Rapid Runner™
2.5
User Guide



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# Rapid Runner Overview

#### **Features**

Rapid Runner allows you to create report set files. A report set is a collection of R&R reports and can contain as many reports as you wish. A set may contain both Xbase and SQL reports. You can then run individual reports within the set or the entire set directly from Rapid Runner. Rapid Runner then calls the appropriate version of R&R runtime to execute the report.

Rapid Runner allows you to:

- Quickly modify various runtime settings without using R&R.
- Copy settings from one report item to another. For example if you set one report to run with a certain date range, you can copy that setting to all the reports in the set.
- Run individual reports to the screen, printer or export file without using the R&R Report Designer.
- Run a whole set of reports upon request or at a specified time.
- Consolidate the output of multiple reports to a single database file.

### **Advantages**

Running reports using Rapid Runner has the following advantages:

- No programming knowledge is required.
- You don't tie up an R&R license just to run reports.
- You can save time by running reports more efficiently.
- You cannot inadvertently make unwanted changes to a saved report.
- You can seamlessly run both Xbase and SQL reports.
- You can perform database consolidation of data from multiple platforms and data sources.

# File Summary

Rapid Runner uses the following files.

Note that this is only a *partial* and not a complete listing of the files required to run reports through Rapid Runner.

Filename	Purpose	Location
RAPIDRUN.EXE	Main program file	\RapidRun subdirectory within R&R program location
RAPIDRUN.HLP	Help file	\RapidRun subdirectory within R&R program location
RRWRUN.EXE RSWRUN.EXE	R&R Xbase and SQL runtime executables	Progdir32 directory listed in \windows\R?W.INI
RRRPT32.DLL RSRPT32.DLL	DLL interface that Rapid Runner uses to communicate with R&R	\windows\system

### What's New in 2.5

The following summarizes the changes and new features for Rapid Runner Version 2.5.

- Rapid Runner runs on Vista and aupports both Xbase and SQL reports.
- Report output may be appended to an existing database file.
- Report sets are now saved with the file extension .SET.

### **Compatibility with earlier releases**

- You can open and run report sets created with earlier versions of Rapid Runner. But if you make modifications, the set will be saved in 2.x format and will not be available for use with earlier Rapid Runner versions.
- Rapid Runner 2.5 can run reports created with any Windows 6.5 or above release of R&R for Xbase or SQL and any report created in the DOS Xbase version of R&R.

### Consolidation to a single DBF

Rapid Runner now allows you to output a report to an existing database table. Using this feature you can combine multiple data tables into a single table. For example, you may have separate sales journals for dozens of outlets of a retail store. Using Rapid Runner you can now combine this data into a single file and then can even in the same Rapid Runner set, run additional reports based on the consolidated file. And since consolidation is available for both SQL and Xbase reports, you can use this feature to combine data from for example an Oracle database on your server and a DBF file that you maintain locally.

To use this new feature, select the Runtime Setting Report Destination. From the Destination menu select Consolidate (DBF) and in the Output File box, select or enter the Output filename. When the report is executed, if the Output file does not exist (such as if this is the first report in a consolidate series) it will be created. If the Output File does exist, then the output of the current report will be appended to the existing file.

When you are using consolidation for several reports, the first time that a consolidate report is sent to the output file, the structure (fieldnames and data types) of the file will be created. For subsequent consolidated reports, only those same fieldnames/data types will be appended.

For example, you may have a SQL Server table that you are sending to a consolidated file. The structure of the output file becomes:

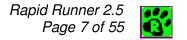
CUSTNO Numeric (8,0)
COMPANY Char (25)
ADDRESS1 Char(100)
ADDRESS2 Char(100)
CITY Char(30)
STATE Char(2)
ZIP Char(10)

The local DBF file that you want to consolidate with the SQL Server data has the structure:

CUSTNUM Char (8)
CUSTOMER Char (25)
ADDR1 Char(100)
ADDR2 Char(100)
CITY Char(30)
STATE Char(2)
ZIP Char(10)

The local DBF contains similar data but some of the field names and data types are different from the SQL Server file.

To allow for consolidation, in the second report against the local DBF file, you need to create calculated fields whose names and data types will match those in the SQL Server consolidated DBF.



You will then create the following calculations in the DBF report:

FieldName Expression

CUSTNO VAL(CUSTNUM)
COMPANY CUSTOMER
ADDRESS1 ADDR1
ADDRESS2 ADDR2

You can then place these 4 calculated fields along with the database field CITY,STATE and ZIP on the layout and when you consolidate this report to the same output file in Rapid Runner, you will get data from both tables in a single output file.

**Note:** If you select a consolidate DBF file that was created by a database application rather than via a R&R or Rapid Runner export, make sure that it does not contain any memo fields in it's structure or the Rapid Runner consolidation may fail on an error.

# **Quick Start**

Here are some basic instructions to get you started running reports with Rapid Runner.

### Creating a Report Set

A Report Set in Rapid Runner is a collection of R&R reports that you can run individually or all at once. When you run Rapid Runner, you start with an empty report set.

You can create a new report set by clicking the **New** button on the toolbar or by selecting File->New from the menu bar.

#### **Adding Reports to the Set**

- 1. Click the **Add Report** button on the tool bar or select Reports->Add from the main menu. You can also use the keyboard shortcut Ctrl+Ins to add a report.
  - This will bring you to a report file selection dialog.
- 2. Choose the report you wish to add and then Click the Open button.
- 3. Repeat steps 1 and 2 for as many reports as you want. You can even add the same report more than once should you wish to run it multiple times but with different selected options. When you add a report, its name will appear in the report list and either (Xbase) or (SQL) will be displayed after the name to indicate the report type.

#### **Modifying Report Settings**

Select a report from the set listing on the left and then use the controls on the right side of the screen to modify any of the available settings. These settings will be activated when the report is run, but will not change the saved report.

#### Running Reports in the Set

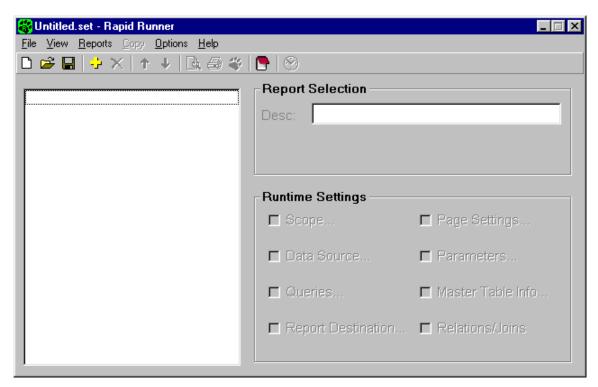
Use the **Preview** or the menu choice <u>Reports->Preview</u> this Report or the keyboard shortcut Ctrl+V to preview a single report. To run single report use <u>Reports->Run</u> this Report or the Ctrl+U keyboard shortcut.

