

R&R Report Designer Version 10 Utility Programs

Report Conversion
Shortcut Maker



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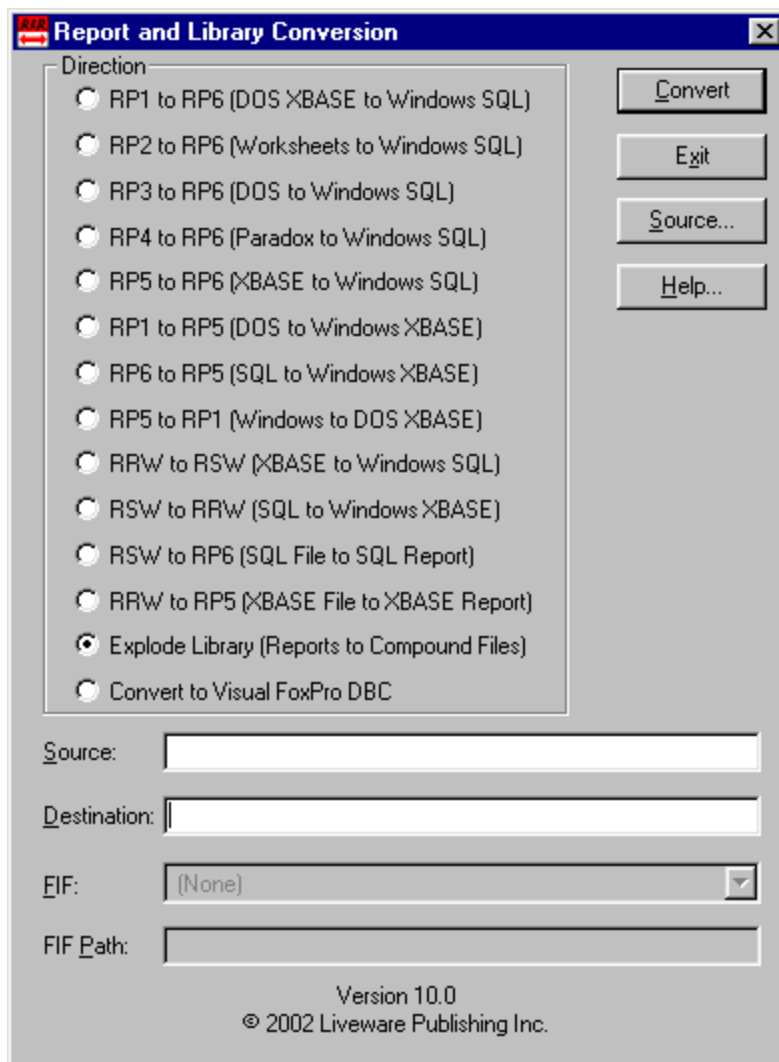
R&R Report Converter

Report and Library Conversion Dialog

The Report and Library conversion program (RRCNVRT.EXE) allows you to:

- Convert among various versions of R&R Report Writer.
- Convert reports saved as compound document files into a format that can be included in a report library.
- Explode reports contained in report library files into individual compound document files.

Below is the main Report and Library Conversion dialog box.



Each of the available options are explained below.

Direction

The first step in conversion is selecting the source and destination file types. This is done by selecting the appropriate radio button from the direction list. The available conversion directions are explained below.

Source

You can select the report you want to convert by either typing a full path and file name in the edit box or by clicking on the Source button to open the Select Report Source dialog.

Destination

If you selected the source using the Source button, a destination name with the appropriate extension is created for you. Otherwise, type the full path and name of the destination file you want to create.

If you do not specify an extension, the conversion program will use the extensions given in the Direction group box: RP1 for DOS report libraries, RP5 for Windows XBASE report libraries, and RP6 for Windows SQL report libraries; RRW for XBASE compound file reports; and RSW for SQL compound file reports.

If you do not specify a destination, the conversion program will create one using the source name and the appropriate extension.

FIF

If you are creating a DOS report library (RP5 to RP1), select the font information file you want attached to all the reports in the new library. The default is (none), which means that no font information file will be attached.

FIF Path

If you have selected a font information file, type the full path of the directory

RP1 to RP6 (DOS XBASE to Windows SQL) Conversion

This choice converts a report library produced by Version 4, 5 or 6 of R&R for XBASE into a library that can be used by R&R for Windows, SQL Edition. When you use this conversion option, you will be prompted to specify a data source for each report in the library. For quick conversion of large libraries, you can select one data source and select the "All" button to assign that data source to all the reports.

RP2 to RP6 (DOS Worksheets to Windows SQL) Conversion

This choice converts a report library produced by Version 4, 5 or 6 of R&R for Worksheets into a library that can be read by R&R for Windows, SQL Edition.

RP3 to RP6 (DOS SQL to Windows SQL) Conversion

This choice converts a report library created by Version 3 of R&R for Oracle, R&R for NetWare SQL, or R&R for XDB into a library that can be used by the Windows Edition of R&R for SQL. When you use this conversion option, R&R will prompt you to specify a data source for each report in the library. For quick conversion of large libraries, you can select one data source and select the "All" button to assign that data source to all the reports.

R&R for SQL can read reports either directly from DOS report libraries (RP3) or from libraries that have been produced by this conversion. To identify the source of the report, the user ID of each report in the new library is "Windows (from DOS)." After you open and save the report in Windows, the user ID will be changed to "Windows."

