new one.

Create a program item for the report in the Program Manager

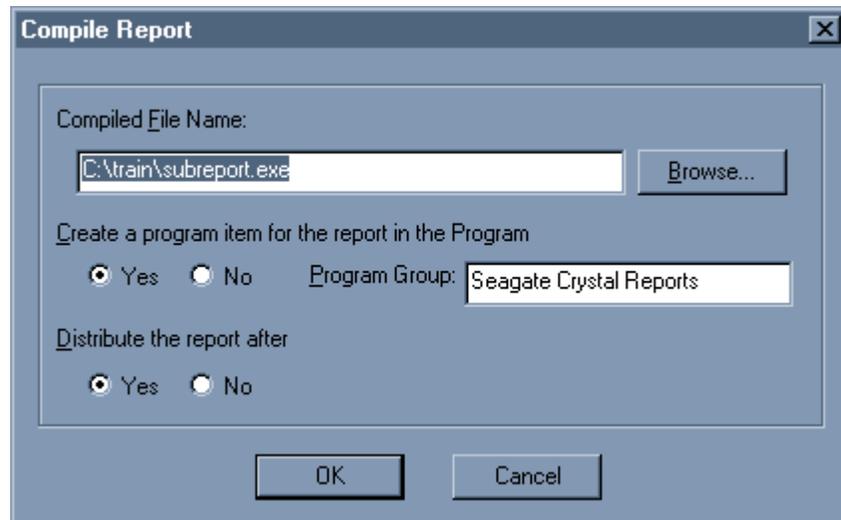
This options dialog allows you to create an icon for your executable (compiled) report and to create or specify an existing program group (or folder in Windows 95) for that icon. This dialog box also enables you to call up the Report Distribution Expert after you have compiled the reports so you can make certain you distribute all the necessary files with your report.

If you want the program to create a program item (icon), select **Yes** under **Create a program item for the report in the Program Manager**. If you do not want the program to create a program item, select **No**. If you want the program item to appear in a program group other than the default group, type the name of the new group over the existing program group name in the Program Group edit box.

- If the program group you specify already exists, the program will add the icon to that 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.

If you want the program to call up the Distribute Reports Expert when it is done compiling, select **Yes** under **Distribute the report after**. If you do not want the Distribute Reports expert to appear, select **No**.

