

Crystal Reports

How to resolve join syntax errors in Crystal Reports 8.5

Overview

Read this document if join syntax error messages appear when you attempt to link tables in a report or preview a report in Crystal Reports 8.5. Although this document has been written for Crystal Reports 8.5, it is applicable to earlier versions of Crystal Reports.

CAUTION

The list of the available types of SQL join syntax is provided as a tip. Crystal Decisions Technical Support is not responsible for identifying or referencing the join syntax applicable to your database.

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Introduction

The Microsoft ODBC standard for SQL join syntax is the *OJSyntax*.

For Crystal Reports 8.5 to interpret the expected join syntax for database drivers that do not use the Microsoft ODBC standard, the driver name must be referenced in a registry key. This document provides a list of databases, the correct join syntax for these databases and the registry key that needs to be modified.

To resolve join syntax error messages in Crystal Reports 8.5, update the registry key with the ODBC database driver information and its required SQL join syntax.

NOTE

The join syntax is used to link tables. For more information on table linking in Crystal Reports, refer to the technical brief [Scr_pclinking.pdf](#).

The join syntax in Crystal Reports 8.5 is defined differently than in version 9.

Join syntax for Crystal Reports 9:

If you are using Crystal Reports 9 to connect to your database, click [here](#) for more on what the correct join syntax for a specific database would be with Crystal Reports 9.

Join Syntax Error Messages

The following are examples of error messages that may appear due to the incorrect join syntax being used.

- “Unable to understand after declare”
- “Failed to Open Rowset”
- “Merant ODBC SQL BASE Driver. Invalid Table Name”
- “Query contains an illegal outer-join request”
- “Syntax Error”
- “Expected lexical element not found: <identifier>”
- “OJ syntax error”
- “Outer Join syntax error”
- “ODBC Error: Query contains an illegal outer-join request”
- “SQL Server error”
- “ODBC error: Syntax error”
- “Query contains an illegal outer join request”
- “Incorrect syntax near Left Outer Join”

Other error messages or similar error messages may appear.

Identifying the Required SQL Join Syntax

Here is a list of the database types, the correct SQL join syntax for each database and the corresponding registry key.

Table A: Join Syntax

Database Type	Join Syntax	Registry Key
Btrieve 6.15	PlusEqual	PlusEqual
DB2 5.x to 7.x	OpenIngres	OpenIngres
Centura SQLBase 6.x	PlusEqual	PlusEqual
Centura SQLBase 7.x	PlusEqual	PlusEqual
Informix 7, 9, 2000	(Informix)	Informix
Interbase 4.x	OpenIngres	OpenIngres
Interbase 5.x	OpenIngres	OpenIngres
Oracle 7.x	PlusEqual	PlusEqual
Oracle 8.x	PlusEqual	PlusEqual
Pervasive 7	PlusEqual	PlusEqual
Pervasive 2000	OJSyntax	OJSyntax
Progress 8.x	OpenIngres	OpenIngres
Progress 9.x	OpenIngres	OpenIngres
Progress 9.x with a PG driver, Pgpro14.dll	PlusEqual	PlusEqual
SQL Server 6.x	OJSyntax	OJSyntax
SQL Server 7.x	OJSyntax	OJSyntax
SQL Server 2000	OJSyntax	OJSyntax
Sybase Adaptive Server Anywhere 5.x to 8.x	SQL2OuterJoin	SQL2OuterJoin
Sybase (ASE) 10.x	StarEqual	StarEqual
Sybase (ASE) 11.x	StarEqual	StarEqual
Sybase (ASE) 12.x	OpenIngres	OpenIngres
Top Speed	StarEqual	StarEqual

If the database type is not specified on this list, contact the database vendor to verify the type of join syntax that the database uses. Once you find out this information, read through the remainder of the documentation.

Identifying the ODBC Database Driver

To associate the correct join syntax to your database, you must equate the ODBC database driver to the join syntax that is expected by that driver when modifying the registry key.

The driver names of ODBC database drivers are listed in the ODBC Data Source Administrator of the Microsoft Windows operating system.

Steps to identify the ODBC database driver name

These steps have been written for Windows XP. The steps may vary in a different version of Windows.