Use the **Run Set** button or Ctrl+R to run the whole set.

To run the set at a specified time, click the **Timer** button on the toolbar. Note that Rapid Runner must be running for the timer to launch reports.

# The Rapid Runner Main Window

The main Rapid Runner Window consists of a top-level menu with a toolbar immediately below. As reports are added to a set, they are displayed in the white report list pane on the left. In the upper right pane, the Report Selection Desc: box displays the selected report name as it appears in the report list window. Immediately below the Desc, the full path and filename of the report is displayed. In the lower right pane, there are several Runtime Settings checkboxes. Clicking on any one of these will open a dialog box where you can select a variety of options to apply to the execution of the selected report.



# The Rapid Runner Menu

The Rapid Runner menu has 6 available choices. The following section lists each of the submenu choices that can be selected.

### <u>F</u>ile Menu

Command	Purpose
New (Ctrl+N)	Display a blank report set.
Open (Ctrl+O)	Open an existing set.
Close	Close the current set
Save (Ctrl+S)	Save the current set
Save As (Ctrl+A)	Save an unsaved set, or save a saved set under a new name.
Exit	Exit from Rapid Runner

### <u>V</u>iew Menu

Command	Purpose
Log (Ctrl+L)	Displays the log file for the current set.
<u>I</u> nstructions (Ctrl+I)	View or edit the instructions for the current set.

### **Reports Menu** (also available by right-clicking on the report item list)

Command	Purpose
Add (Ctrl+Ins)	Add a report to the current set
Delete (Ctrl+O)	Delete selected report from the current set
Move <u>U</u> p	Move the selected report item up in the list
Move Do <u>w</u> n	Move the selected report item down in the list
Duplicate	Add a copy of the current report item to the report set
Pre <u>v</u> iew this Report (Ctrl+V)	Display the selected report to the screen
R <u>u</u> n this Report (Ctrl+U)	Run the selected report
Run Set (Ctrl+R)	Run all the reports in the set, one after the other

## Copy Menu

Command	Purpose
<u>S</u> cope	Scope is available for Xbase reports only.
	Displays a screen allowing you to either search for specific scope values and replace them in all report items in the set, or copy the scope settings of the current report item to other Xbase report items in the set
<u>P</u> arameters	Displays a screen allowing you to copy parameter settings from the current report item to other report items in the set
<u>Q</u> ueries	Copy the query from the current report item to other report items in the set
P <u>r</u> inter	Copy the selected printer from the current report item to other report items in the set

## Options Menu

Command	Purpose
<u>F</u> ile Settings	Display the File Settings screen for setting
	default locations and log viewer options

### Help Menu

Command	Purpose
Contents	Display the main help screen
Search for Help on	Run help and open the Search screen
<u>A</u> bout Rapid Runner	Display Rapid Runner version and copyright information

# The Rapid Runner Toolbar

Below the Main Menu, there is a shortcut toolbar that allows you to quickly perform many Rapid Runner tasks.

Toolbar Button	Menu Bar Command	Purpose
	<u>F</u> ile-> <u>N</u> ew (Ctrl+N)	Create a new report set
<b>2</b>	<u>F</u> ile-> <u>O</u> pen (Ctrl+O)	Open a report set
	<u>F</u> ile-> <u>S</u> ave (Ctrl+S)	Save the current report set
÷	Reports->Add (Ctrl+Ins)	Add a report item to the current set
×	Reports->Delete	Delete the selected report item from the set
1	Reports->Move Up	Move the selected report item up
<b>V</b>	Reports->Move Down	Move the selected report item down
D.	Reports->Preview this Report	Preview the selected report
<b>4</b>	Reports->Run this Report	Print or export the selected report
*	Reports->Run Set	Run the entire set
<b>•</b>	View->Log (Ctrl+L)	View the log file for this set
[À	Only available from toolbar	Set a time to run the set

# File Settings

Selecting File Settings from the Options menu allows you to modify the following settings:

Location of reports sets	Default directory for opening and saving report sets.
Location of reports	Default directory for selecting report libraries or report files.
Data directory	Applies to Xbase reports only. Directory used to locate tables and indexes when they cannot be found in the locations saved with the report.
Default data source	Applies to SQL reports only. You must have SQL report selected to activate this choice.  The default selected here will become the default value when the Runtime Settings Data Source box is checked.
Export directory	Default directory selected for Output Files in Report Destination.
Index type	Applies to Xbase reports only. Used when indexes cannot be located using the extension saved with the report.
Log viewer program	Program used to view the log file that is updated each time a report set is executed.
AutoPurge	When the AutoPurge box is checked, RapidRunner checks the size of the Log File when the set is opened. If the size is above the limit set in the If over box, you are asked if you want Rapid Runner to purge down to the lower size set in the reduce down to box by removing the oldest data.

Within the File Settings dialog you can click the File button to the right of a selection box to choose values from a list.

If you enter an invalid value for any item, a warning message will be displayed when you press  $\mathbf{OK}$  to save changes.

Rapid Runner saves all selected settings to the Windows registry.

# Creating Report Sets

#### **Brief Overview**

Creating a report set involves the following steps:

- Create a new, blank report set.
- Add one or more reports to the set. As you add reports, they will be listed in the large white Report Items list box on the left side of the Rapid Runner screen.
- Save the report set.

Once a report item is included in a set, you can modify its runtime option settings.

### **Creating a New Report Set**

When you open Rapid Runner, an empty Report Set is automatically displayed with the default name of Untitled.Set.

If Rapid Runner is already running, you can create a new set by selecting New from the File menu, or clicking on the *New Set* button on the toolbar.

#### Saving a Report Set

You save a report set using the menu choice File->Save or the keyboard shortcut Ctrl+S. To save an existing report set using a different file name or location, you use File->Save As (Ctrl+A). Set files by default are given the file extension .SET and are saved to the report set directory specified in Options->File Settings.

# Opening a Report Set

### Opening a Set File

You can open a report set in the following ways:

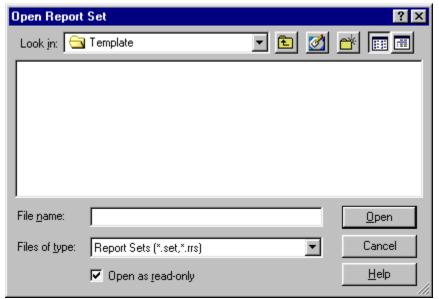
- Select Open from the File menu.
- Click on the Open button on the toolbar.
- Select a set name from the Recently Opened Files list at the bottom of the File menu.

#### **Read Only Set Files**

When you open a report set as Read Only, you can change settings and run reports, but you can't save the report set under the original name.