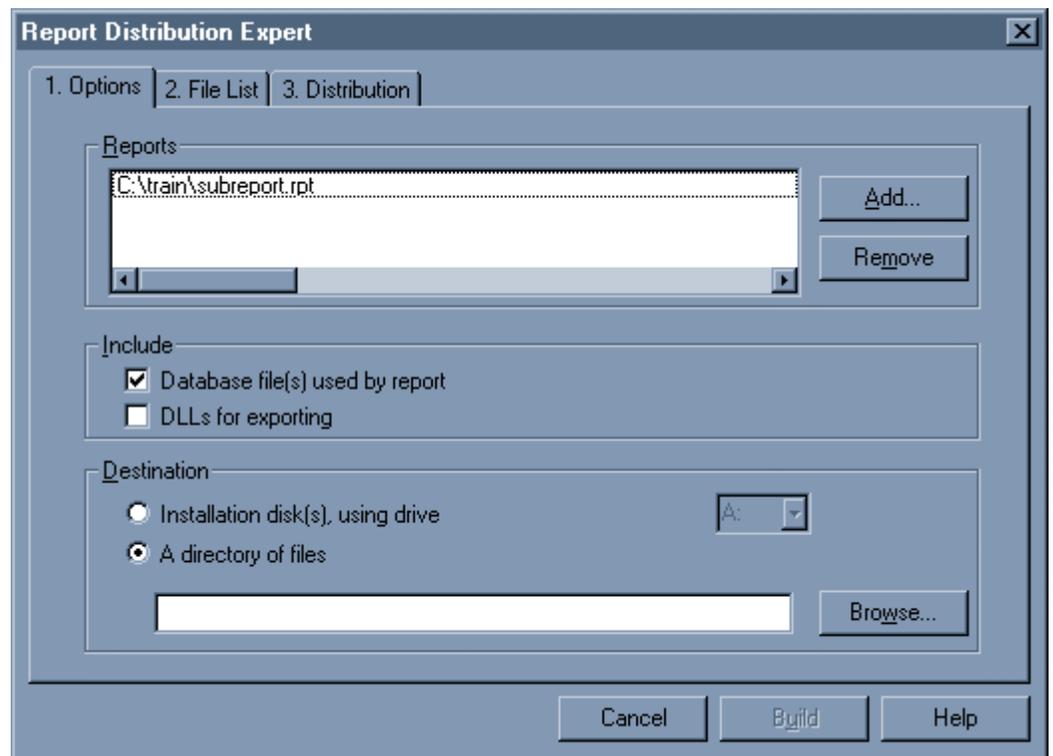


Report Distribution

The Report Distribution Expert

The Report Distribution Expert is only available in professional versions of Crystal Reports and Seagate Crystal Reports. The expert is available,

- When you compile a report for distribution using the Compile Report command on the Report menu, and **Yes** is selected under **Distribute the report after**.
- When you choose the Report Distribution Expert command from the Report menu (Report | Report Distribution Expert).



Use the Report Distribution Expert to:

- Ship data with the report if required; enable the “Database file(s) used by report” check box in the “Include” box.
- Compress the component files, and
- Build a SETUP.EXE file.

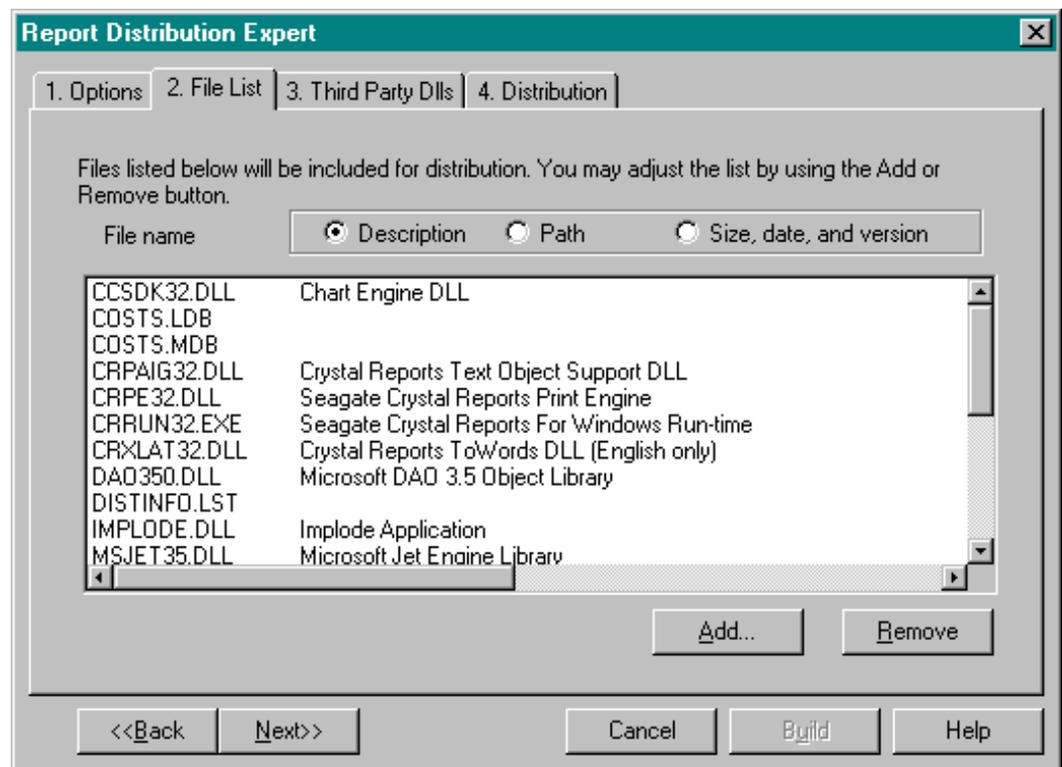
The user can use the SETUP.EXE file to install the report(s) and runtime files just like any other setup program. The program decompresses the files, installs them where the user wants them, and even creates an icon for calling up the report. You can use the Distribute Report Expert whenever you:

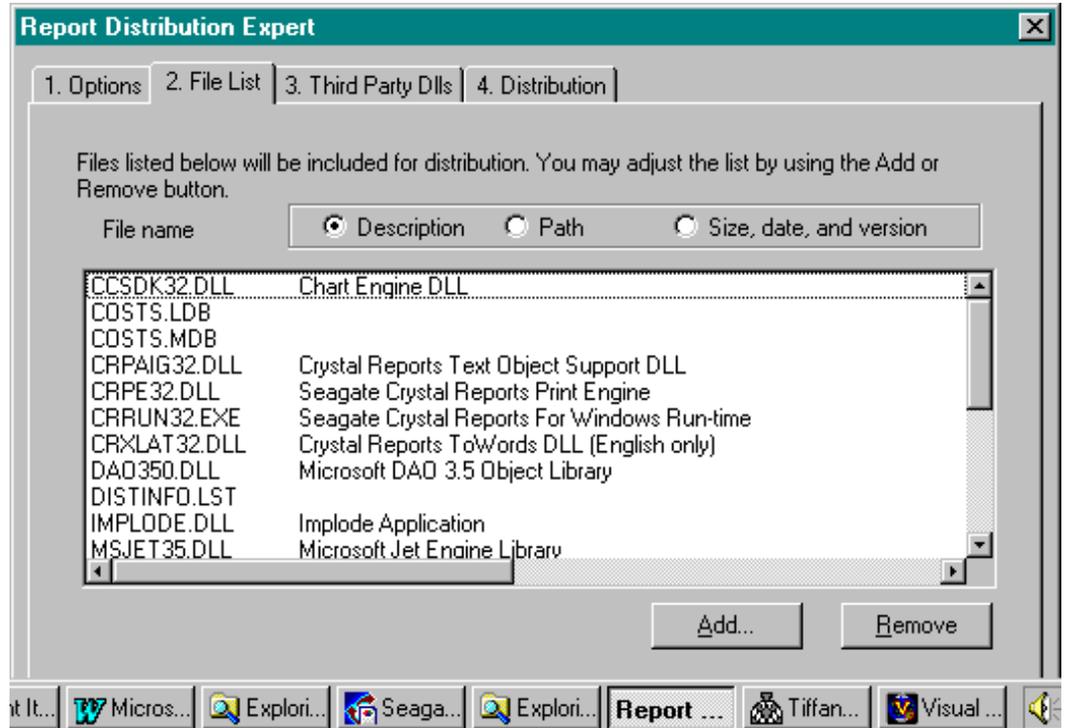
- Compile reports
- Save reports to a disk file for distribution
- Send a report to a network drive so many people can use it

It is a valuable tool for anyone who creates reports for others.

NOTE	The Report Distribution Expert will not distribute the Crystal OCX, as the OCX is not a required file for Compiled reports . You can add the OCX and its dependencies manually, but the file will not be registered once the Compiled Report is installed on a user's machine.
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The Report Distribution Expert asks you what reports you want to distribute, if you want to include database files and DLL's for exporting, and where you want the distribution files sent; "Installation disk(s), using drive", or "A" directory of files". Then, clicking on the <Next> button, or the "2. File List" tab, the Expert builds a list of all the required files for your review. Review the list, remove the files you do not want to distribute, add any additional files that the report distribution processor has not determined to be necessary but you would like to ship.



**NOTE**

If a report is using an ODBC connection to a database, each client that you install this report to will have to have the ODBC datasource setup. The Report Distribution Expert will not setup or re-configure ODBC at the site of installation.

Third party DLLs used by the report, such as Client Software used to report on an SQL type database will be listed under the “3. Third Party DLLs” tab. You have the option of including these DLLs by clicking on the <Add To The Distribution List> button.