RP4 to RP6 (DOS Paradox to Windows SQL)

This choice converts a report library created by Version 4 of R&R for Paradox into a library that can be used by R&R for Windows, SQL Edition.

You will have to modify any R&R for Paradox reports that contain memo fields with merged data (such as form letter or "mail merge" reports). To do so, create an unformatted text file containing the memo text and merged data and use the Insert ⇒ Text File command. (See Chapter 18, "Creating Form Letter Reports," for information about creating text memo files.)

When you use this conversion option, R&R will prompt you to specify a data source for each report in the library. For quick conversion of large libraries, you can select one data source and select the "All" button to assign that data source to all the reports.

RP5 to RP6 (Windows XBASE to Windows SQL) Conversion

This choice converts a report library created by R&R for Windows, XBASE Edition, into a library that can be read by Version 6 of R&R for Windows, SQL edition. To identify the source of the report, the user ID of each report in the

new library is "Windows (from XBASE)." After you open and save the report in Windows, the user ID will be changed to "Windows."

When you use this conversion option, R&R will prompt you to specify a data source for each report in the library. For quick conversion of large libraries, you can select one data source and select the "All" button to assign that data source to all the reports.

Files that are related in your XBASE report by an index file will be joined in the SQL report by the key expression in the index file (since the index file is opened to determine the key expression, R&R must be able to find this index file). If this expression is not a field in the related file, you will not be able to retrieve the report in R&R for SQL.

RP1 to RP5 (DOS XBASE to Windows XBASE) Conversion

This choice converts a report library produced by Version 4, 5 or 6 of R&R for XBASE into a library that can be used by R&R for Windows, XBASE Edition. R&R for Windows can read reports either directly from DOS report libraries (RP1) or from libraries that have been produced by this conversion. To identify the source of the report, the user ID of each report in the new library is "DOS." After you open and save the report in Windows, the user ID will be changed to "Windows."

Note that the use of multiple UDF libraries in DOS reports has no counterpart in the Windows version of R&R.

RP6 to RP5 (Windows SQL to Windows XBASE) Conversion

This choice converts a report library created by R&R for SQL into a library that can be read by R&R for Windows, XBASE Edition. You must run this utility to enable R&R for XBASE to read R&R for SQL reports. To identify the source of the report, the user ID of each report in the new library is "Windows (from SQL)." After you open and save the report in Windows, the user ID will be changed to "Windows."

Table names are converted to DOS-equivalent file names. Related files are assumed to be related by an index file named <table>.ndx. If such a table or index file does not exist, when you try to open the report in R&R for XBASE you will receive an error message prompting you to correct the name.

All table joins in the SQL report become exact lookups when converted to XBASE. As a result, you will need to edit any database relations in the converted report that should be R&R for XBASE scans instead of exact lookups.

Note that the following features of R&R for SQL have no counterpart in R&R for XBASE:

- Multi-column joins
- Queries using LIKE, NOT LIKE, NULL, NOT NULL

RP5 to RP1 (Windows XBASE to DOS XBASE) Conversion

This choice converts a report library produced by R&R for Windows, XBASE Edition into a library that can be read by the latest DOS version of R&R for XBASE (Version 6). You must run this utility to enable R&R for DOS to read R&R for Windows reports.

If you want your DOS reports to use fonts similar to those used in your Windows reports, select a font information file (FIF) to attach to all the reports in the converted library. The FIF you select must correspond to the fonts available on the printer you will use to print your DOS reports. You must also enter the complete path of the directory containing this FIF.

Note that the following features of Windows reports have no counterpart in the DOS version:

- Windows alignment of numeric and date fields (alignment is converted to DOS-type alignment);
- Windows-specific date formats (converted to closest DOS equivalent);
- Queries longer than 512 bytes (warning is issued and query is deleted);
- AND, OR, and NOT operators used without periods (you must edit any calculated field or UDF expressions that use these operators to include the periods required by the DOS product);
- True, False, On, Off, Yes, No used as logical constants (you must edit any calculated field or UDF expressions that use such constants to include the valid DOS constants: .t. and .f.);
- Fields starting past column 254 (fields are moved to column 254)

RRW to RSW (XBASE to SQL Windows) Conversion

This choice converts a compound file report produced by R&R for Windows, XBASE Edition into a compound file report that can be read by R&R for Windows, SQL edition.

RSW to RRW (SQL Windows to XBASE) Conversion

This choice converts a compound file report produced by R&R Report Designer, SQL edition into a compound file report that can be read by R&R for Windows, XBASE Edition. When you convert a report, you will be prompted to select a data source.

All table joins in the SQL report become exact lookups when converted to XBASE. As a result, you will need to edit any database relations in the converted report that should be R&R for XBASE scans instead of exact lookups.

RSW to RP6 (SQL Windows to SQL Library) Conversion

This choice converts a compound file report produced by R&R Report Designer, SQL into a report format that can be included in a report library.

If the destination library you specify does not exist, it will be created.

If the destination library exists, a dialog appears prompting you to choose one of the following:

- **Yes** adds the report to the existing library.
- **No** deletes the existing library, creates a new library with the same name, and adds the report to that library.
- **Cancel** cancels the conversion.

RRW to RP5 (XBASE File to XBASE Library) Conversion

This choice converts a compound file report produced by R&R for Windows, XBASE Edition into a report format that can be included in a report library.