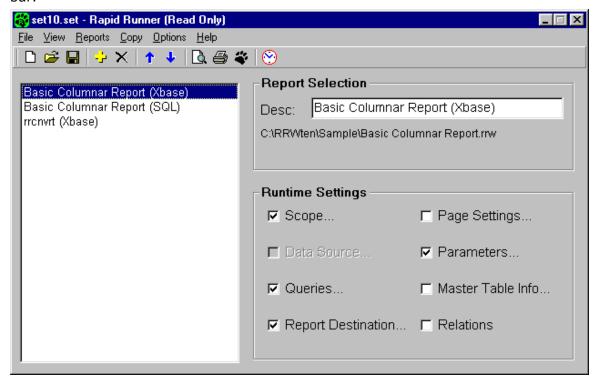
You can open a report set Read Only in the following ways:

• Check the Open as read-only box in the File Open dialog box



- Open a report set that is write protected. A file may be write protected due to the setting in Windows, or due to network permissions.
- Open a report set that is in use by another user. See File Locking below.

When you open a report set Read Only, the text "(Read Only)" appears in the title bar.



### **Set File Locking**

When someone opens a Rapid Runner report set, the set file is locked so that other users cannot open it for editing. This is to prevent two users from editing the same file, then saving over each other's changes. When the first user closes the file the lock is released.

# The Report Items List

The Report Items List is the large white box on the left side of the Rapid Runner screen. The Report Items List displays the Description for each report item in the current set.

You can select a report item from the list using either the mouse or the keyboard up/down arrow keys. Rapid Runner then loads the Description and the various Runtime settings for that item in the Report Selection and Runtime Settings boxes on the right of the screen. You can view and modify runtime settings for the selected report by clicking on a setting.

### **Adding Reports**

You add reports to a set using a Select report or Library file dialog. Rapid Runner uses the Default Report Directory that is set in Options->File Settings for this dialog. In the files of type drop down you can choose to display:

```
All report files (*.RRW,*.RSW,*.RP5,*.RP6,*.RP1)
Xbase Report Files (*.RRW,*.RP5,*.RP1)
SQL Report Files (*.RSW,*.RP6)
All files (*.*)
```

When you select a report, it is added to the end of the report list. The order in which the reports are listed is the order in which they will be executed. Note that you can add the same report more than once in a set if you wish to run it more than once. You can include both Xbase and SQL reports in a set. If you select a report library file, which can contain multiple reports, after you select the file name, a second Open Report dialog will list the individual report names within that library. Select the report you wish to add then press OK.

#### **Managing Items in the Report Items List**

There are several ways that you can manage the report items list. You can add, delete, duplicate and re-order report items in the list by:

- Using the Reports menu.
- Right clicking on the item in the list and select a menu choice.
- Using the appropriate button on the toolbar.
- By selecting and dragging a report item with the mouse to change its position in the list.

If you add more reports to a set than will fit in the report items window, vertical scroll bars are automatically added so that you can scroll through the list.

### **Naming Report Items**

When you add a report to a set, the default name that appears in report items list is the name of the report followed by either (Xbase or SQL) to indicate its file type. You can change this default by selecting the report from the list and then editing its name in the Desc: box in the Report Selection pane on the upper right. As you type in the Desc box, the report list name will immediately change. The actual name and pathname of the report does not change and is always displayed in the area below the Desc: box. Report Descriptions do not need to be unique within report set. You may want to change a report description if you are running the same report more than once in a set.

# Running Reports

The following methods can be used to run reports using Rapid Runner.

- Preview or run a single report within a set
- Run all of the reports within a set
- Schedule a set to run at a specified time using the Rapid Runner timer
- Run a report from a command line or Windows shortcut

Each of these methods is described below.

#### Previewing or running a single report

There are several ways that you can execute a single report. For each method you must first you must select the report item from the Report items list on the left. The name of the selected report will be listed in the Report Selection box on the right. Then:

- Click the Preview or the Run button from the toolbar
- Select Reports->Preview This Report or Reports->Run this Report from the main menu
- Right click on the selected report item to display the shortcut menu and then select Preview this report or Run this Report from the menu
- Use the keyboard shortcut Ctrl+V to Preview or Ctrl+U to run the selected report

### Running All the Reports in a Set

To run all of the reports in the current set you can:

- Click the Run Set button on the toolbar
- Select Reports->Run Set from the main menu
- Use the keyboard shortcut Ctrl+R

Each report in the set will then run in sequence.

#### Scheduling a Report Set to Run at a Specified Time

To run a set at a specific time, click the Timer button on the toolbar. This will open the Timer Settings dialog.



You can use the Copy Time button to copy the current date and time to the Date and Time fields. You can then use the up/down arrows to set the desired date and time. The Clear Timer button erases any settings. Click on the Set Timer button to turn on the timer. When the timer has been activated, the date/time that has been set will appear on the Rapid Runner toolbar just to the right of the timer button. The set will then automatically be run at the pre-set time. Note that you must leave Rapid Runner running for the timer to work. When you save the set, the date and time settings are also saved.

#### **Canceling a Running Set**

When a report set is running, the Run Set button changes to a Cancel button. When you click on the Cancel button, Rapid Runner stops sending reports in the set to the R&R run time module. After choosing Cancel, you may have to also cancel the currently running report. The status window for the running report may be hidden behind other windows.

#### Running a Report Set From the Command Line

You can run Rapid Runner so that it automatically runs a specified report set and then closes. This would be useful if you have a scheduling program that you want to use to run a report set on a daily or weekly basis. This is especially efficient if no settings need to be changed every time the report is run - the report always runs off of current data or uses the system date to query records.

To do this, you invoke the Rapid Runner executable with two command line parameters each separated by a single space. The first parameter is the name of the set and the second is a /run.

For example if the Rapid Runner executable is installed in C:\Program Files\RRVer10\RapidRunRunner and the set you wish to run is C:\My Documents\Rapid Runner Sets\Daily.set

The command line would be:

"C:\Program Files\RRVer10\RapidRun\RapidRun.exe" "C:\My Documents\Rapid Runner Sets\Daily.set" /run

This will run Rapid Runner, open the set Daily.set, run the set, and close Rapid Runner.

## **Report Set Instructions**

Selecting View->Instructions opens a Report Set Instructions dialog where you can enter text that will be saved with the report set and available when the set is opened. Examples of items you might include in report set instructions include:

- Steps to complete before running the set, like updating indexes.
- How to use the output when a report is exported to a file.
- How the scope settings should be set.

If you check the Display when set is opened checkbox, then when the set is opened, the instructions window will automatically be displayed.

# Report Set Log Files

When a report is run (not previewed), an entry is added to the report set's log file. The log file is a text file that is saved in the same directory as the report set, with the file extension .log. So if you have a set called DAILY.SET the log file would be DAILY.LOG.

