Chapter 15 Printing Reports

Introduction

This chapter explains how to preview and print R&R reports. This information is presented in the following sections:

Overview of Print Commands
Selecting a Printer
Defining Page Setup and Record Layout
Previewing and Printing a Report
Controlling Pagination

R&R provides the capability of selecting from a wide variety of Avery labels for printing. When you select an Avery label (using the "Label Type" setting on the Record Layout dialog), R&R automatically defines the appropriate page and record layout. See the **Multiple Columns** section of this chapter for details.

Also, R&R provides for the printing of "snaked-column" reports in which the report data flows from the bottom of one column to the top of the next (similar to the format of a telephone book). See the **Snaked-Column Reports** section of this chapter for information about this type of report.

Overview of Print Commands

The following commands display dialog boxes whose settings affect R&R's printed output:

□ File ⇒ Print
 □ File ⇒ Printers
 □ File ⇒ Page Setup
 □ Format ⇒ Record Layout
 □ Options ⇒ Default Settings

Figure 15.1 briefly explains the Print settings in each dialog box.

Dialog Box	Print Settings
Print	Printer, item to print (Report, Test Pattern, or
	Specification) number of copies, page range, paper source, Print to file
Printers	Lists available printers
Page Setup	Paper size, margins, and orientation
Record	Record layout; record width, height, copies, number of
Layout	records across; settings for snaked column and Avery
	label reports
Default	Global settings for Paper Size, Margins, Font, and
Settings	Ruler Spacing

Figure 15.1 Print, Page Setup, and Record Layout Settings

The Print, Page Setup, and Record Layout settings you specify apply only to the current R&R report and will be saved with that report. Each time you create a new report, R&R will use the default Windows printer and the global layout settings specified in the Options ⇒ Default Settings dialog box. See Chapter 6, "Setting Defaults," for information about the Default Settings dialog box.

Selecting a Printer

Before you print a report, you need to verify that the currently selected printer is appropriate and select a different printer if necessary.

To select a printer:

- Choose File ⇒ Printers.
 The Printers dialog appears. The currently selected printer is highlighted.
- 2. Highlight the name of the printer you want to use.
- 3. Select OK to close the Printes dialog box and use the printer you chose, or select Cancel to revert to the original printer.

R&R initially uses the Windows default printer. To change the Windows default printer, use the Windows Control Panel.

The selected printer is saved with the report and used the next time the report is opened, if possible.

Windows Printer Setup Dialog Settings

Selecting Options in the Printers dialog box displays the Windows printer setup dialog box. See your Windows documentation for information about this dialog box.

You can use this box to change font selections for this printer. These changes will then apply to any Windows application (including R&R) that uses this printer driver. Remember, though, that the Paper Source, Paper Size, Orientation, and Copies settings you select in R&R (using the Print and Page Setup dialogs) *override* the Paper Source, Paper Size, Orientation, and Copies settings displayed in this dialog box.

R&R Print Dialog Settings

When you select File \Rightarrow Print, the R&R Print dialog displays (see Figure 15.9). Use this dialog box to specify report, test pattern, or report specification printing; to set the range of pages and number of report copies to print; and to select the paper source (that is, to select a paper tray or to specify manual or envelope feed).

The settings in this dialog are saved with the report and override any corresponding settings in the Windows printer setup dialog.

By default, if you print multiple copies of a report, the pages will not be collated. To print collated multiple copies, turn on the "Collate Copies" setting on the R&R Print dialog. Printing multiple copies will take longer when this setting is on, since R&R must process the entire report for each copy that is printed.

Defining Page Setup and Record Layout

After you have selected a printer, you can specify R&R settings to control paper size, margins, and orientation (portrait or landscape) and to define how records will be laid out. The following sections explain how to specify settings that control page and record layout.

Page Setup Settings

To change paper size, margin, orientation, and interline spacing settings, select File ⇒ Page Setup (see Figure 15.2).

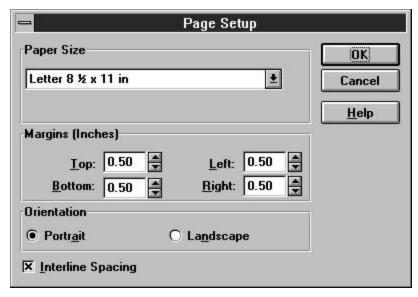


Figure 15.2 Page Setup Dialog Box

The unit of measurement (inches or centimeters) for paper size and margins depends on your Windows configuration and the paper size you select.