If the destination library you specify does not exist, it will be created.

If the destination library exists, a dialog appears prompting you to choose one of the following:

- **Yes** adds the report to the existing library.
- **No** deletes the existing library, creates a new library with the same name, and adds the report to that library.
- **Cancel** cancels the conversion.

Explode Library (Report Library to individual RRW/RSW report files)

This choice converts each of the reports in the source library to a compound file report. File names for the destination compound file reports will be the same as the source report names.

Note that any of the following characters in a report name will be converted to a space when "exploded" to a compound file: colon (:), slash (/), backslash (\), question mark (?).

Convert to Visual FoxPro DBC

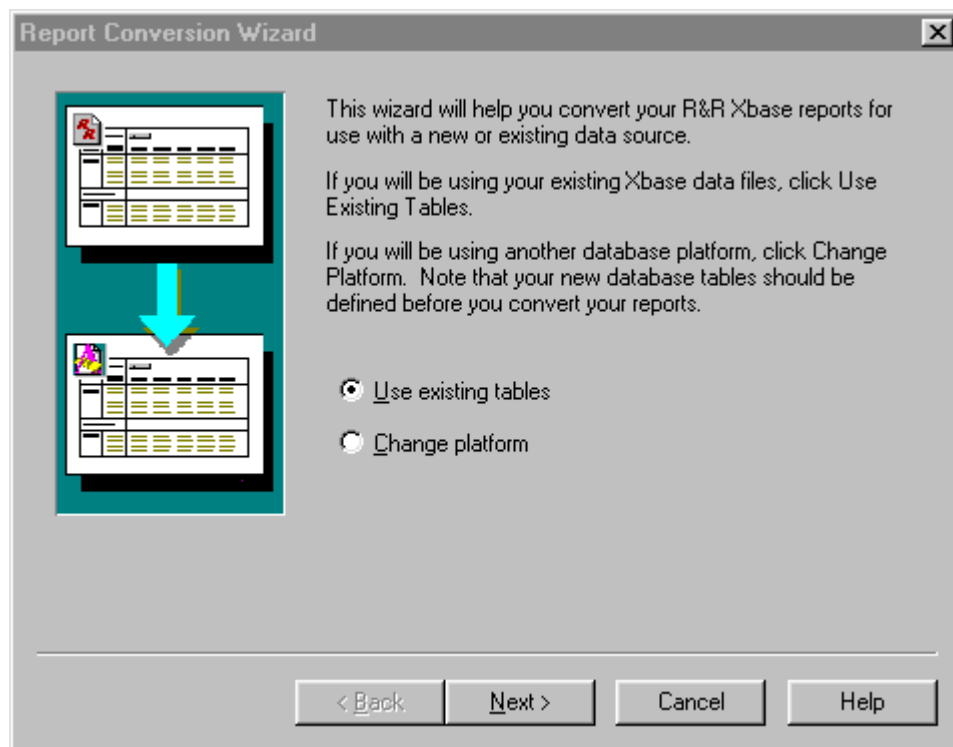
For an RRW report, allows you to select a Visual FoxPro DBC database whose tables will be used in place of master and related files saved with the report.

R&R SQL Report Conversion Wizard

Introduction (Report Conversion Wizard)

The Report Conversion Wizard utility (RRSQLWIZ.EXE) is designed for R&R Report Writer users who want to migrate their Xbase reports to the SQL version. Report Conversion Wizard is easy to use. It walks you through the steps of converting an R&R Xbase report (.RRW) to an R&R SQL report (.RSW). It will prompt you to select reports, help you create a data source for those reports, allow you to make any needed table or field name alterations, and give detailed information regarding any potential ambiguities in the converted reports.

Report Conversion Wizard dialog box

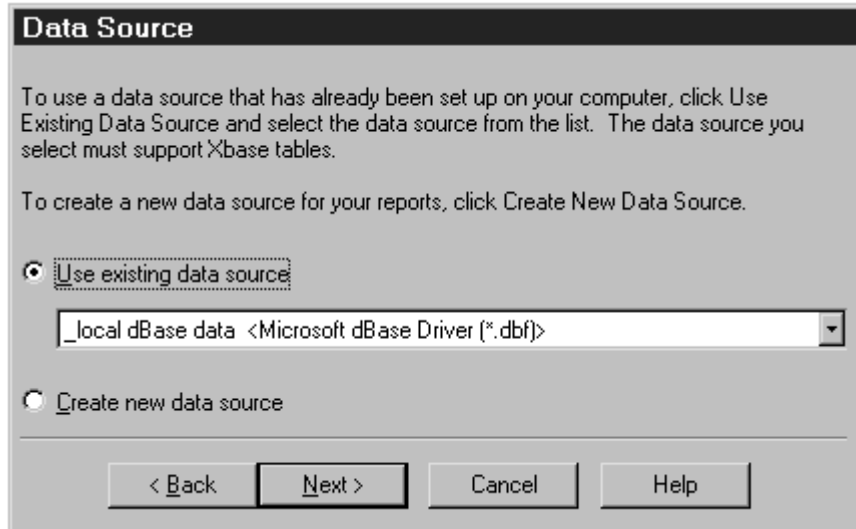


The Report Conversion Wizard helps you convert your existing R&R Report Writer (.RRW) reports to SQL (.RSW) reports. You have the choice of using existing tables or changing the platform.