The log entry includes the start time, end time and elapsed time for the report, as well as the scope, query and parameter values used to run the report. If an error occurs while trying to run the report, that is also included.

You can view the Log File by selecting View->Log (Ctrl+L) from the main menu or by selecting the log file button on the toolbar.

By default, the log is displayed using Notepad. You can change this default by entering the path and filename of the viewer file in the Log viewer program box in the **Options->File Settings** screen.

For example if you wanted to use WordPad, you would enter:

"C:\Program Files\Accessories\Wordpad.exe"

The quotes are required since the path name contains spaces.

You can automatically delete old log entries when the log file exceeds a certain size by checking the AutoPurge box in **Options->File Settings** and entering values for the If over and reduce down to byte settings.

If the Log File is deleted or moved, a new one will automatically be created the next time the set is run.

# **Runtime Settings**

There are 8 available runtime setting items that can be changed for individual report set items. These settings are used to modify how a particular report item is run. For example you could have a sales report listed twice in the report list. The first one could report on July sales only and the second could show total sales for the year. Runtime settings are saved with a report set but make no changes to the actual saved report files.

Some runtime items are available for Xbase or SQL only. Other change in name depending on whether the selected report is an Xbase or an SQL report. If a setting is not available to a selected report, it will be dimmed. To view or modify a setting, click on its name to display the dialog box for that setting. Each runtime item has a checkbox to its left. When an item is changed, then that checkbox is checked.

The following runtime settings are available:

Setting	Purpose
Scope	Used to change range of records to include from the master table (Xbase only)
Data Source	Used to set a data source and any required user name and password (SQL only)
Queries/Filters	Used to change record selection criteria
	For an Xbase report the displayed setting name is Queries For a SQL report the displayed setting name is Filters
Report Destination	Used to select output destination, printer, and an output filename for file destinations
Page Settings	Used to set the number of report copies and the output page range
Parameters	Used to supply values to any RIPARAM() calculated fields in the report
Master Table Info	Used to change the saved master table for the report
Relations/Joins	Used to change saved related/joined tables For an Xbase report the displayed setting name is Relations For a SQL report the displayed setting name is Joins

# Scope (Xbase Reports only)

**For Xbase reports only**, you can use the Runtime Scope Setting to limit the records that are read from the master file. When you select Scope from the main window, a Scope dialog is presented.



The Report Settings box in the Scope dialog shows the starting and ending range of records from the master file that are contained in the saved report. These values represent record numbers if a report does not have a saved master index, or index key values if there is a master index. If the saved report does not have a saved scope, the value will be shown as a horizontal line.

In the Runtime Settings box of the Scope dialog there are 3 controls. The first is the Usage drop down list. This allows you to choose:

Usage Value	Runtime Behavior
Use Report Settings	Run report using the saved From and To Report Settings
Override Report Settings	Enables the From and To boxes so you can enter new values
None	Run report using all master file records, ignoring any saved Report Settings

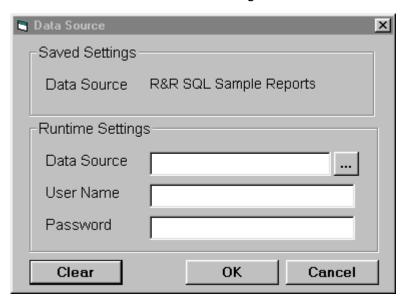
If you select Override Report Settings in the Usage field, then the From and To fields are enabled. Any values that you enter will be used to limit the records that are returned from the master file. If you leave box either empty it will default to the lowest or highest value index or record number value. Note that the range you set fully includes the endpoints. For example, if you enter A as a From value and M as a To value using a Master Index based on the character field COMPANY, the report will read all COMPANY records from the first COMPANY beginning with A to the last COMPANY beginning with M.

#### **Copying Scope**

If you make a Scope selection for one Xbase report item, you can copy that setting to other Xbase report items in the set. See Copying Scope Settings\_for more information.

# Data Source (SQL Reports only)

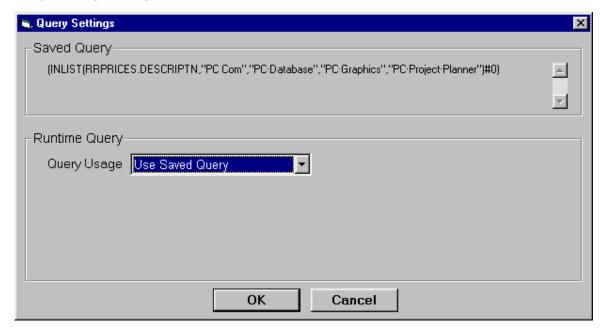
The Data Source runtime setting is only available for SQL reports. Selecting this option brings you to a Data Source dialog where you can select an available data source name to override the saved data source and where you can enter a User Name and Password that will used to log into the saved or re-reselected data source.



## Queries/Filters

Queries(Xbase) and Filters(SQL) are used in R&R reports to limit the records included in a report.

Rapid allows you to enter a set of query lines to replace or further filter the query saved in your report. Selecting the Runtime Setting Query/Filter bring you to the Query Settings dialog.



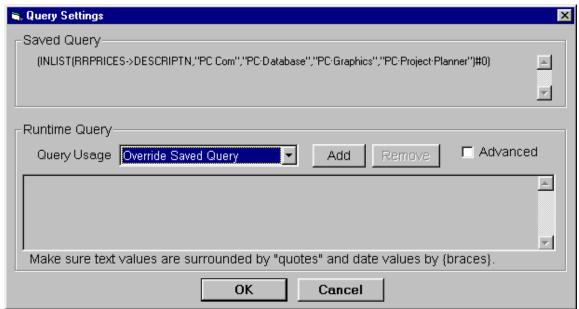
The upper area of the Query/Filter dialog will display any query conditions that are saved within the report. If there is no saved query, the text (None) will be shown. For lengthy expressions, the vertical scroll bars to the right can be used to navigate the full expression.

In the lower Runtime Query section of the dialog, there is a Query Usage drop down box where you can select from the following choices:

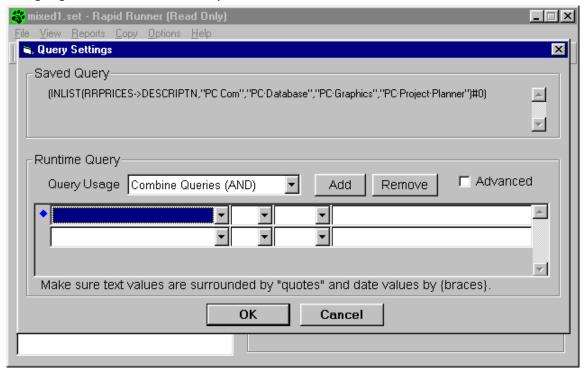
Usage Value	Runtime Behavior
Use Saved Query	Run report using the listed above.
Combine Queries (AND)	Add additional query conditions to those saved with the report. Selecting this option provides additional selection choices described below.
Override Saved Query	Replace the saved report query. Selecting this option provides additional selection choices described below.
No Query	Run the report without ANY query condition.
Build at Runtime	When the report is run, it will display the saved queries as they would be displayed in R&R and then wait for user input. You can then modify them as you would in R&R. When you click OK, the report runs with your temporary settings.  Note that you should only use this setting if the report/set will be interactively run since user input is required for the report to execute.