The Page Setup settings override the equivalent options on the R&R Default Settings dialog box and the Windows Printer Setup dialog box. These settings are saved with each individual report. Changes to the Page Setup settings do not affect other reports, new R&R reports, or other Windows applications.

Changing Paper Size

Use this setting to specify paper size for printed output. The default is Letter. To change the Paper Size used for your report:

- Select File ⇒ Page Setup.
 The Page Setup dialog box appears.
- 2. In the Paper Size group box, select a predefined paper size (the default is Letter).
- 3. Select OK.

The new paper size is applied to the report.

Some printers allow you to specify a custom paper size rather than a predefined size. For those printers, one of the displayed choices is "User

Defined Size." You specify the dimensions for the User Defined Size selection using either File ⇒ Printers or the Printers option of the Windows Control Panel. When you select "User Defined Size" on the Page Setup dialog, the current dimensions for that selection are displayed below the Paper Size box. (Note that many Windows printer drivers do not support custom paper sizes.)

The predefined paper size settings enable R&R to compute page length automatically based on the paper size and the Orientation setting. Selecting a predefined paper size also automatically determines the size of the page that displays when you use the File ⇒ Print Preview command.

Setting Margins

Enter values to specify the amount of white space at the top, bottom, left, and right of the report page. To set the margins for your report:

- Select File ⇒ Page Setup.
 The Page Setup dialog box appears.
- 2. In the "Margins" group box, type the measurements you want to use in the "Top," "Bottom," "Left," and "Right" edit boxes.
- 3. Select OK.

The new margins are applied to the report.

On the layout, the right margin is indicated on the ruler by the letter **R**. The right margin setting controls where R&R places fields on left-, right-, and center-justified band lines. (Note that R&R does not prevent you from inserting a field so that it extends beyond the right margin, nor does it prevent such a field from printing beyond the right margin.)

Changing Page Orientation

A report's orientation determines whether the report prints vertically (Portrait) or horizontally (Landscape). Portrait is the default.

To change a report's page orientation:

- 1. Select File \Rightarrow Page Setup to display the Page Setup dialog box.
- 2. In the Orientation group box, select "Portrait" or "Landscape."
- 3. Select OK; the new orientation is applied to the report.

Note that some printers do not support landscape printing.

Changing Interline Spacing

By default, R&R adds a small amount of vertical spacing (referred to as *leading*) to any lines with a Height setting of "Automatic." As a result, the height of each line is slightly more than that of the largest font used on the line. (Note that the Interline Spacing setting applies *only* to lines that have been assigned an Automatic line height.)

If you do not want R&R to add leading to lines with Automatic line heights, turn off the "Interline Spacing" setting on the Page Setup dialog. With Interline Spacing turned off, each line's height will be equal to the point size of the largest font on that line.

Defining Record Layout

Select Format \Rightarrow Record Layout to control how records are laid out on the page (see Figure 15.3).

The following sections explain each of the settings in the Record Layout dialog box.

Multiple Columns Settings

Use the settings in this group box to define layouts for reports requiring multiple columns, "snaked columns," or specific horizontal or vertical spacing of data on Record lines.

Columns

Use this setting to specify how many records you want to print across the page. Enter a value in this field for reports in which you want to save space by printing records in horizontal rows.

Note that when you print multiple records across, R&R does not insert additional lines for word-wrapped fields. A word-wrapped field will wrap to fill as many lines as are available, pushing fields below it down if necessary. Therefore, you should not use word-wrapped fields when printing more than one record across unless your Record band contains enough lines to accommodate the maximum length of any word-wrapped field(s) and any fields in the Record band beneath the word-wrapped field(s).

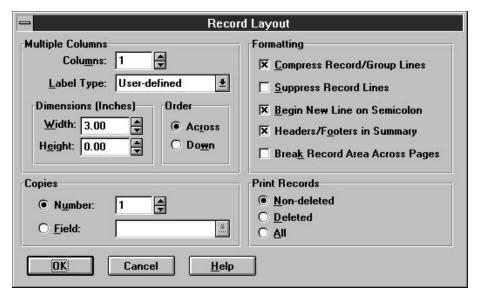


Figure 15.3 Record Layout Dialog Box

Snaked-Column Reports

Use the "Columns" and "Order" settings on the Record Layout Dialog to design multi-column reports in which the records "snake" from the bottom of one column to the top of the next. All data on body, group header, and group footer lines will flow from one column to the next when this setting is greater than 1.