- Select **Use existing tables** if you want the batch of reports to convert .RRW reports based on Xbase tables to .RSW reports that use an Xbase ODBC driver and data source to access the same tables.
- Select **Change platform** if you have tables in a different platform that match the Xbase tables your .RRW reports are based on and would like the .RSW reports to be based on these new tables. Change platform enables you to select the exact ODBC driver you would like your .RSW reports to be based on.

With either path you choose, the next step will be to choose an existing data source or create a new data source for your .RSW reports from the Data Source dialog box that displays.

Data Source dialog box



In the dialog box, do one of the following:

- Select **Use existing data source** if you have an existing data source set up already to use with the batch of .RRW reports you will be converting in this session, and then select the existing data source from the drop-down list box on the dialog. Your next step will be to select existing or change table and column names from the Table Names dialog box .
- Select **Create new data source** if you do not have an existing data source set up already to use with the batch of .RRW reports you will be converting in this session. The Report Convert Wizard displays the Create Data Source dialog box that will help you create a new data source to use with this batch of reports.

With either path you choose, the next step will be to provide a few simple details about the data source — a name, a description, table type, and where they are located.

Create Data Source dialog box

Create Data Source

Select the Xbase file type for the data source from the list of types below.

Xbase file type: dBase (*.dbf)

Enter a name that identifies the data source, such as Payroll or Personnel.

Name: Payroll

Enter an optional description of the data in the data source; for example, "Hire date, salary history, and current review of all employees."

Description: Hire date, salary history, and current review of all employees

< Back Next > Cancel Help

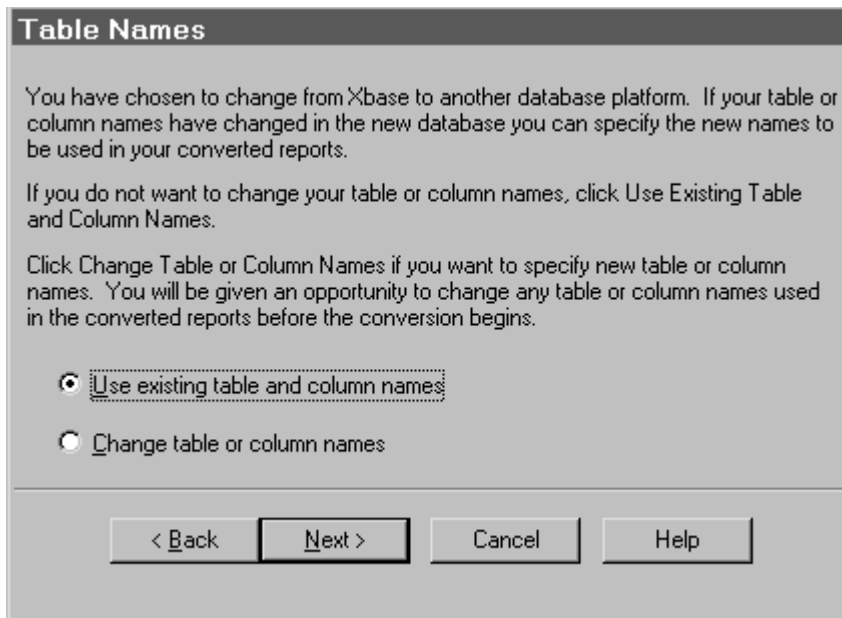
The Create Data Source dialog helps you create a new data source to be used with this batch of reports.

You will next be prompted to define the data source. The dialog will be the Setup dialog of the ODBC driver you select. It will be identical to the one you would see if you created a data source on your own through the ODBC Administrator found on the Control Panel which you can also get to from the R&R SQL Report Designer. You need to define the data source in this dialog, by giving it a name, a description, and often other information, such as what directory or database the tables reside in.

There are three *Xbase file type* options.

1. Select whether the batch of reports you will be converting in this session will be dBase (*.dbf), FoxPro (*.dbf), or Visual Fox Pro (*.dbc). If you aren't sure, go with the default. The Visual FoxPro option is provided for R&R Report Writer reports that are based on Microsoft's Visual FoxPro database container (DBC) files.
2. Provide a name and an optional description for the data source.

Table Names dialog box



In most cases, the table and column names in your .RSW reports will be the same as in your .RRW reports. For those times when you are changing database platforms and you have a table or column names that does not exactly match what you have in your Xbase tables, you need to use this dialog box.

- Select **Use existing table and column names** to have the Conversion Wizard automatically name the table or column names.
- Select **Change table or column names** to manually provide the names.

With either path you choose, the next step will be to select the reports in the Select Reports dialog box that displays. You will be prompted to make changes to any table or column names for which this applies.