### **Runtime Query Criteria Builder**

If you select the Query Usage value of **Combine Queries (AND)** or **Override Saved Query** the Runtime Query section enables additional selection choices.



Clicking the Add button adds an empty query builder row to the dialog and also enables the Remove button. If you Add multiple rows, the currently selected row is highlighted with a diamond symbol at the start of the row.



Each row contains four separate boxes that allow you to build a single query clause. In the first box, you select a comparison field from the drop down field list. The second dropdown list in the query row can be blank or you can select the drop down choice of Not. Selecting Not acts to reverses the action of the operator that you select in the third drop down list.

The available operators are:

Operator	Description
=	Equal to
>	Greater than
>=	Greater than or equal to
<	Less than
<=	Less than or equal to
InRange	Included within the range of two inclusive values
InList	Included within a list of values
Like	Matching the display pattern (SQL only)
IsNull	Is an empty/null value <b>(SQL only)</b> Selecting this operator disables the 4 <sup>th</sup> compared to box.

The final box is a text entry box where you enter the compared to value to be used for that query row.

#### **Rules for entering Comparison Values**

Character values must be enclosed in quoted delimiters.

Examples:

"O'Brien"

'Accounting Dept'

- Numeric values must consist of only signs, decimals and digits.
- Date and Date time values must be enclosed in curly braces.

Examples:

{01/31/2002}

{09/06/1974 10:15 am}

• The Inrange operator requires two values separated by a single comma.

Examples:

100,500

"A","D"

• The Inlist operator requires a single comma separated list of at least two elements.

Examples:

100,500,100

`MA','CT','RI','ME','VT'

- The SQL Like operator uses ? and \_ as single character wildcards and % and
   \* as multiple character wildcards.
- For Xbase reports only, the Equals operator uses ? as a single character wildcard and \* as a multiple character wildcard.

See the R&R Report Designer documentation for more information on using wildcards.

If you enter values that violate the above rules, you will not get an error when the query row is created or the set is saved. But when you run the report, you will get an error message that will point to a problem with RI\_FILTER. You can consult the R&R Developing Applications documentation for more information.

### **Adding and Deleting Query Rows**

To create additional query rows, click Add.

To delete a query row, select the row and then click Remove. Note that each query row is applied as an AND condition so that records are selected only when they meet each condition.

#### **Advanced Runtime Queries**

If you need more flexibility in specifying record selection criteria, you can click the Advanced check box instead of Adding query rows. This will give you a text box where you can enter a logical expression that will be used (for Override Saved Query) or AND appended (for Combine Queries as your runtime query. This box uses the same syntax as required for an R&R calculated field that returns a logical value. For more information, consult the R&R Report Designer documentation.

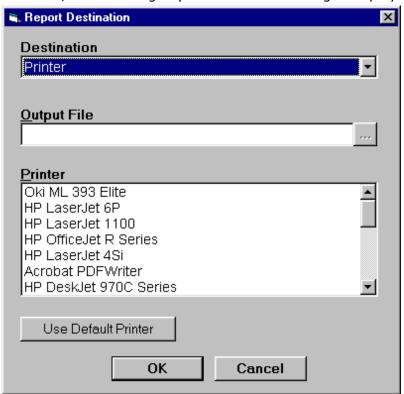
Note: If you enter query rows and then select Advanced, your query rows will be cleared.

#### **Copying Queries**

If you make a Query/Filter selection for one report item, you can copy that setting to other report items in the set. See Copying Queries/Filter for more information.

# **Report Destination**

The Report Destination options allow you to send the results of a report to a file or a specific printer at run time. When you select the Runtime Option of Report Destination, the following Report Destination dialog is displayed.



There are three sections in this dialog. The first is the Destination drop down list. The Available choices in the Destination list are:

Item	Description
Printer	Send report directly to the selected printer
Print to File	Output report to the selected output filename
Text File	Output the report as an ASCII text file to the selected output filename
Text Data File *	Output the report as a text data file to the selected output filename
Xbase (DBF) *	Output the report as a DBF file to the selected output filename
Consolidate (DBF)*	Append the report output to the to the selected output filename
HTML (HTM)	Output the report in HTML format to the selected output filename
MS Word Merge *	Output the report as a word merge text file to the selected output filename
Rich Text (RTF)	Output the report in RTF format to the selected output filename
Worksheet (XLS) *	Output the report in worksheet format to the selected output filename
Prompt at Runtime	Provide the user with an destination dialog at runtime

The second section is the Output File box. If you have selected one of the file output choices in the Destination menu, the file name that is entered in the Output file box will be used. You can enter a filename or use the file button to display a file dialog.

If you choose a file based Destination but not an Output File name, then the output filename then any output filename that was saved with the report (for the specified destination, e.g., Xbase) will be used. If there is no file selected in the report, there will be an error when you run it.

The default *Export directory* can be set in the File Settings screen.

When running a report that sends output to a file, you will not be warned about replacing an already existing file. This is so that report sets will not be interrupted when running.

The Destination choices that have an asterisk in the listing above are band based file exports. This means that only a single selected band line from the report is actually output to the file. The default band line for export is a record band line. However if a report has been saved in the Report Designer with an export choice that selects a different band line for that export format, then that band line will be used. The same holds true for other file output options. For example, in the Report Designer, the Text Data Option offers four different file types, CSV, Tab Separated, Fixed Width and Character Separated. If a report is saved with Text Data options of Fixed Width, Group 1 footer selected, when Text Data is selected in Rapid Runner, those same options will be used.

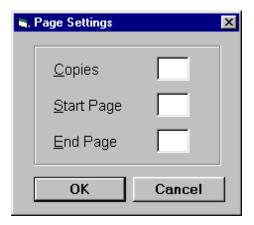
The third Printer list box allows you to select from the list of available printers, or click Use Default Printer to remove your selection and use the current Windows default printer.

#### **Copying Printer Settings**

If you make a printer name selection for one report item, you can copy that printer name selection to other report items in the set. See Copying Printer Settings.