To set up a "snaked" columnar report, do the following:

- 1. Set "Columns" to the number of columns you want horizontally across the page.
- 2. Enter a "Width" setting appropriate for the maximum width of the data in your records and the number of columns across.
- 3. Select Down in the "Order" box.

Figure 15.4 shows the top portion of a snaked-column report. The "Columns" setting for this report is 3, and the "Width" setting is 2.5 inches. As a result of these settings, the report data prints in three columns, flowing from the bottom of one column to the top of the next.

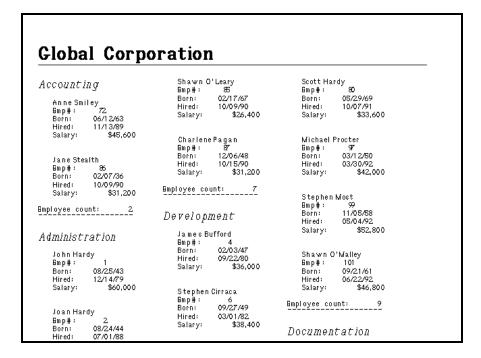


Figure 15.4 Top Portion of Snaked Column Report

Label Type

R&R provides over 150 choices for printing a variety of labels (for example, mailing labels) on commercially available Avery label stock. These settings are contained in a file named RRLABELS.INI that is installed in the R&R program directory.

Select "Label Type" on the Record Layout dialog to display a menu of label choices. When you select a label type, R&R automatically sets page size, margins, record width, and record height to the values appropriate for that label type.

Dimensions

Use these settings to specify the dimensions (width and height) of the Record area when printing multiple records across. Enter values in these fields for reports in which the Record area must fit within a predefined horizontal area. If you are printing mailing labels, the value in this field should be the distance from the left edge of one label to the left edge of the adjacent label.

Copies

Use this setting to specify how many copies of each Record area you want to print.

You can specify the number of Record areas to print for each composite record in either of two ways:

Entono	numbor	in tha	Number	adit hav
Enter a	number	in the	Niimber	east box

Open the Field list box and select a numeric field whose value will control the number of Record areas printed. You can use any field except an R&R total field or a calculated field that uses an R&R total field or the PAGENO() function. If the value of the field is one, zero, or negative, R&R prints one copy of each Record area. If the setting is positive, R&R uses the integer part of the setting to determine the number of record copies to print.

Record Formatting Settings

The Formatting box contains check boxes for these settings: Compress Record/Group Lines, Suppress Record Lines, Begin New Line on Semicolon, Headers/Footers in Summary, and Break Record Area Across Pages.

Compress Record/Group Lines

Use this setting to suppress printing of empty lines in the Record, Group Header, and Group Footer areas of a report. If you want empty lines in these areas to print, turn this setting Off.

When this setting is On, lines are suppressed if they consist entirely of empty fields of any sort, of database fields containing only spaces, or of non-underscored text fields consisting entirely of spaces. Because spaces in calculated fields are treated as "hard" spaces, lines with calculated fields will be suppressed only if those fields are empty.

Suppress Record Lines

Use this setting to print a report that omits Record lines. For example, you can print a report that contains only totals (on lines other than Record lines). When this option is On, R&R ignores any Record lines. When this option is Off, R&R prints Record lines as usual.

Begin New Line on Semicolon

Use this setting to specify whether semicolons included in word-wrapped character fields should be treated as line terminators. When this setting is

On, R&R will begin a new line each time it encounters a semicolon in a word-wrapped character field (without printing the semicolon). When this setting is Off, R&R will print any semicolons in word-wrapped character fields without beginning new lines. (Note that this setting applies to character fields only; it has no effect on memo fields.)

Headers/Footers in Summary

Use this setting to specify whether Page Headers and Footers will print or display on a page containing only Summary lines. When this setting is On, any Page Header and Footer lines you have defined will print on a page containing only Summary lines. When this setting is Off, Page Header and Footer lines will not print on a Summary-only page.

Break Record Area Across Pages

If a record area takes up more than one line and cannot fit on the current page, you can use this option to tell R&R where you want the page break (this option also affects R&R's widow/orphan control). You can split the record area between two pages, or you can keep the record area together by printing the entire record on the next page.

To specify page break behavior for multiple-line record areas:

- Select Format ⇒ Record Layout.
 The Record Layout dialog box appears.
- 2. In the "Formatting" group box, check or uncheck the "Break Record Area Across Pages" box.

When this option is On (checked), a page break can occur within a multiple-line record area. R&R prints as many lines of the current composite record as will fit on the current page; the rest of the record will be continued on the next page.