NOTE

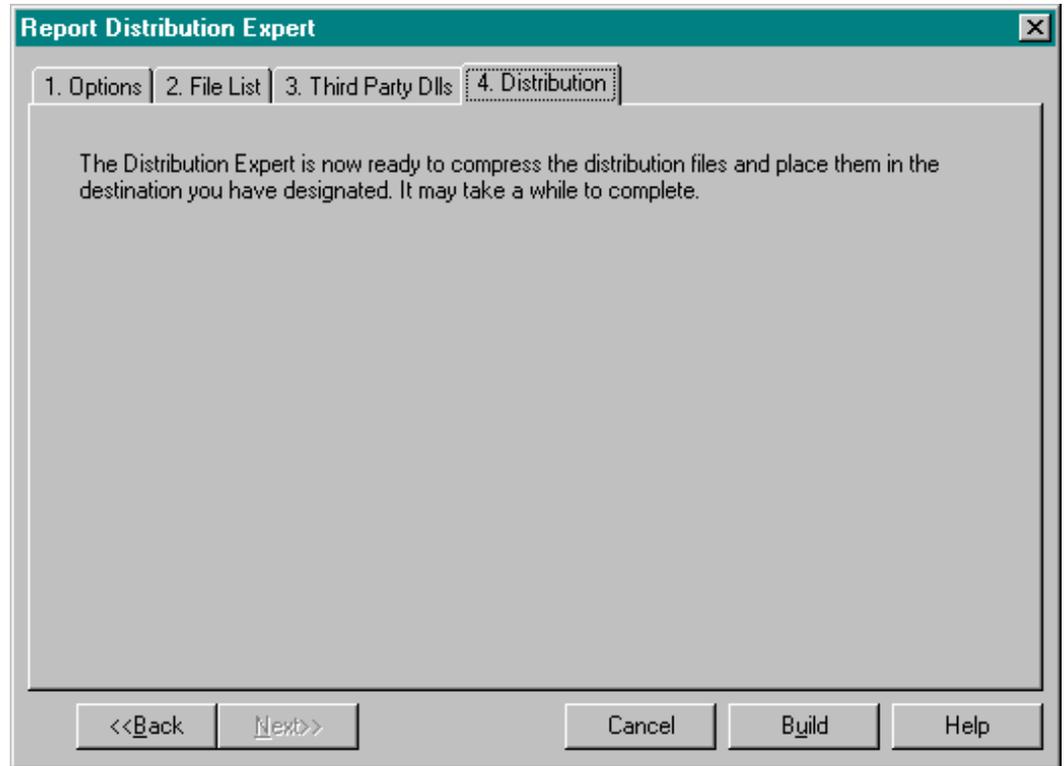
“Third Party DLLs” feature is only available with Seagate Crystal Reports, version 6.0.x.151. and higher.

“Third Party DLLs” are defined as DLLs that are not included on the Seagate Crystal Reports install CD.

To build a distribution set (including your report(s)) on a hard disk or floppy disk at your distribution destination, click on the <Next> button or the “4. Distribution” tab. Then click on the <Build> button.

NOTE

For more information on which files to distribute, see RUNTIME.HLP (located in the main application directory).



Installing a Compiled Report

To install a compiled report, run the Setup.exe on the hard disk or floppy disk that was created in the above steps.

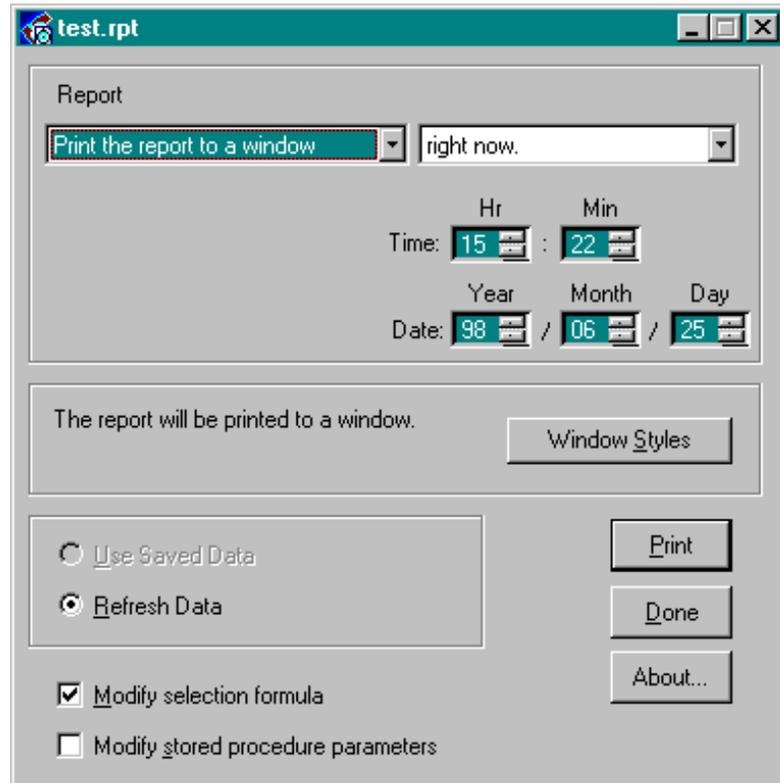
The installation is a two step process. Decompression of install files and installation of runtime files.