# Page Settings

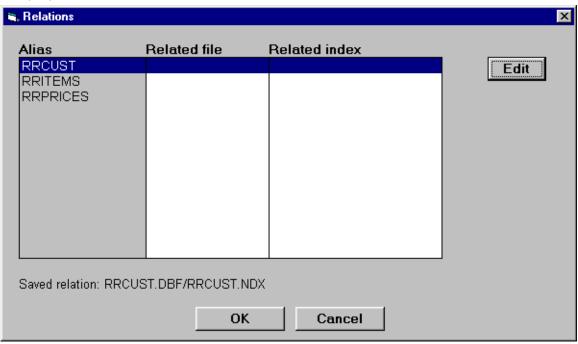
Selecting Runtime Page Settings allows you modify the following print settings:



Copies	Specify the number of report copies to be printed This setting only applies to reports that are output to a printer
Start Page	Specify the starting page number
End Page	Specify the ending page number

## Relations/Joins

Relations are used to include other tables in a report besides the master table. Rapid Runner allows you to change related tables (and for Xbase only related indexes) at runtime. The advantage to this is that instead of having two reports that access similar data, you can have one report. If you decide to change the design of the report, you only have one to worry about. When you select the Runtime Setting Relations (Joins is displayed for SQL) the Relations/Joins dialog is displayed.

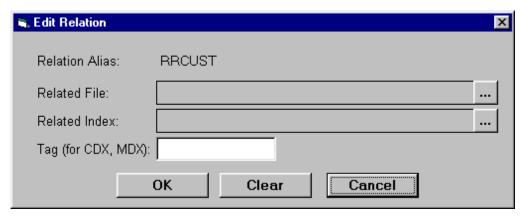


#### The Xbase Relations Screen

The leftmost column in the relations screen shows a listing of the alias names for all the relations in the saved report. For reports having no related tables, this list will be empty. As you select an alias in the list, the table and index that define the relation are shown below the table list box.

The second and third columns show any related file and related index replacements that have been selected.

To change a relation, double-click on its line or select it and click the Edit button. This will bring you to the Edit Relation dialog.

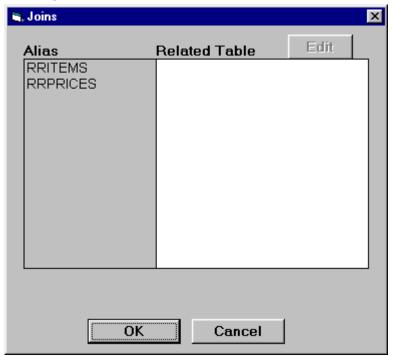


The Edit Relation dialog has a selection box for both the related table and for the related index. You can change either or both of these settings. You click the File

button to the right of the table and index selection boxes to choose a file from an explorer window. If the selected index is a compound index (having a CDX or MDX file extension) you will also need to provide the tag name that you wish to use. You can consult the R&R Report Designer documentation for information on compound index tags.

To remove a selected table or index, select the Clear button from the Edit Relation dialog.

## The SQL Joins Screen



The leftmost column in the joins screen shows a listing of the alias names for all the relations in the saved report. For reports having no related tables, this list will be empty. As you select an alias in the list, the table defines the relation is shown below the table list box.

The second shows any Related table replacements that has been selected.

To change a joined table, double-click on its line or select it and click the Edit button. This will bring you to the Edit Join dialog.



The Edit Join dialog has a selection box for the related table. Click the File button to the right of the related table box to select a different table.

To remove a selected table, select the Clear button.

### **Parameters**

Parameters are a powerful and flexible way to communicate with R&R reports at run time. Parameters allow you to design R&R reports so that information is provided to the report at runtime rather than being hard coded within the report.

R&R Report Designer provides a parameteRR field type. When a parameteRR field is used in a report, when the report is executed a parameteRR value entry screen is presented so that the end user can enter values. You can consult the R&R Report Designer documentation for more information on designing reports with parameteRR fields.

If a report containing parameteRR fields is included in a Rapid Runner set, the parameteRR value entry screen will be displayed so that the end user can input field values. Since report sets may be run at times when a user may not be present (such as a set that is run nightly) the parameteRR value entry screen has a default timeout value. If no user input is made within the timeout period, then the report will proceed using the default values for each parameteRR field.

Since there may be circumstances where you need to provide unattended input to a report, R&R offers an alternative method to pass a parameter to a report using calculated fields with a special RIPARAM() function. The RIPARAM function takes a string as its argument and at runtime evaluates the contents of a parameter value whose name is the name of the RIPARAM() string. The Parameter runtime setting in Rapid Runner works directly with RIPARAM() calculated fields so that you can use Rapid Runner to pass values to a report.

Working with parameters involves the following steps:

- Use R&R to create a calculated field in the report that uses the parameter name from Rapid Runner with the RIPARAM functions.
- For number and date quantities, convert using VAL and CTOD.
- Use advanced calculations for reports that will be run from R&R and Rapid Runner, or for using parameters to query on a list of values.
- Create a parameter in Rapid Runner to set the runtime value for the RIPARAM()
  calculated field.

The following example will help to illustrate the use of an RIPARAM() field along with a Rapid Runner runtime parameter.

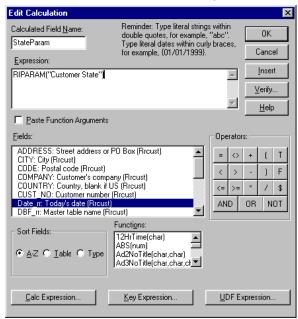
## **Example of Using a Parameter in a Report**

You have a simple report titled *Customer List* based on a table *CUST.DBF*. You want to use a query to display only the customers from one state, but the state will change every time you run the report. We will show how to do this by creating a parameter named "Customer State" (the name chosen is arbitrary), and using it in the report's query.

**1.** Use R&R to create the following calculated field in the report.

R&R Field Name: StateParam (any legal field name is OK)

R&R Field Formula: RIPARAM("Customer State")



**2.** Create a query in the report.

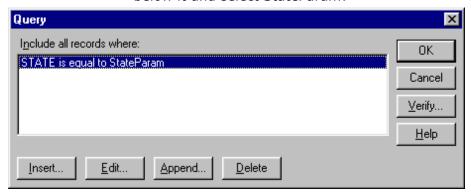
3.