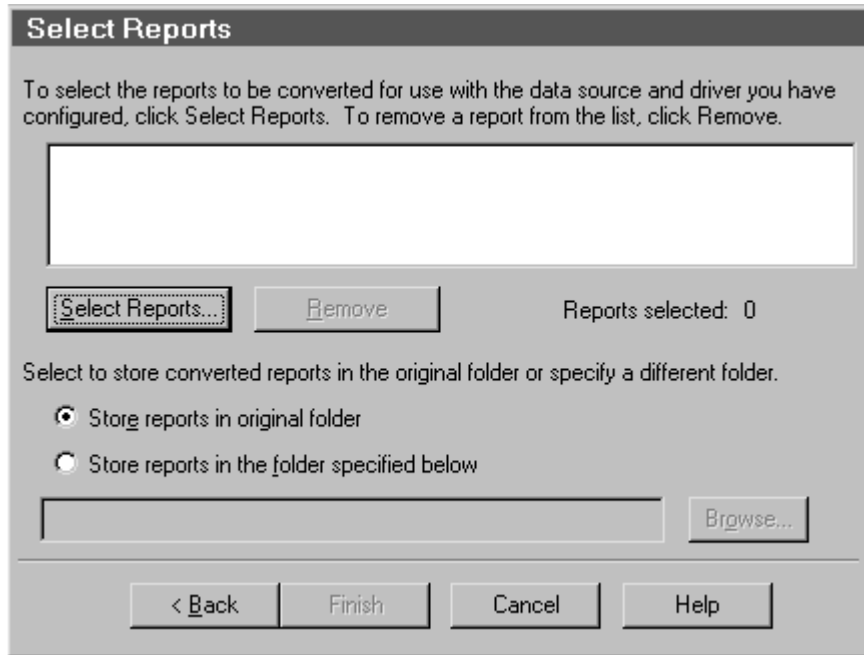
Driver Information dialog box

The Driver Information dialog box provides choices for specifying where the Xbase tables reside. You can have Convert Wizard do this automatically or you can do it manually. An Xbase data source includes a specification of the directory where the Xbase tables are located. R&R Report Writer puts full path information in the .RRW report definitions.

- Select **Automatic** to have the Convert Wizard create a data source with a table location based on the master table location in the first report it converts. This should be adequate in most cases. Note that R&R for SQL supports joining across directories in reports based on Xbase platforms, so your .RSW reports will be valid even if your .RRW reports were based on tables in different locations.

- Select **Enter or select data directory** and enter or choose the location or your Xbase tables, if you would like to be explicit about how the data source is defined.

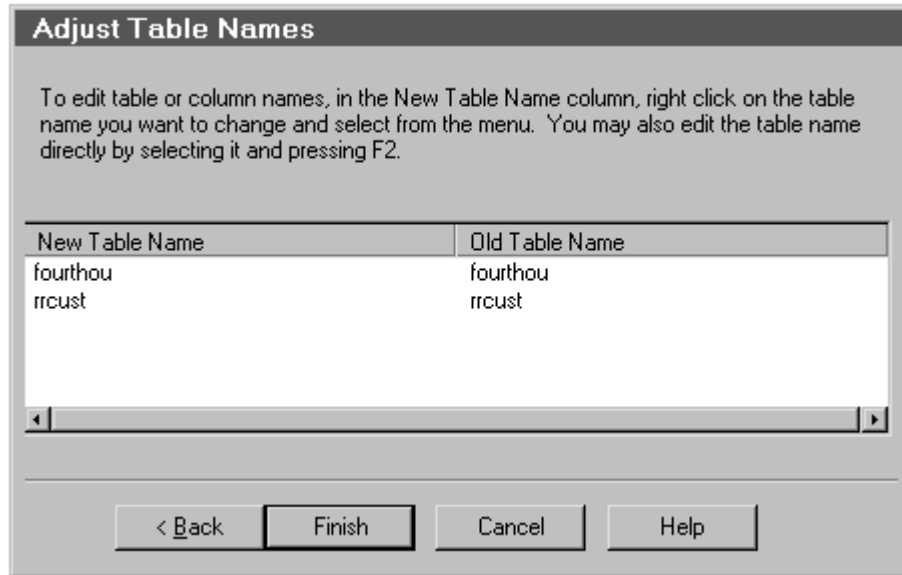
Select Reports dialog box



On the dialog box,

1. Select the batch of .RRW reports that you would like to convert to .RSW reports with the data source you just selected or defined. Choosing reports that are all based on tables that are in the same location is recommended.
2. Click the **Select Reports** button to select reports to add to the list. (If you change your mind, select reports from the list and click **Remove**.) The .RSW reports will have the same names as the original .RRW reports, but with a new extension. You can specify whether you would like the .RSW reports stored in the same location as the .RRW reports they were based on, or you can indicate a folder in which to store all reports converted in this batch.
3. If you elected to map table or field names, you have one more step. Otherwise, it is now time for the conversion, click Finish to get your new SQL reports.

Adjust Table Names dialog box



The Adjust Table Names dialog box displays if you selected Change Table or Column names in the Table Names dialog box. All of the tables used in the selected reports are listed in the *Old Table Name* column on the right. The original table names are also listed in the *New Table Name* column on the left, but you can edit the table names in this column.

If you have table names that are different in the database platform that you have chosen for this batch of .RSW reports, you must specify the new names here.

