

Crystal Reports

Convert Database Driver – What is it Used For?

Overview

The **Convert Database Driver** command on the Database menu serves a variety of purposes in Crystal Reports. It can be used to identify the current driver, change the driver that is being used, or change the data source the report is using. This paper describes when and how to use **Convert Database Driver** and briefly discusses other issues related to **Convert Database Driver**. You should read this document if you design reports. This information applies to Crystal Reports version 7 and later and Seagate Info 7 and later.

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Introduction

When a report is created in Crystal Reports, the database driver and the location of the database are hard-coded into the report. When the report is opened (but the data is not refreshed), it is pointing to a particular database driver (a database .DLL) and the location of its database. When the report is refreshed, Crystal Reports looks at the hard-coded database .DLL name and attempts to use it for the report. If it finds the .DLL and the database is in the location specified in the report, data is returned.

However, there are times when it is necessary to change the database type or to change the database location. Typically, to change the database *type* (e.g. from Microsoft SQL Server to Oracle), use the **Convert Database Driver** command on the **Database** menu. To simply change the database *location*, use the **Set Location** command on the **Database** menu.

This paper will explore when to use the **Convert Database Driver** command and some of its implications.

Why do you need to use Convert Database Driver?

There are three main reasons for using **Convert Database Driver**:

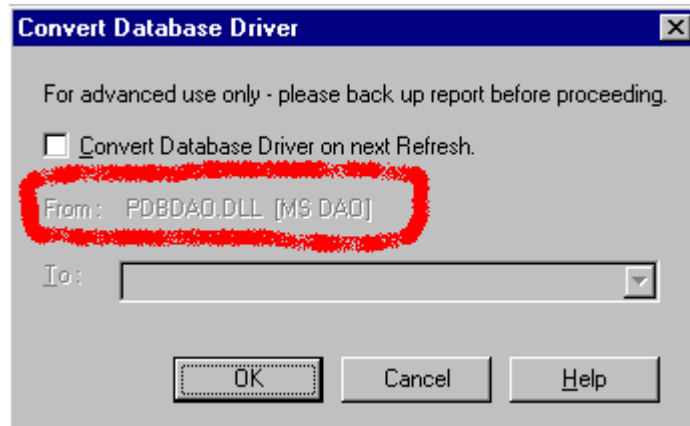
- To find out what database driver the report is currently using
- To change the database driver the report will use
- To change the ODBC data source the report will use

Which Database Driver are you using?

Crystal Reports users sometimes need to know what database driver is being used in a report. To find out, on the **Database** menu, click **Convert Database driver**. In the **Convert Database Driver** dialog box, there is a grayed-out file name in the FROM: section. This is the driver the report is currently using.

Some database driver examples are:

- PDSSQL.DLL – Microsoft SQL Server
- PDSORA7.DLL – Oracle
- PDBDAO.DLL – Microsoft Access
- PDSODBC.DLL – ODBC



Convert Database Driver Comments

Here are some comments on the **Convert Database Driver** command:

NOTE	Database drivers named PD***.DLL usually refer to 16-bit drivers. Those named P2***.DLL refer to 32-bit drivers. However, in Convert Database Driver , the driver name is <u>always</u> PD***, even if it's a 32-bit driver. This should be resolved in future versions of Crystal Reports.
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- This command can be useful when you need to know if you're connecting to your database via a "native" connection (using a direct driver to the database – i.e. Pdsora7.dll to Oracle) or via the ODBC layer (an extra layer between Crystal Reports and the database – i.e. always via the Pdsodbc.dll driver).
- If the **Convert Database Driver** command on the **Database** menu is grayed out, then your report is usually using either a Crystal Dictionary file or an SQL Query file or an Info View file. You cannot convert the database driver if you are using one of these data sources. You can only point to other Dictionaries or Query files using the **Set Location** command on the **Database** menu.