Field: STATE

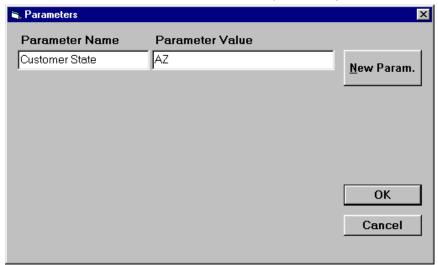
Comparison: equal to

Compared To: Type StateParam (without quotes), or click in the Compared To box, click on the Field... button just

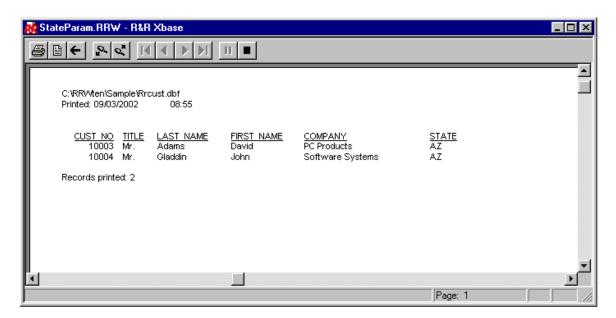
below it and select StateParam.



- 4. Add this report to a Rapid Runner set.
- **5.** Select the report and choose Parameters from the Runtime Settings box.
- **6.** Define the Parameter Name as Customer State (this was the text inside the RIPARAM calculation)
- **7.** Define the parameter value as AZ (Note that you do not need to add any text delimiters to the value that you enter)



When you run the report from Rapid Runner, the value "AZ" will be passed to the report in the parameter *Customer State*, so the resulting query will be STATE= "AZ" and only Arizona customers will be displayed.



### **Important Note on using Parameters in Reports**

Parameters are always passed to R&R reports as character fields. If you want to use a parameter to query on number or date fields, you must convert the text using the VAL or CTOD function.

These examples can be created using a simple report based on the a table called ORDERS.DBF

Parameter for a numerical field using ORDERS.DBF

Parameter Name: Customer Number

Parameter Value: 10001

R&R Calc Field Name: CustParam

Database Field: CUSTNO (Numeric datatype)

R&R Field Formula: VAL(RIPARAM("Customer Number"))

Report Query: CUSTNO is equal to CustParam

Parameter for a date field using ORDERS.DBF

Parameter Name: Order Date After

Parameter Value: 3/10/2002 R&R Calc Field Name: DateParam

Database Field: Date (Date datatype)

R&R Field Formula: CTOD(RIPARAM("Order Date After"))
Report Query: DATE is greater than DateParam

### **Adding Additional Parameters**

You use the New Param button to add an additional row. You can then enter an additional parameter name and value. You can repeat this process as required.

## **Deleting Parameters**

To delete a parameter you simply delete the contents of the both the parameter name and the parameter value to create an empty row. When you OK and then reopen the Parameters setting the empty row will no longer be represent.

### **Copying Parameter Settings**

If you make a parameter selection for one report item, you can copy that to other report items in the set. See Copying Parameters for more information.

## Master Table Information

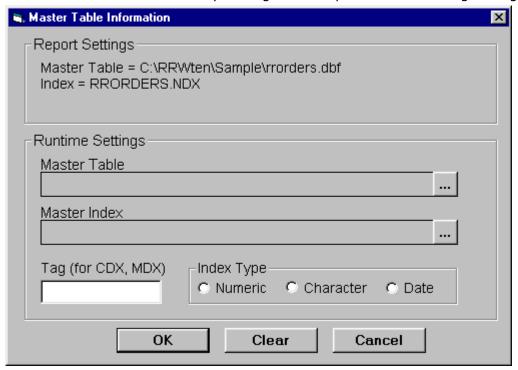
Clicking on the Master Table Information setting brings you to a dialog where you can change the master table for the report and for the Xbase version only, can also change the master index. Note that any selected table must contain the same fieldnames and datatypes as fields from the current master file that are used in the report or when you run the report, an error message will be returned and the report will not execute.

The appearance of the Master Table Information dialog depends on whether your selected report is an Xbase or a SQL report. For Xbase you can change both the master table and the master index. For SQL, the dialog only allows for a new master table.

## **Changing the Master Table and Index (Xbase)**

The Xbase master table dialog has a selection box for both the master table and for the master index. You can change either or both of these settings. You click

the File button to the right of the table and index selection boxes to choose a file from an explorer window. The starting directory and the default index extension will be determined by settings in the Options->File Settings dialog.



If you have selected a master index, you will additionally need to tell Rapid Runner the data type of that index key expression by selecting one of the three index type radio buttons. You can consult the R&R Report Designer documentation for information on master index data types.

If the selected index is a compound index (having a CDX or MDX file extension) you will also need to provide the tag name that you wish to use. You can consult the R&R Report Designer documentation for information on compound index tags.

# Changing the Master Table (SQL)

For SQL reports, the Master Table information dialog has only a single choice to select a master table.



## **Removing Master Table Settings**

Click *Clear* to remove your settings and revert to the settings saved with the report.

# Copying Report Item Settings

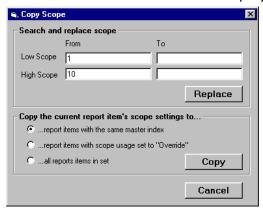
When you modify a report set, it's often helpful to make the same change to many report items at the same time. Rapid Runner allows you to do this for the following settings:

- Scope (Xbase reports only)
- Parameters
- Queries
- Printer

Selecting the Copy from the Rapid Runner main menu can access all of these features.

# Copying Scope Settings (Xbase only)

To quickly copy scope settings to many Xbase report items in a set, select Copy->Scope from the main menu. This will display the copy Scope dialog.



There are several ways to modify Scope settings throughout a report set. The first is to use Search and replace scope in the upper part of the screen. This allows you to find and replace specific scope values. Or you can choose one of the three Copy options in the lower part of the screen to copy Scope settings from the selected report to other reports in the set.

### Search and replace scope

The low and high scope values for the selected report item are automatically displayed in the Low Scope and High Scope From column. Enter the replacement values in the To column and click Replace. Rapid Runner will then search for the From values in the Scope setting of all of Xbase reports in the set and when a match is found, will replace it with to To value.

## Copy current scope settings to report items with the same master index

The current scope settings (usage, low scope, high scope) for the currently selected report item will be copied to all of the Xbase report items in the current set that have the same master index as the currently selected report item.

# Copy current scope settings to report items with scope usage set to "Override"

This is a broader change than the one based on master index. It is useful if many Xbase reports in the set are based on different tables with different indexes, but they use the same scope. For example, reports are based on different orders tables, but you want to run them on the same dates.

### Copy current scope settings to all report items in the set

This selection should only be used if all the Xbase reports in the set use a similar scope format.

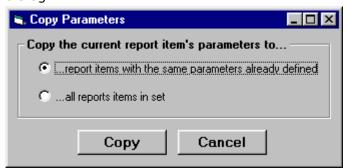
# Copying Printer Settings

The Report Destination screen allows you to select the default printer or any available printer for a report's output. To copy the printer selection for the currently selected report item to all report items in the set, select Printer from the main menu Copy choice. After you select this choice, you will get a dialog box indicating <Printer Name> copied to all report items where <Printer Name> is the printer that was in effect for the selected report.

