R&R Report Writer® *Technical Bulletin*

Printing Page Number X of Y on Runtime Reports

Product: R&R Report Writer® for DOS®   **Oper Sys:** DOS
Version: N.A.

Summary

This technical bulletin describes how you can generate Runtime reports that print each page number out of the total number of pages. For example, if you are generating a 20-page report, the report can show "Page 1 of 20," "Page 2 of 20," and so on, instead of simply each page number.

Creating "Page X of Y" Page Numbering

To create "Page 1 of 20" page numbering, link the report to RRUNOUT.DBF (the status file that is updated when the Runtime is executed). On the report, insert the RO_PAGES field from RRUNOUT.DBF; this field contains the total number of pages in the most recently processed report. When you execute the Runtime, you use a control file that specifies that the report should run twice in sequence—the first time to update the RO_PAGES value and the second time to print the report with the updated RO_PAGES value. Follow the steps described below.

1. **Create RRUNOUT.DBF.** RRUNOUT.DBF is the status file that R&R Report Writer creates when the Runtime is executed. If the RRUNOUT.DBF file doesn't already exist, create one by executing RRUN.EXE without any parameters. The contents of the status file are unimportant; it will be updated when you execute the Runtime.

2. **Prepare the Report.** Start R&R Report Writer and retrieve or create the report whose pages you are numbering.

3. **Create a page number field.** If you developed your report from an R&R Report Writer instant report, it will already contain the field PAGE_RR whose expression is PAGENO(). This field returns the current page number. If PAGE_RR does not exist in your report, create a calculated field whose expression is PAGENO().

4. **Create a calculated linking field.** Create a calculated field called PAGE_LINK that will serve as the linking field to RRUNOUT.DBF. PAGE_LINK should have as its expression

the numeric value 1—you will use the record number to access RRUNOUT.DBF, which has only one record.

5. **Set a database relation to RRUNOUT.DBF.** Follow these steps:

   a.   Select /Database Relation Set by typing **/DRS**.

   b.   Select PAGE_LINK as the linking field.

   c.   Select Exact-Lookup as the relation type.

   d.   Select RRUNOUT.DBF as the related file.

   e.   Confirm RRUNOUT as the database alias.

   f.   Select the «Recno» option as the link control.

   g.   Select Blank as the failure action.

7. **Place the page number and RO_PAGES fields on the report layout.** Usually page number fields go on page footer lines. You probably want to add text and format the fields so that the values appear as "Page # of #" as in "Page 2 of 20."

8. **Create or edit the Runtime control file.** Your Runtime control file must have two sequential records that have the same RI_LIBRARY and RI_REPORT values. You can edit RRUNIN.DBF, the sample control file supplied with R&R Report Writer, or create a new control file.

   The first record should have at least the following three fields with these values:

Field Name	Contents
RI_LIBRARY	The name of the library that contains the report whose pages you are numbering; for example, C:\REPORTS\INVOICES.RP1
RI_REPORT	The name of the report whose pages you are numbering; for example, Invoice Report 1.
RI_OUTFILE	NUL

   The purpose of the NUL value in the RI_OUTFILE field is to generate the report without sending it to any device for output. However, the RO_PAGES field in RRUNOUT.DBF is updated so that it contains the total number of pages in the report.

   The second record should contain the RI_LIBRARY and RI_REPORT fields with the same values, but it *should not* contain an RI_OUTFILE field with the NUL value. To direct the report output to the destination you want, use the Runtime control fields RI_PRINTER and RI_OUTFILE as described in the *Using R&R* manual. To direct the report output to the saved destination, omit these fields from the control file or leave them empty.

The second record generates the report again, but this time the RO_PAGES field contains the total number of pages in the report, so the correct number of total pages will appear on the report output.

9. **Execute the Runtime.** Execute the Runtime as you usually do—by issuing the Runtime command from the DOS command line or by including a call to the Runtime in your application.

These instructions describe how to use this page-numbering technique with a single Runtime report, but you can generate multiple Runtime reports the same way. Make sure that each report has a relation to RRUNOUT.DBF and includes the RO_PAGES field as described above. When you execute the Runtime, make sure that you generate each report twice *in sequence* or you will not get the correct RO_PAGES values.