Before You Begin

There are some databases, which do not do a **Convert Database Driver** operation easily. The following conversion scenarios may cause unforeseen issues and are not supported:

Lotus Notes:

Native Driver to ODBC

Active Data Driver (P2SMON.DLL):

Native Driver to any other driver OR Any other driver to Native Driver

How do you change the Database Driver?

NOTE	<p>When you are performing a Convert Database Driver operation, keep the following points in mind.</p> <p>For a smooth and error-free migration from one database type to another, the naming conventions, data types, and data hierarchy should be identical between the source and destination databases.</p> <p>There are many variables to consider, which may change the steps to convert the database driver. These factors include:</p> <ul style="list-style-type: none">➤ The presence of subreports➤ The number of linked tables➤ The type of database➤ The name of the tables and fields
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To migrate a report from one database type to another using the **Convert Database Driver** command:

1. On the **Database** menu, click **Convert Database Driver**. The Convert Database Driver dialog box appears.
2. Select the checkbox **Convert Database Driver on next Refresh**.
3. In the **TO:** section list, click the driver you want to use.
4. (Depending on the driver selected) Select your data source and log on (if necessary). If prompted, click “Yes” to fix up the report. You may also be prompted to map fields in the report to the fields in the database. For more information on mapping fields in Crystal Reports, see section *How do you Map Fields (if prompted after Convert Database Driver)?*.
5. If you receive any errors, particularly ones which indicate “physical database not found” or “there are no fields in the file...”, then you may need to do a **Set Location** to point the report tables and fields to this new database. For more information on performing a **Set Location** command in Crystal Reports, see section *How do you do a Set Location (after a Convert Database Driver)?*.
6. To confirm that the **Convert Database Driver** operation was successful, perform both of the following:
 - Refresh the report.
 - On the **Database** menu, click **Verify Database**. If successful, you should get the following message:



NOTE

If you have a report that contains subreports, you will need to do perform a **Convert Database Driver** within the subreport itself. This is very important if your subreport is using a different driver than your main report.

How do you change the ODBC Data Source of the Report?

If you need to change the ODBC data source your report is using (e.g. From one that connects to Server “A” to one that connects to Server “B”), use **Convert Database Driver** to change this data source quickly. To change the ODBC data source for the report:

1. Follow the procedure outlined in the previous section and when selecting the driver in the **TO:** section list, click **PDSODBC.DLL**.
2. You will be prompted to choose a new ODBC data source. Choose the one you’ve created which points to the new location and click **OK**.

Your report should now point to the correct data source.

What else do you need to Consider?

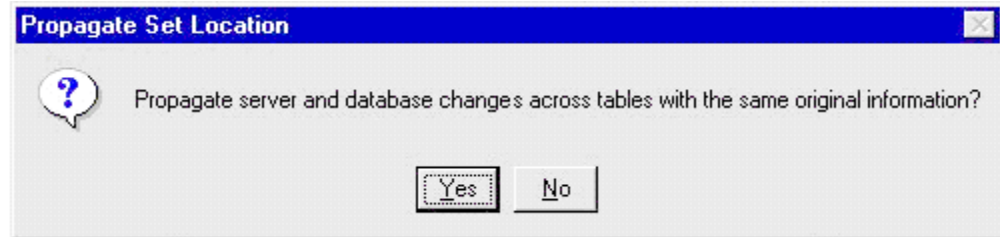
What is the difference between Convert Database Driver and Set Location?

There are two distinct differences between the **Convert Database Driver** and **Set Location** commands on the **Database** menu:

- **Convert Database Driver** changes the database type (and driver) that the report will use. **Set Location** uses the same database type (and driver). **Set Location** changes only the location of the database and not its type.
- **Convert Database Driver** does not require the user to log on to the report’s original database. **Set Location** does. (This is useful if the report’s original database is no longer available.)

How do you do a Set Location (after a Convert Database Driver)?

1. On the **Database** menu, click **Set Location**.
2. In the **Databases** list, click the first table and click **Set Location**.
3. In the Data Explorer dialog box, navigate to and choose the new data source to log on to. Type the logon parameters (if required).
4. Choose the corresponding table to the table in step 2. Click **Set**.
5. You may be prompted with the following Table Propagation message. Click **Yes**.