When this option is Off (unchecked), multiple-line records are kept together on the same page. If all the Record lines won't fit on the current page, the entire record will print on the next page.

3. Select OK.

Print Records Setting

Use this setting to specify which records to print.

☐ Select Non-deleted (the default) to print only composite records that have no component records marked for deletion in the database.

- ☐ Select Deleted to print only composite records that have all components marked for deletion.
- ☐ Select All to print all composite records.

Previewing and Printing a Report

To print a report, you access the Print dialog box by selecting File \Rightarrow Print. (You can also select the Print button on the Standard Toolbar to bypass the print dialog and print the report directly.)

Figure 15.5 briefly explains each of the items in the Print dialog box.

Item	Purpose
Print What	Specifies printing of Report (the default), Test
	Pattern, or Report Specification
Copies	Specifies how many report copies to print (default is
	1)
Page Range	Selects a range of pages to print by setting beginning
	(From) and ending (To) numbers
Paper Source	Specifies paper source (for those printers that
	provide more than one means of inserting paper)
Print to File	Specifies output path and file name for printing to a
	file (with printer codes included)
Collate Copies	Specifies collating for multiple report copies
Preview button	Displays Preview of current report
Printers	Opens Printers dialog box for selecting a different
button	printer
Page Setup	Opens Page Setup dialog for specifying paper size,
button	margins, and orientation

Figure 15.5 Explanation of Print Dialog Box

Previewing a Report

Before sending a report to the printer, you can preview it on screen to check fonts, field placement, page breaks, and other elements of the page setup. The Preview screen (see Figure 15.6) consists of a facsimile of the

report page, with VCR-like buttons at the top that allow you to page forward and backward through a multi-page report, magnify portions of the page, print the current page or the entire report, and pause or cancel the Preview (you can also perform these operations using the function keys, as shown in Figure 15.6).

You can access the Preview screen in any of the following ways:

- \square Select File \Rightarrow Print Preview.
- ☐ Select the Print Preview button on the Formatting Toolbar.
- ☐ Select File ⇒ Print; then select the Preview button on the Print dialog box.

When you select any of these options, R&R displays the Print Preview window (see Figure 15.6).

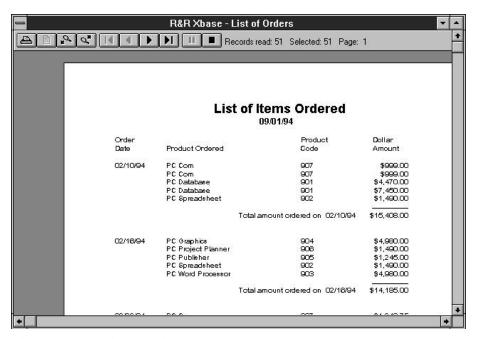


Figure 15.6 Print Preview Display

You can "zoom" the display simply by clicking at the desired location on the preview page. Note that zoom level and positioning are maintained as you page through a report and will be retained if you exit and restart Preview.

You use the Preview buttons to move around in multiple-page reports and to close the Preview screen and return to the report layout. Figure 15.7

shows the Preview control buttons and lists the function key that corresponds to each. Figure 15.8 explains the purpose of each button.

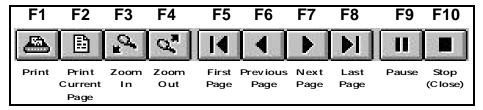


Figure 15.7 Preview Buttons (and Corresponding Function Keys)

Button	Purpose
Print	Prints entire report with current settings
Print Current Page	Prints only currently displayed page
Zoom In	Displays magnified page preview
Zoom Out	Returns to previous magnification level
First Page	Displays first page of multi-page report
Previous Page	Displays previous report page
Next Page	Displays next page
Last Page	Displays final report page
Pause	Pauses preview when positioning to last page
Close	Closes Preview window

Figure 15.8 Explanation of Preview Buttons

Dealing with Low Memory During Preview

When you page forward through a report in Preview, R&R keeps the previously viewed report pages in memory. If you have several other Windows applications running, you might reach a point when previewing a large report where there is not enough memory to store additional preview pages. If this occurs, R&R will display a Low Memory Condition dialog containing the message "Insufficient Memory to Continue Print Preview."

You can select one of three actions for R&R to take:

- □ Pause Print Process□ Free Earlier Pages
- ☐ Terminate Preview Process

Pause Print Process

Selecting this option is equivalent to selecting the Pause button on the Preview screen. After pausing the preview, you can switch out of R&R and free up memory by terminating other Windows applications. You can then continue with the report preview.