TIP

You do not need to distribute all the runtime files for new reports, if these reports are connecting to the same type of database. Once the install process has been completed on a client computer, all you need in order to run new reports, are the report.rpt, report.exe and report.crf files that are created when a report is compiled.

To run a compiled report

Click the icon for the report of interest. 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 smaller boxes:

The top box is for setting the print destination and the time and date you want the report to print

The center box displays the print destination you have selected and the <Window Styles> button. The <Window Styles> button is only available in Seagate Crystal Reports version 5 and higher.

The bottom box allows you to select “Use Saved Data” and “Refresh Data” options.

At the very bottom of the Compiled Report Dialog box are check boxes for “Modify selection formula” and “Modify stored procedure parameters”.

The top box

The options in the top box enable you to specify where you want the report printed (the left scroll box) and when you want the report printed (the right scroll box and time and date selectors).

The 'destination' scroll box

The “destination” scroll box lets you specify the print destination for your report. You can print a compiled report to a printer, to a print window, or to a file.

TIP	If you want to limit print to file to certain selection(s) see Exporting in the “Runtime File Requirements”. The “when” scroll box lets you specify when (time and date) you want the report to print. When you specify a time and date to print your report, the program monitors your computer’s internal clock / calendar and prints the report at the appointed time.
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NOTE	In order to run dates of year 2000 and higher, you must use the file crrun32.exe / crrun.exe, version 6.0.0.18 or higher. To get the crrun32.exe / crrun.exe, go to http://support.crystaldecisions.com/downloads and download: crrun2k5.exe or crrun2k6.exe
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Modify selection formula check box

Modify selection formula check box is checked by default if the report contains a selection formula. If the report contains a selection formula, the program lets you modify the selection before it prints the report. For more details on how compiled reports selection formulas work, see the section **Limitations of Compiled reports**.

Modify stored procedure parameters check box

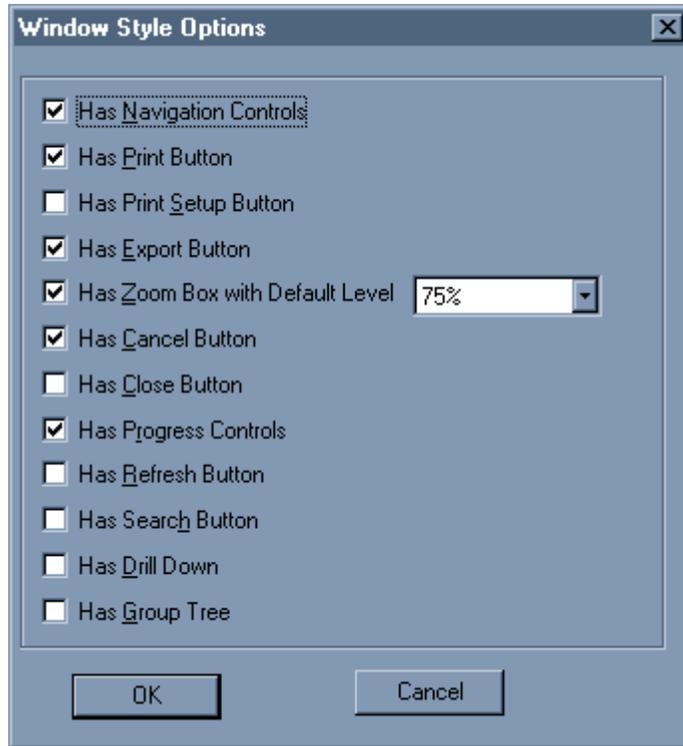
Modify stored procedure parameters check box is never checked by default. If a you run a compiled report that contains a stored procedure and you want to enter new stored procedure parameters, you must check the Modify stored procedure parameters check box, before printing the report.