Note that Copy Printer only copies the printer name and not all of the Report Destination options that may have been set for the selected report.

# **Copying Parameters**

To quickly copy parameter settings to many report items in a set, select Parameters from the Copy option on the main menu. This will display the Copy Parameters dialog.



There are two radio button options available for copying parameter settings.

# Copying parameters to report items with the same parameters already defined

Rapid Runner will search in the other report items in the set for the parameter names found in the currently selected report item. When the parameter name is found, its value will be replaced with the value from the current report.

When the parameters have been copied, a message box will display the number of times each parameter was found in the set.

### Copying parameters to all reports items in set

Rapid Runner will copy all the parameter names and values in the currently selected report item to all the other report items in the set. Any parameters that have not been defined in a report item will be created and given the value from the current report unless the maximum number of allowed parameters has been reached.

# Copying Queries/Filters

To copy the query/filter settings for the currently selected report item to all report items in the set, select Query from the Copy menu. This will copy the both the query usage and any runtime query to all reports in the set.

# Glossary

### **Alias**

An alias is the name used to uniquely identify a table within a report. Usually this is just the name of a table. But if the same table is included more than once in the same report, different aliases must be used for each reference.

#### **Data Source**

A data source is a named configuration of an ODBC driver. You create and manage data sources using the ODBC database Administrator within the Windows Control Panel. The SQL version of R&R uses an ODBC data source to make data available for a report.

### Index

A separate file used for sorting data in a data table.

Indexes are used by the Xbase version of R&R to link tables together and to quickly sort or scope master table data.

### **Master Index**

The index applied to the master table in an Xbase report.

When a master index is selected, the master table is processed in the order specified by the master index. In addition, you can enter scope values to quickly restrict the report to a range of records.

### **Master Table**

The main source of data for an R&R report. Relations/joins are used to include other tables that are related to the master table or to each other.

### **Parameter**

A parameter is a report field whose value is set when a report is executed.

### Report Item

An entry in a report set that refers to a report created in R&R Report Writer. A report set set is a collection of report items.

### Right-Click

Position the mouse pointer over an item, and press the right mouse button.

### Runtime

Runtime refers to the R&R utility that can run reports without the full-version of R&R running.

Runtime also is used to describe when report settings are changed: changes made using R&R itself are made at design time; settings modified when a report is run (as with Rapid Runner) are made at run time.

### Scope

The scope settings are the most efficient way to limit the records in an Xbase report. If a report includes a master index, the low and high scope settings limit the report output to the appropriate range of records in the master table as applied to that index. For example, if the master index of a report is based on an OrderDate field, you can enter scope values for the order dates to be included.

If a report does not have a master index, the scope values refer to the positions of the records in the data file.

### Set

A set is the file structure used by Rapid Runner to store information about reports and their runtime settings.

### **Table**

A file containing a set of records. For example, in an XBase system, the file orders.dbf is a table.

# Technical Support

Summary	Technical Support service gives you access to product experts who can help solve problems you encounter using R&R Report Writer.
	Several options provide you with the level of service you need to get answers in the most timely and cost-effective manner.
Key Benefits	Help available when you need it — online, email or 800#
	Dedicated, knowledgeable staff — over 50+ years R&R experience
	Cost-effective — pay only for what you use, never expires
Capabilities	Liveware Publishing offers varying levels of service to meet your technical, administrative, and budgetary requirements. From comprehensive support plans to self-service online resources, we've got the right program to fit your needs.
Option 1 — Pay-per-Call	At any time between the hours of 8:30 AM and 5:30 PM Eastern Time, you may call 302-791-9446 to speak with a technical support representative. The fee for support is \$100 per hour, with a minimum charge of \$10 per call. Payment can be made by credit card (VISA/MC/AMEX). You will not be charged for problems arising from R&R Report Writer software.
	(Time is calculated to the closest five dollar time unit, only for time actually spent by a Liveware Publishing support representative resolving the issue. Any time spent is subject to Liveware Publishing management review for effectiveness of the support provided.)
	(A "call" is defined as phone conversations, e-mail, and voice-mail messages related to resolution (or attempted resolution) of a particular issue. Issues may be grouped in a particular "call" to reach the minimum.)

Option 2 — Support/Upgr ade Account	You can establish a pre-paid support/upgrade account (SUA) with Liveware Publishing to receive a faster response and at a discounted rate. The cost for opening an SUA account for a single user is \$500, and special pricing is available for multiple user accounts. Once you have opened an SUA account, at any time between the hours of 8:30 AM and 5:30 PM Eastern Time, you may call the special 800 number to speak with a technical support representative. You may also send an email if you are working outside our normal business hours. The fee for support is discounted to \$80 per hour, with a minimum charge of \$10 per call.
	In addition, with the purchase of an SUA account you receive the following benefits:
	Installation support during the first 60 days is not chargeable.  One FREE tech support call.
	One FREE copy of <i>Relate and Report: Your Guide to Reporting with R&amp;R</i> . (350 pages, a \$59 value.)
	FREE maintenance releases
	Reduced pricing on printed copies of the product documentation - pay just \$25 (a \$10 savings.)
	Reduced pricing on product upgrades. You may apply any unused portion of your SUA account balance to the purchase of upgrades.
	The balance in your account never expires.
	Customers with SUA accounts will be supplied a statement of account usage, upon request, itemizing time spent on each call. Per-call customers will be informed of the time and cost of the call at its conclusion. Requests for review of charges may be sent via e-mail at our web site. Customers with SUA's should deposit sufficient funds to cover reasonable support needs for your organization for at least three months. Automatic re-billing to replenish accounts is available, or you may use a credit card or purchase order.
Option 3 —	Option 3 —Self ServiceResources
Self Service Resources	At any time, you may refer to the Resources page on our website http://www.livewarepub.com for Documentation, Frequently Asked Questions, Technical Bulletins, Service Packs, and other information about R&R Report Writer.
	The site also includes an R&R User Discussion Forum so that you can post questions and view posting from other users.
Subscribe Now!	Complete the form on our web site http://www.livewarepub.com/ts_order.htm to open your Support/Upgrade Account today, or call 800-936-6202 or email us at livesales@livewarepub.com for more information.

Before You Call	Please be prepared to provide the following information with each call or email:  User name, company, email and phone/fax numbers  Product serial number  SUA account number (if applicable)  Type, vendor and version of operating system and database in use  Product and version in use  Underlying application name and vendor
	To contact Liveware Publishing Technical Support for Pay-per-Call or Support/Upgrade Account service, call the special 800 number any time between the hours of 8:30 AM and 5:30 PM Eastern Time. Alternatively, you may send an email at any time using the online Technical Support Help Request form.