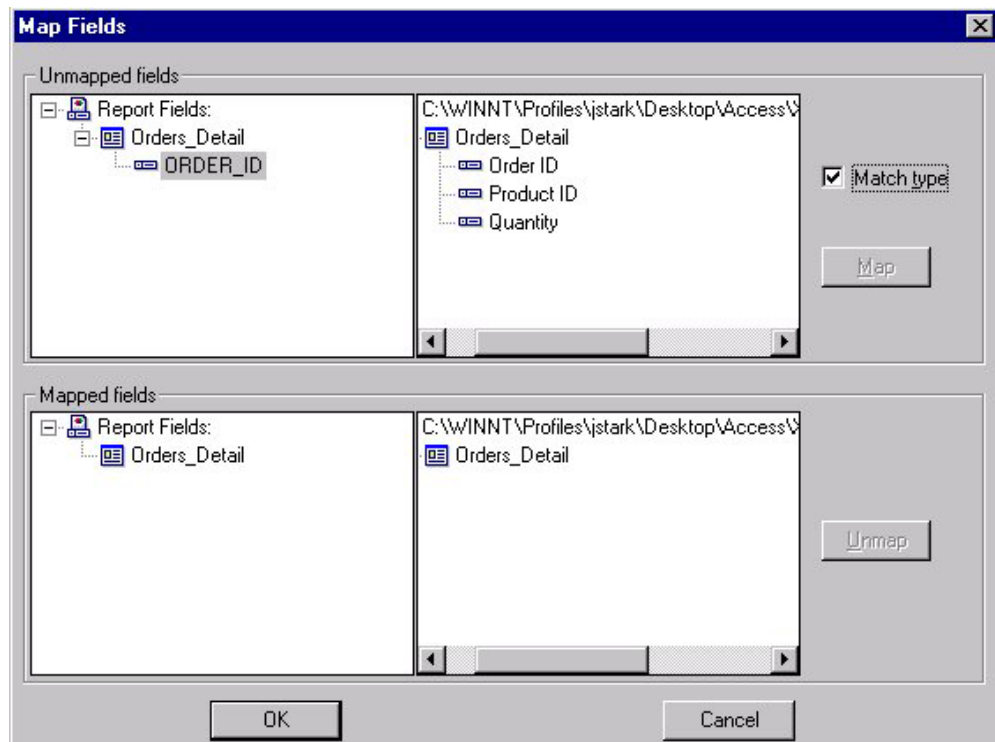


- To ensure that all the tables are properly pointing to the new database, in the **Set Location** dialog box, please click on each of the tables in the **Databases** list and ensure that the **Server Type** and **Server Name** in the **Location** section are correct.

If not, please perform steps 2 – 4 again and ensure you select those tables that are incorrect.

How do you Map Fields (if prompted after Convert Database Driver)?

- (Optional) Clear the **Match type** checkbox. This will display all of the fields in the table, regardless of their type.
- In the **Unmapped fields** section, single-click the first field in the leftmost window pane. Then, single-click the corresponding field in the rightmost window pane. Click **Map**. (This mapped field should now appear in the **Mapped Fields** section.)



3. Repeat for any unmapped fields in the **Unmapped Fields** section in the leftmost window pane.
4. Click **OK**.
5. You may get a **Verify Database** dialog box prompting you to “Proceed to fix up the report”. Click **Yes**.

What is “Verify Database”?

Clicking the **Verify Database** command on the **Database** menu checks to see that the database structure (the table names and field names) are the same as when the report was created.

- If the structure has changed, you will get a dialog box prompt that says: “The report has changed. Proceed to fix up the report.”
- If the database structure has remained the same, you will get a dialog box message that says: “The database is up to date”.

Finding More Information

To find further information on field mapping in Crystal Reports, search for *scr_fieldmapping.pdf* at <http://support.crystaldecisions.com/docs>.

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>