Free Earlier Pages

You can select this option to have R&R begin removing earlier report pages (beginning with the first page) from memory until enough memory has been freed up to continue the preview. After you select this option, R&R will continue to free earlier pages as necessary as you page forward through the report.

Once these earlier pages have been freed from memory, of course, you must cancel and then restart Preview in order to view them.

Terminate Preview Process

Selecting this option is equivalent to selecting the Close button on the Preview screen. R&R returns to the layout window; if you select Print Preview again, the preview will begin at the first report page.

Printing with the Current Print Settings

To print a report using the current print settings, first display the Print dialog box either by selecting File \Rightarrow Print or by selecting File \Rightarrow Print Preview and selecting the Print button on the Preview screen.

- 1. In the "Copies" edit box, type the number of report copies you want. The default is 1.
- 2. To print only part of your report, type the starting and ending page numbers in the "From" and "To" edit boxes in the Pages group box.
- 3. To choose a different paper bin, select an option from the "Paper Source" list.
- 4. To change the page layout, select Page Setup to display the Page Setup dialog box.
 - Make any changes you want on the Page Setup dialog box; then select OK to return to the Print dialog box.
- 5. Select OK to print the report with the current print settings.

After you select OK, a message box shows you the report name, the number of records processed, and the number of the page that is currently printing. Select Cancel at any point to halt the print job.

Changing the Print Settings

You can change any of the settings in the Print dialog box before printing. For example, you may want to print multiple report copies, specify a page range to print, or select a different paper bin. You can also display the report on the screen using the Preview button or select a different printer using the Printer button.

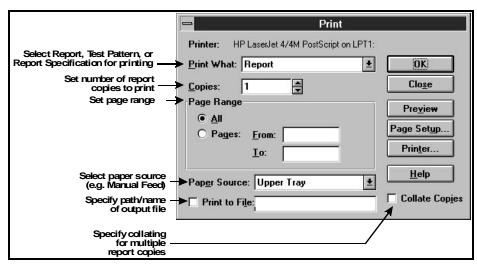


Figure 15.9 R&R Print Dialog

The following sections explain the settings in the Print dialog box and describe how to change them.

"Print What" List Box

The Print What list box has three choices: Report (the default), Test Pattern, and Report Specification.

- ☐ Select Report to print or preview the current report.
- ☐ Select Test Pattern to print only Page Header, Page Footer, and Record areas of a report in the form of text fields and field symbols (for example, **AAAA**) that represent data fields. Printing a test

- pattern is useful for aligning forms or mailing labels before printing the actual report data.
- ☐ Select Report Specification to print or preview a complete description of the content and layout of the current report. (For an explanation of the Report Specification option, see Chapter 3, "Managing Reports and Libraries.")

Printing Multiple Report Copies

By default, R&R prints one copy of all report pages. To print multiple report copies, enter or select the number of copies to be printed in the Copies edit box.

Note that in order to avoid having to process a report multiple times when the "Collate Copies" setting is off, R&R takes advantage of the ability of some printer drivers to print multiple uncollated copies. Printing multiple copies will take longer when the "Collate Copies" setting is on, since R&R must process the entire report for each copy that is printed.

Changing the Page Range Setting

To specify a range of report pages to print, enter or select the beginning page number in the "From" box and the ending page number in the "To" box. In each case, "page number" is the number of a physical page rather than a printed page number; that is, you must take into account *all* report pages, even if page numbering does not begin on the first page.

Paper Source List Box

Choices in the Paper Source list box depend on the currently selected printer; for example, the HP LaserJet II has choices of Upper tray (the default), Manual, or Envelope.

Printing to a File

To print a report to a file rather than to the printer, do the following:

- Select File ⇒ Print.
 The Print dialog box appears.
- 2. Check the "Print to File" check box.

- 3. Enter the name of the output file (optionally including a path) in the edit box. If you do not include a path, the file will be output to the current directory.
- 4. Select Print to send the output to the specified disk file. To return to the report layout without outputting the report, select Close; the "Print to File" setting will be retained.

NOTES The output file will include printer codes for the currently selected Windows printer. To output to a plain text file with no printer codes, use the File \Rightarrow Export command.

The "Print to File" setting is saved with the report. To remove this setting so that print jobs will be sent to a printer rather than a file, select File ⇒ Print and turn off "Print to File." Then select Close.