To make changes:

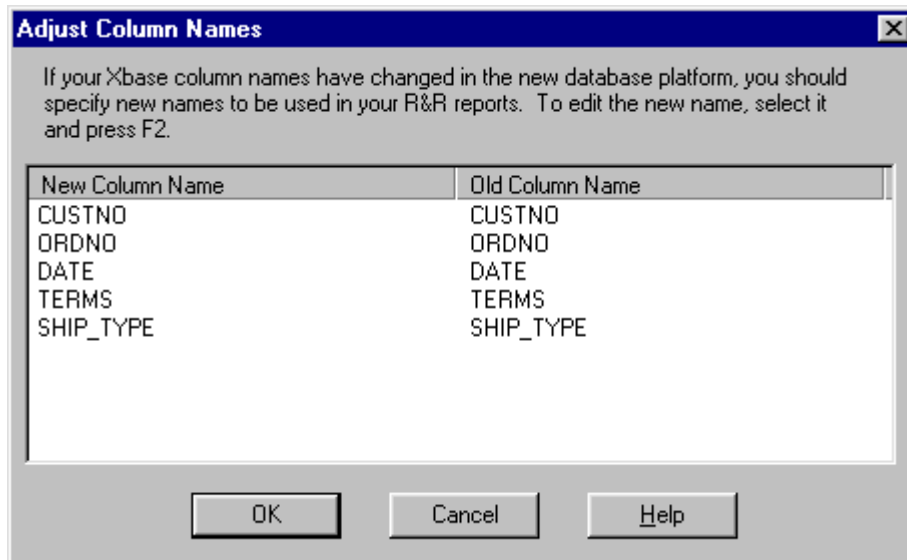
1. Select a table, hit F2, and enter the name of the table as it appears in the destination platform. You can also right-click on tables in the *New Table Name* column and choose **Edit Table Name**, **Select Table**, or **Adjust Column Names**.
 - *Edit Table Name* has the same affect as hitting F2.
 - *Select Table* allows you to choose a new table name by navigating to it and selecting it.
 - *Adjust Column Names* if there are columns in the destination table that do not exactly match the column names in your Xbase tables.
2. Now it is time for the conversion. In Adjust Table Names, click Finish to get your new R&R SQL reports.

Table Names dialog box



In the Table Names dialog box, select the table that you would like the converted .RSW report to reference. This will replace the table indicated in the Old Table Name column on the Adjust Table Names dialog. This table should have an equivalent structure to the one you are replacing.

Adjust Column Names dialog box



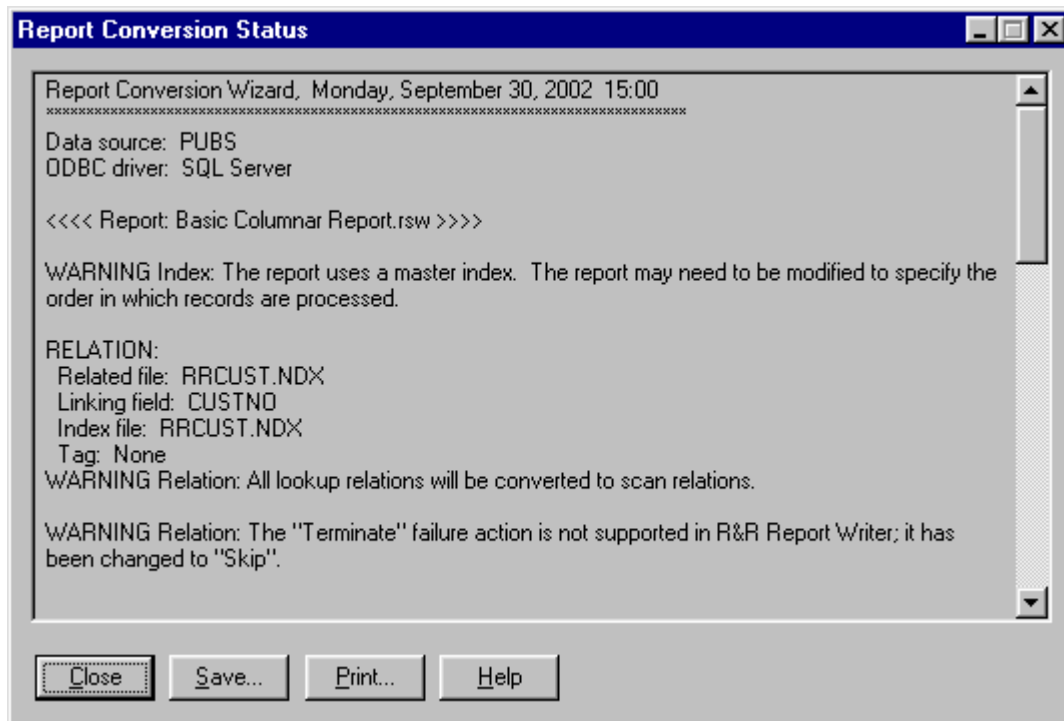
Adjust Column Names works much like the Adjust Table Names dialog. The original column names as they appear in your Xbase tables are in the *Old Column Name* column on the right.

You can specify how these columns are named in the new tables in the *New Column Name* column on the left. Select a column name in the list, press F2, and specify the new name.

Note that in order to adjust column names, the original table name that was saved with the report MUST also be contained in the selected data source. This restriction will be corrected in a later release.

Report Conversion Status dialog box messages

The Report Conversion Status dialog box provides details about the conversion process.



Report Conversion Status shows status of the conversion. The data source and driver and all converted reports are listed. Also listed are any notes, warnings, and errors from the conversion process. There are aspects of some .RRW reports that do not have exact translations in .RSW reports. If any of these warnings or errors occur during the conversion, they are reported in the log. The status log can be printed or saved.

Multiscan Workaround

The following scenario illustrates how an R&R Report Writer-style multiscan report converts in R&R SQL edition. The example shows the basics of the procedure. It can be used as the basis of the solution to a more complex case.