NOTE	If you get prompted for a parameter twice, open the report in the Seagate Crystal Reports designer, and uncheck the “Verify on every print” option, under the database menu.
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Additions to Compiled Reports in Crystal Reports 5 and 6

Version 6.0.1.151 analyzes the dependency files to ensure that all dependency files are distributed, including third party DLLs.

In version 5 and 6 there are a more choices for window options when running a compiled report.



Printing compiled report directly to a printer, information about what printer to use and the DEVMODE structure are first loaded from the CRF file. When CRW of version **4.5 and earlier**, compiles the report, information about the printer orientation is not recorded in the CRF. Therefore when printing directly to a printer, the report will always use the default setting which is portrait in the given case. To print the report in landscape, click the <Select printer> button and change the orientation to landscape. Your compiled report will now always print in landscape. This is because the landscape setting is saved in the CRF file.

This issue is resolved in Seagate Crystal Reports version 6.

If printing directly to a window and then to a printer, compiled reports never look at the CRF file and will always use the printer information from the report. To change the printer orientation from the preview window, you will need to check the “Has Print Setup Button” check box in the “Window Style Options”, before printing the report.

Starting with version 5.0.x.108, you can set location to a database, if connecting via ODBC.

If you are using SQL databases:

Open the report in the Report Designer. Go to the Database | Set Location window. For each table in the window, remove the reference to the database name and the owner in the text box below (eg. "pubs.dbo.table1" is modified to become "table1").

When logging on with the compiled report, type:

<Crwdc>database=new_database_name

into the Database text box of the Logon Parameters box. For example, to convert a report reporting off MS SQL database **pubs** to point to MS SQL database **master** type:

<Crwdc>database=master

For PC Databases connected to via ODBC, type:

<Crwdc>DBQ=full_path_and_name_of_DB Database

into the Database text box of the Logon Parameters box. For example, to convert a report reporting off Craze.mdb to report off Production.mdb, type:

<Crwdc>DBQ=c:\good\Production.mdb

NOTE	You can NOT change database location if the report is using native drivers.
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Version 6 of Seagate Crystal Reports allows you to run a report with “Saved data”, even though the database does not exist any more. This feature is not available in previous versions.

Runtime File Requirements for Compiled Reports

16-bit Compiled Reports

If you are including a Compiled Report on the distribution diskette, include the following runtime files:

File Name	Installation Location	Description
CRRUN.EXE	WINDOWS\SYSTEM	Compiled reports program
XXXXXXXXX.RPT (Where X is your report name)	The directory you specify for your compiled report	Your report file
XXXXXXXXX.CRF	The directory you specify for your compiled report	(Crystal Reports) control file
XXXXXXXXX.EXE	The directory you specify for your compiled	

When you compile a report, XXXXXXXX.CRF and XXXXXXXX.EXE are created in the same directory. These files must remain in the same directory as your compiled report.

32-bit Compiled Reports

If you are including a Compiled Report on the distribution diskette, include the following runtime files:

File Name	Installation Location	Description
CRRUN32.EXE	WINDOWS\SYSTEM or WINDOWS\SYSTEM32 (NT only)	Compiled reports program
MSVCRT20.DLL	WINDOWS\SYSTEM or WINDOWS\SYSTEM32 (NT only)	Microsoft VC++ Run Time library
XXXXXXXX.RPT (Where X is your report name)	The directory you specify for your compiled report	Your report file
XXXXXXXX.CRF	The directory you specify for your compiled report	(Crystal Reports) control file
XXXXXXXX.EXE	The directory you specify for your compiled	

When you compile a report, XXXXXXXX.CRF and XXXXXXXX.EXE are created in the same directory. These files must remain in the same directory as your compiled report.