Printing a Report Specification

To print a detailed specification of your report:

- Select File ⇒ Print.
 The Print dialog box appears.
- 2. In the "Print What" list, select the "Report Specification" option.
- 3. Select OK.

Printing a Test Pattern

To print a test pattern showing the placement of fields in your report:

- Select File ⇒ Print.
 The Print dialog box appears.
- 2. In the "Print What" list, select the "Test Pattern" option.
- 3. Select OK.

Controlling Pagination

The following features affect how R&R determines where to place page breaks in your report:

Page Setup settings (Paper size, margins, and orientation);
Record Layout settings;

Fields with word-wrap format;
Line heights calculated automatically by R&R or specified with the
Format ⇒ Band Line Properties "Freeform" setting;
New-page lines inserted on the report layout;
R&R's automatic widow/orphan control.

Page Setup Settings

When R&R prints your report, it uses the current Paper Size, Margins (Top and Bottom), and Orientation settings in the File ⇒ Page Setup dialog box to determine how much remaining space is available on the page.

Record Layout Settings

The Format ⇒ Record Layout settings determine record layout and control which records and lines R&R will print. All of these settings affect where R&R will place page breaks, especially "Compress Record/Group Lines," "Suppress Record Lines," and "Break Record Area."

When calculating the number of lines that can fit on the page, R&R ignores blank Record, Group Header, and Group Footer lines compressed by the "Compress Record/Group Lines" setting. In addition, it ignores Record lines suppressed by the "Suppress Record Lines" setting and any lines whose printing is suppressed with the Format ⇒ Band Line Properties "Logical Field" setting.

R&R uses the "Break Record Area" setting to determine whether to allow page breaks to occur within Record areas that occupy more than one line.

Note that when printing more than one record across the page, R&R controls pagination by using the actual number of Record lines, not taking into account blank line compression or line logical conditions.

Inserting a Page Break

You can specify where page breaks should occur on your report by inserting a new-page line anywhere on the layout except in a Page Header or Page Footer band.

To insert a page break in your report:

1. Select Insert \Rightarrow Create Band Line (or press Ctrl+F11).

The Create Band Line dialog box appears.

- 2. In the "Line Placement" group box, specify where you want the new-page line to be inserted (Above Current Line, Below Current Line, or in any band except a Page Header/Footer or a swapped Group Header/Footer).
- 3. Turn on the "New Page Line" setting at the bottom of the dialog; an X appears indicating that the line you are inserting is a new-page line.

4. Select OK.

R&R inserts a dashed line in the specified area of the layout, indicating a page break.

When you output your report, R&R starts a new page at that line. All lines following the page break line are printed starting on the next page.

You can move, copy, or delete a new-page line just like any other line on the report layout.

Figure 15.10 explains several areas where new-page lines can be inserted to produce page breaks in different places in your report.

Position of New-Page Line on Report Layout	Resulting Page Break in Report	
Last line in Title band	After title	
Last line in Group Footer band	After group	
Last line in Record band	After each record	
First line in Summary band	Before summary	

Figure 15.10 Location of New-Page Lines

Word-Wrapped Fields

If your report includes word-wrapped fields in the Title, Record, Group Header, Group Footer, or Summary band, pagination may be affected by the number of lines the data in these fields occupies. You can control the length of a word-wrapped field by using the Format \Rightarrow Field command to change the width within which the data wraps. See Chapter 5, "Working with Fields," for more information.

Line Heights

R&R determines how many lines it can fit on a page by taking into account the height of each band line in the report. For band lines that have been assigned an Automatic height, R&R calculates line heights automatically based on the largest font on each line (Automatic lines include a small amount of additional white space or leading, unless you have turned off the Interline Spacing setting on the Page Setup dialog). To set a specific height, select Format ⇒ Band Line Properties, select Freeform, and specify a height in inches or points.

Widow/Orphan Control

R&R has automatic widow/orphan control that prevents a Group Header from appearing at the bottom of a page when there is not enough room for the Record area of at least one record.

In addition, for reports that have the following features, R&R prevents a Group Footer from appearing at the top of a page unless it is preceded by the Record area of at least one record:

- □ A Record band that does not contain any new-page lines.
 □ A Group Footer band containing at least one field.
 □ The following Format ⇒ Record Layout settings:
 - ♦ Break Record Area = Off
 - ◆ Suppress Record Lines = Off
 - ♦ Records Across = 1
- ☐ "Reset Page," "Swap Header," and "Swap Footer" Group Order settings turned Off for all group fields.