We have a master table, JOBS with these fields:

JOBS

JOBNO character job id

CUSTNO numeric customer id

We have two tables, SERVICES and MATERIALS, with the following fields:

SERVICES

JOBNO character job id

SCODE character service id code

CATEGORY numeric service category

HOURS numeric hours spent providing service

MATERIALS

JOBNO character job id

MCODE character materials code

QTY numeric units of material

In R&R Report Writer, one would set one scan from **JOBS** to **SERVICES**, and a second from **JOBS** to **MATERIALS** to set up the multiscan. Composite records returned would show first, say, all the **MATERIALS** records for the first **JOBS** record along with empty values for the fields from the **SERVICES** table. Next, the composites returned would show all the **SERVICES** records for that first **JOBS** record along with empty values for the fields from the **MATERIALS** table. After this, composites would be returned for the next **JOBS** record, and so on. Note the key point that for composites with data in the **MATERIALS** fields, the **SERVICES** fields are empty, and vice versa.

In R&R SQL, if you set a join from **JOBS** to **SERVICES** and then one from **JOBS** to **MATERIALS**, a very different set of composites would be returned. For each **JOBS** record, each matching **MATERIALS** record would be returned with data from every one of the matching **SERVICES** records. So, far more composites could be returned for each **JOB** and each **SERVICE** or **MATERIAL** could be returned multiple times rather than simply once.

In R&R SQL, a multiscan report must be simulated with a fairly complex user SQL report. It is done by doing the SQL **UNION** of two **SELECT** statements. The first **SELECT** return all the **MATERIALS** records for each **JOB** along with empty values for the **SERVICES** fields. The second **SELECT** returns all the **SERVICES** records for each **JOB** along with empty values for the **MATERIALS** fields. In addition, each **SELECT** returns a constant value that indicates which of the two **SELECTS** returned a given composite. The **UNION** of these two **SELECT** will return all the records from the first **SELECT** and all the records from the second **SELECT**. We call for the returned records to be sorted so that the records for a given **JOB** are grouped together, and within that grouping, all **MATERIALS** records are grouped together and then all **SERVICES** records. That is what the user SQL does in English. The following is how to say it in SQL:

```
select J.JOBNO, J.CUSTNO, M.MCODE, M.QTY, "", 0, 0, 1 from JOBS J,
MATERIALS M where J.JOBNO = M.JOBNO

union

select J.JOBNO, J.CUSTNO, "", 0, S.SCODE, S.CATEGORY, S.HOURS, 2
from JOBS J, SERVICES S, where J.JOBNO = S.JOBNO

order by 1, 8
```

The **ORDER BY** clause refers to the **J.JOBNO** field of each of the two **SELECTS** by its position in the column list; i.e., position 1. The second **ORDER BY** field is in position 8 and is the constant value 1 for the first **SELECT** and 2 for the second. This is the value the R&R report can test to decide which related table's data is being returned in any given composite record. Note that this numeric field can be used by report calculations in the same way the R&R Report Writer **SCANNING()** function's value can be used.

Note that for **SELECTS** to be combined this way with a **UNION**, the columns of the **SELECTS** must be consistent in data type and each select must return the same number of columns. Also, some databases allow for the keyword **NULL** to be used in place of the empty values we list explicitly in each of the **SELECTS**. If your database allows this use of **NULL**, that is the best choice for specifying an empty value.

There is one more step needed to finish the user SQL simulation of multiscan. R&R requires that every field of the composite in a user SQL report have a unique name. To do this, we make use of the RSW **DEFINE REPORTVIEW** construction, as follows:

```
define reportview JOBJOIN (JOBNO, CUSTNO, MCODE, QTY, SCODE,
CATEGORY, HOURS, SOURCE) as

select J.JOBNO, J.CUSTNO, M.MCODE, M.QTY, "", 0, 0, 1 from JOBS J,
MATERIALS M where J.JOBNO = M.JOBNO

union

select J.JOBNO, J.CUSTNO, "", 0, S.SCODE, S.CATEGORY, S.HOURS, 2
from JOBS J, SERVICES S, where J.JOBNO = S.JOBNO
```

