Report Generator for Visual Basic

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Features

This report generator is based upon the grid custom control. It is intended to be bolted on to other applications that require report output, both on screen and on printer. Key features include:

- a simple set of calls to create a report, define columns and populate with data
- the ability to define titles and footnotes
- the ability to define formatting attributes for columns including width and alignment
- the ability to view a report one page at a time, scroll thru page and navigate pages
- a report can contain text and numeric (including date) columns
- the report can be sorted on any column, text or numeric
- a selected region or page may be copied via the clipboard into Excel
- a high quality report may be printed out in portrait or landscape modes

The following files are included:

GRID.VBX	grid custom control (this should be placed in your path)
RPTFORM.FRM	the user interface for a generated report
RPTMAIN.BAS	the functions required to generate a report
RPTGLOB.BAS	the global declarations
MAIN.BAS	a small program to create a test report
RPT.WRI	this documentation

This has been thrown together quite quickly for a project I am currently working on. I would appreciate any comments or suggestions for extending or improving it.

Acknowledgements

This program contains the grid custom control written by Microsoft and it is my understanding that this may be freely distributed. It also contains a sorting algorithm found in a program called VBSORT.EXE by Nelson Ford (71355,470). My thanks to both parties for their efforts.

Function Calls

The following functions are used to create and control a report:

```
r%=RptCreate (rtitle$, numcols%, textcols%, nrows%, thinbars%, thickbars%, title1$, title2$, foot1$, foot2$)
```

Create a new report

rtitle$ is the caption for the report form
numcols is the number of numeric columns
textcols is the number of text columns
nrows is the maximum number of rows for the report (may be larger than one

page)
thinbars number (n) says to draw a thin line on the printed report every n rows
use zero if you don't want any thinbars
thickbars, ditto but with a thicker line
title1 is the main title
title2 is the secondary title
foot1 is the first footnote
foot2 is the second footnote
returned value should be a report handle although is not currently used

```
RptDefineColumn Rhnd%, colno%, ctype$, ctitle$, cwidth%, calign%, cfmt$, bar%
```
Define each report column
Rhnd is a report handle (not currently used)
colno is the column number (from 1 to max)
ctype is the datatype: A for text and 9 for numeric
ctitle is the column title
cwidth is the default width in twips
calign is the alignment: 0 = left, 1 = centred, 2 = right
cfmt is a standard VB format string used to format each cell value
bar is a flag indicating if a vertical bar should be drawn on the printed report 0 (FALSE) = no, -1 (TRUE) = yes

```
RptDelete Rhnd%
```
Delete the current report

```
RptNewPage Rhnd%, page%
```
Display specified page of a report
report handle is ignored currently

```
RptPrint Rhnd%
```
prints current report page
Report handle is currently ignored

```
RptPrintAll Rhnd%
```
print all pages for current report

```
RptSetText Rhnd%, colno%, rowno%, tvalue$
```
assign a text value to a cell in the report

```
RptSetValue Rhnd%, colno%, rowno%, value!
```
assign a numeric value (single precision) to a report cell

```
RptSort colno%
```
sort report by specified column, text or numeric

Limitations and Potential Problems

I have tested RPT out and found it to be quite resillient, however there may be problems in the following areas:

1. if either the array holding numeric data or the one holding text data becomes larger than 64k
2. if the contents of the grid for any one page becomes larger than 15k(ish)

3. if the user changes printer orientation after the report has been created (its calculation for number of rows per page will be screwed up). I am sure its possible to work around this although I haven't coded it in yet. What I would like to do is to be able to work out the width of the table and to set the ideal orientation from within the program but as yet I don't know how to do this. Any suggestions?
4. I started to build in hooks for supporting several reports at once (hence the report handles) but VB doesn't support control arrays of forms, which scuppers my original idea. Once again, any other suggestions.
5. printing is quite slow

Disclaimer

I hope you will find this code useful for existing applications or perhaps for examples on how to get round certain problems. In is distributed free of charge and in good faith. Graham Hobson takes no responsibility for misuse, misrepresentation or damage caused or associated with this software. Other than that, have fun!