NOTE	You may need to also distribute database DLLs. For more information look at Runtime file requirements in the Seagate Crystal Report program group.
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What do these files do?

RPTFiles.inf: This file is created when you run the setup from the distribution disks, it is a check-list of what to do with the files on the disk, whether to overwrite always or check for versions, etc.

You will get the following error in this file if you use long filenames for your report file

“General INF file error in file 'c:<temp path>\rptfiles.inf'. Check for unmatched quotes, brackets or braces.”

To resolve this issue upgrade to version 6.0.1.151 of Seagate Crystal Reports.

RPTSetup.log: This file is created as you run setup from the distribution disks, it contains a listing of the files and the directories that they were put into, it will also list any errors that come up during setup.

CRWDist.ini: Editable file for 16 bit Seagate Crystal Report that tells the distribution wizard what files to include when distributing a report.

CRWD32.ini: Editable file for 32 bit that tells the distribution wizard what files to include when distributing a report.

CRW.ini: This editable file keeps all of the information Crystal requires including report options. Until version 4.5.x this was a required file if you were using date formulas or wanted better error handling. This information is now included with the report file. The only time you may need to distribute the CRW.INI file is when you are using secured Access 2.0 database.

32 bit Seagate Crystal Reports version 5 and higher uses the Windows registry, not the CRW.INI.

Limitations of Compiled reports

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

E.g. **Uppercase{tablename.field} = “String” and {tablename.field2} = 4**

When you run the compiled report with the above selection formula and “Modify selection formula” is checked, the report will only prompt for the value of **{tablename.field2}**.

The only exception, is the “IN” and “TO” operators.

- New database location can NOT be set in a compiled report.
- Compiled reports can NOT use two data sources.
- In a compiled report, sub reports can NOT log on to different ODBC datasources than that used by the main report.
- Compiled reports will return error messages if a sub-report is connected to a secured database, e.g., secured Access database.
- No automatic – “no user intervention” - way of scheduling reports. (can be done in Crystal Info)
- No ability to pass command line parameter to compile reports.
- Version 4.5 32 bit cannot create distribution disks to disk, only to network or locally.

Outstanding Issues

REF NO: 7865, 5911 Version: 6.0 Outstanding

When you uninstall 6.0 32 Bit from the **Control Panel** the CRW 6.0 16-bit icons get erased. If there isn't a compiled RPT in the Group, then the **Seagate Crystal Reports** group name is dispensed with as well

REF NO: 8459 Version: 6.0 Outstanding

When you exit a previewed compiled report accessing a Client Server database and also references the ToWords function, you will get an error: CRRUN32 caused a GPF in CRXLAT32.DLL or KERNEL32.EXE followed by the application crashing

REF NO: 10167 Version: 6.0x.151 Outstanding

Cannot Find SQL Server error when running compiled reports, containing subreports

A report where the main report connects to Oracle via ODBC. and subreport connected to a different server or data source is compiled. When running the compiled report, log on information is prompted for the main report, but there is no prompt for subreports. As there is no possibility to log on to a datasource that the subreport is connecting to, an error is produced:

"Cannot Find SQL Server"

At this time, both the main report and the subreport must be connected to the same server and data source.

REF NO: 10213 Version: 6.0x.151 Outstanding

Compiled Report with subreport (secured Access database) - File could not be opened

A report is designed, based on an Access 97 database. The database has system level and database level security. The report is compiled with the "Save Data with Report" option NOT checked. When the compiled report is executed an Access Session Parameters prompt appears asking for a system password as well as a database password. Entering the CORRECT passwords results in the error message:

Seagate Crystal Reports: Database Error

Error Opening File.

File could not be opened: "Tablename", at file location: "Tablename"

Clicking "OK" results in a second error message:

Print Engine Error

Unable to connect: incorrect session parameters.

Clicking "OK" returns control to the Compiled Report Print form and the compiled report does not get launched.

Contacting Crystal Decisions for Technical Support

We recommend that you refer to the product documentation and that you visit our Technical Support web site for more resources.

Self-serve Support:

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

Email Support:

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

Telephone Support:

<http://www.crystaldecisions.com/contact/support.asp>