order by 1, 8

R&R Report Shortcut Maker

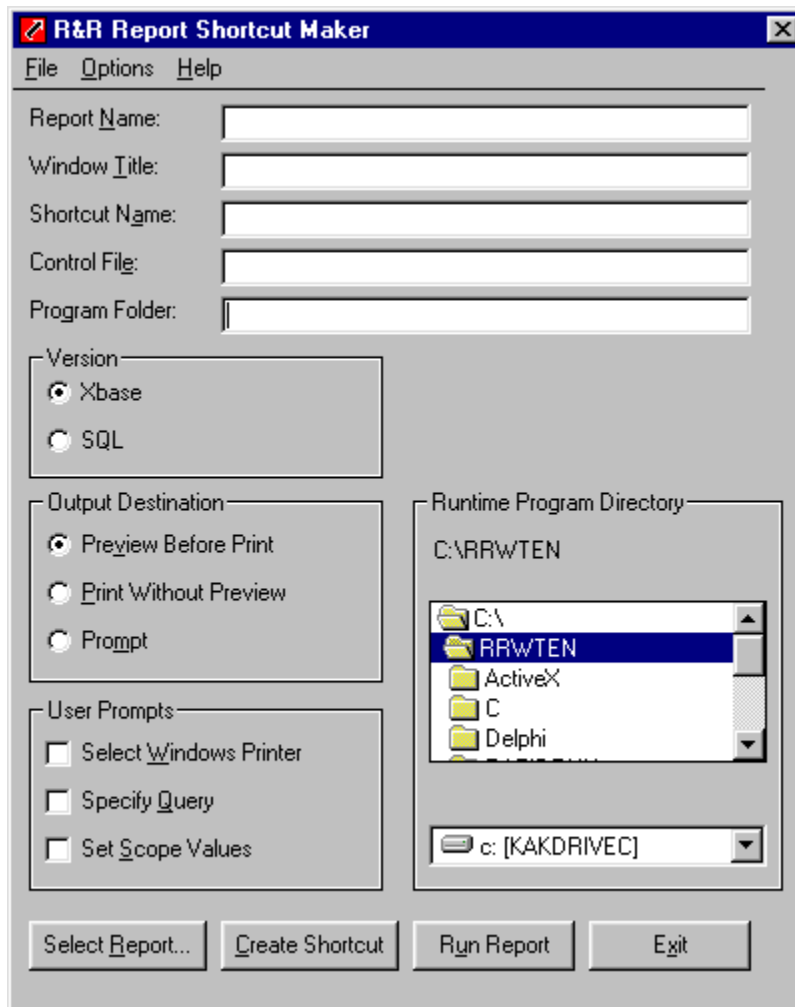
Report Shortcut Dialog

The Report Shortcut program (RRICON.EXE) allows you to create a window shortcut that allow you to directly execute a report through the runtime feature of R&R. When you click the report shortcut, the report will be executed using the options set by the shortcut maker.

Advantages of running reports using a report shortcut:

- No knowledge of R&R is required to run reports.
- Reports run through a shortcut do not use a Report Designer license. Only the runtime and report files must be available.
- Runtime prompting for user input can be provided with no programming required.

Below is the main dialog for the Shortcut Maker.



Each of the available options are explained below.

File Menu

Restore Settings

Restores settings to those current the last time settings were saved or when the Icon Maker utility was last executed.

Save Settings

Saves the current settings in RRICON.INI in the Windows Program directory.

Exit

Exits the Shortcut Maker Utility, discarding any changes.

Options Menu

Change Icon and File on New Report

If this setting is On (the default), the Window Title, Shortcut Name, and Control File settings will be changed appropriately if you select a different report; if this setting is Off, the previous Window Title, Shortcut Name, and Control File settings will be used when you select a different report.

Save Settings On Exit

When this setting is On (the default), Shortcut Maker settings are automatically updated in RRICON.INI when you exit the utility; when this setting is Off, RRICON.INI is not automatically updated on exit.

Restore Settings At Startup

When this setting is On (the default), the Shortcut Maker will use the current RRICON.INI settings at startup; when this setting is Off, RRICON.INI settings are not restored.

Settings

Report Name

Either enter the name of the report to be run or select a report using the Select Report button. If the report to be run is contained in a report library file, enter or select the library file name; you will then be prompted to select a report from that library

Window Title

Enter a title to be displayed in the Title Bar of the Viewer window, the print status window, and any dialog box prompts that appear when a report is executed with the Viewer.

Shortcut Name

Enter text for the caption that will appear below the icon created by the Shortcut Maker utility. This caption defaults to the Report Name; however, you can change it simply by replacing the default in the edit box.

Control File

The name of the text control file created by the Icon Maker; if necessary, you can change this name (default extension is TXT).

Program Folder

The name for the Program Folder in which the shortcut will be created.

Runtime Program Directory

Directory location for the Viewer executable, RRWRUN.EXE for Xbase reports or RSWRUN.EXE for SQL reports.

Version

Xbase

Create shortcut for an Xbase (.RRW) report using RRWRUN.EXE

SQL

Create shortcut for a SQL (.RSW) report using RSWRUN.EXE

Output Destination

Preview Before Print

At Runtime, the report will be displayed in a Preview window before the user prints it.

Print Without Preview

At Runtime, the report will be printed on the printer saved with the report or specified by the Runtime user (if the "Select Windows Printer" setting is on).

Prompt

At Runtime, the user will be presented with a prompt asking whether the report should be previewed or sent directly to the printer.

User Prompts

Select Windows Printer

When this setting is On, the user will be allowed to select a Windows printer for the report; when this setting is Off (the default), the report will be printed on the printer saved with the report.

Specify Query

When this setting is On, the user will be able to enter a query/filter or edit the query/filter saved with the report. When this setting is Off (the default), the report will be run using the saved query/filter (if any).

Set Scope Values

Available only when Xbase Version is selected.

When this setting is On, the user will be able to specify beginning and ending scope values; when this setting is Off (the default), the report will be run with the saved scope values (if any).

Action Buttons

Select Report

Displays the Open Report dialog to enable selection of a report.

Create Shortcut

After specifying all desired settings, select this button to create the Shortcut and icon.

Command line for the Shortcut Program Item will be in the form:

For Xbase:

<RunPath>\RRWRUN.EXE /T<RunPath>\<Control File>

where <RunPath> is the location of RRWRUN.EXE and <Control File> is the generated name of the text control file.

For SQL:

<RunPath>\RSWRUN.EXE /TT <RunPath>\<Control File>

where <RunPath> is the location of RSWRUN.EXE and <Control File> is the generated name of the text control file.

The <RunPath> and start in directory for the shortcut will be the directory selected in the shortcut maker.

Run Report

Immediately executes the specified report using the settings on this dialog.

Exit

Closes the Shortcut Maker dialog.