1. From the Windows **Start** button, click **Settings > Control Panel > Administrative Tools > ODBC Data Sources**.
2. In the ODBC Data Source Administrator dialog box, click the **Drivers** tab.
3. Find the name of the ODBC database driver.
4. Scroll to the right to identify the ODBC database driver DLL file name.

Figure 1: Drivers in the ODBC Data Source Administrator

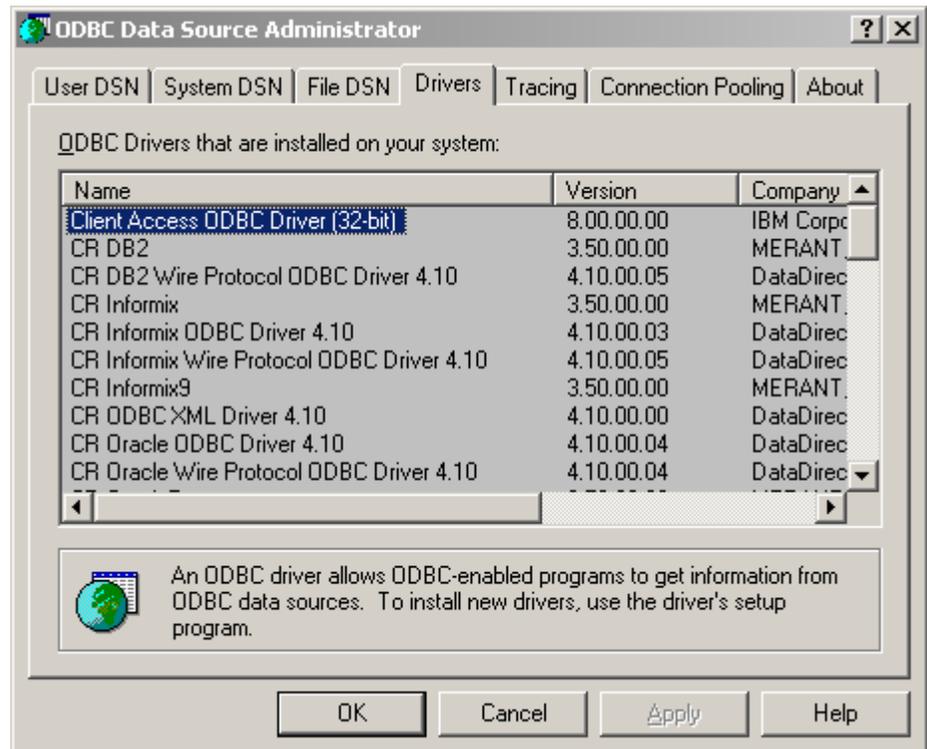
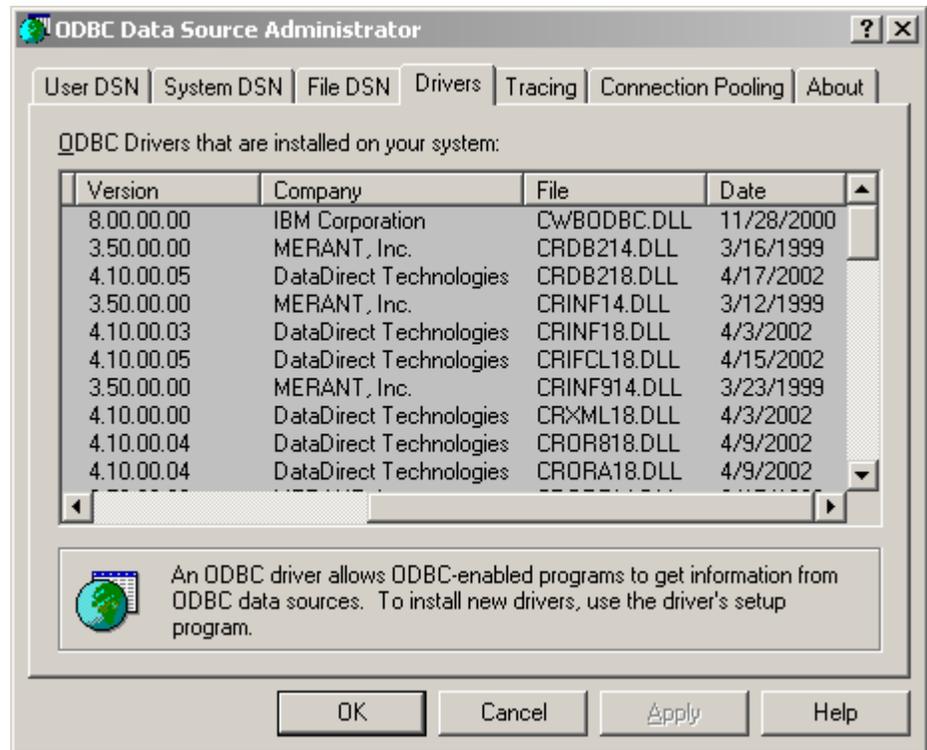


Figure 2: DLL file names in the ODBC Data Source Administrator



Upon completing the steps to identify the DLL file name of the ODBC database driver, record it for later use when modifying the registry key.

Modifying the Registry Key

CAUTION	<p>The following resolution involves editing the registry. Using Registry Editor incorrectly can cause serious problems that may require you to reinstall the Windows operating system. Use Registry Editor at your own risk.</p> <p>For Information on How to Edit the Registry Key</p> <p>View the 'Changing Keys And Values' online Help topic in Registry Editor (Regedit.exe).</p> <p>Recommendation:</p> <p>It is strongly advised that you make a backup copy of the registry files (System.dat and User.dat on Win9x computers) before you edit the registry.</p>
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Steps to add the join syntax of your database to the registry key

Complete the following steps. If your database is not on the list above, you will need to find out what the expected join syntax is from your database vendor.

Gather required information

1. Verify and retain the answers to the following questions for use in the steps to follow:

- What is the registry key name for your database? (Refer to [Table A: Join Syntax](#) or contact the database software vendor.)
- What is the operating system of the computer that is running Crystal Reports?
- What is the join syntax for your database? (Refer to [Table A: Join Syntax](#) or contact the database software vendor.)
- What is the ODBC database driver that you are using to connect to Crystal Reports? (Refer to the [Steps to Identify the ODBC Database Driver Name](#).)

Create a TXT file to update the registry key

2. Create a new text file (TXT) named according to the registry key file name. Refer to the required information from step 1.

Example:

If the registry key name is “SQLServerJoinBuilder” name the text file “SQLServerJoinBuilder.txt”.

3. Add the Registry Header that corresponds to the operating system. Refer to the required information from step 1.

Examples:

- If the operating system is *Windows NT 4* or *Windows 98*, add the Registry Header:

```
REGEDIT4
```

- If the operating system is *Windows 2000*, *ME*, or *XP*, add the Registry Header:

```
Windows Registry Editor Version 5.00
```

4. For Crystal Reports 8.5 and earlier, add the HKEY string to the this registry key text file:

```
[HKEY_CURRENT_USER\Software\Seagate Software\Crystal Reports\DatabaseOptions\Outerjoin
```

5. Assign the Join syntax for your database to equal the ODBC database driver that you are using to connect to Crystal Reports. Refer to the required information from step 1.

Example:

```
"OJSyntax"="sqlsrv32"
```

- Where “OJSyntax” is the correct Join syntax for a SQL Server database
- Where “sqlsrv32” is the ODBC database driver file name without the “.dll” extension

6. Save this TXT file.

Example of the TXT file for the registry key update:

```
Windows Registry Editor Version 5.00
```

```
[HKEY_CURRENT_USER\Software\Seagate Software\Crystal Reports\DatabaseOptions\Outerjoin
```

```
"OJSyntax"="sqlsrv32"
```

This example is based on the following conditions:

- Windows 2000 operating system
- Crystal Reports 8.5 reporting tool
- SQL Server 2000 database
- Sqlsrv32.dll ODBC database driver

Rename the TXT file and update the registry key

7. Rename the TXT file by changing the file extension from “.txt” to “.reg”.

Example:

`SQLServerJoinBuilder.reg`

8. Double-click the REG file to enter the updated registry key setting.

NOTE	You may be required to restart the computer for the updated registry key setting to become effective.
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Upon completing these steps, the registry key will be updated to include the correct join syntax.

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>