



Rpv Reports

The quickest guide for programmers I

About this guide

This document was specially oriented for 1: those developers that need to learn the Rpv Reports concept really quick and do not have time to read hundreds of pages. 2: those programmers that use Rpv Reports regularly and need to have a quick reference with the list of commands of Rpv Reports.

If you are new to Rpv, you will have to read four pages (including this one) to learn how to generate your reports. The rest of the document is the list of the commands.

Introduction to Rpv Reports

Rpv reports or “Rpv” is a different concept for reports development that does not work in the same way that other reporting tools do.

What Rpv does it to read simple text files generated by your program and transform them into reports that can be printed using Windows graphic quality including pictures, barcodes and all the effects accepted by Windows (font bold, underlined, color changes, italic, etc) . Rpv Reports also provides a viewer to preview and navigate your reports before printing them and a print server which will help you to manage large ammounts of data or even to connect to Unix servers.

Since every language is able to generate plain files, then Rpv is applicable to your programming language too.

Uses

Rpv Reports is good for all those programmers that work with programming languages under Windows or Dos obtaining always the same professional results. The plain files can be generated using any operating system.

It is also able to manage reports generated on a Unix server (SCO, Linux, Qnx, Solaris, etc) and print them with the same quality and without inconveniences.

Its logic is really simple and the programmer does not have to learn new logic to prepare the reports. Developer only will send the data to a plain text file and Rpv Reports will show it / manage it.

Understanding the concept

Based on plain files, we believe that Rpv concept is the easiest one that you will ever find.

Here, the first rule:

- All the text between the chars “{“ and “}” is interpreted but not printed.
- Between “{“ and “}” we must place commands, separated (if more than one) by “;” char.

Once we know that, here we introduce two commands:

“F” = Font. This is the name of the font that will be used.



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"S" = Size. This is the size of the font.

{F=Times new roman;S=18} This will be displayed using Times New Roman 18 points.

If you would like to see this on the Rpv viewer, you would see this:

This will be displayed using Times New Roman 18 points

You may know that this kind of things are not possible on an standard plain file.

More commands:

"B" = Font bold.

"U" = Font underlined.

"\N" = One line down.

Knowing this, we can do some more things:

```
{F=Times new roman;S=18;b=y;u=y} This will be bold and underlined {\n}
{b=n;u=n} This one will be normal (also 18 points){\n}
```

Results:

This will be bold and underlined
This will be normal (also 18 points)

Sections of a report

All the reports contain three sections: Configuration, header and data.

Here we explain the reason of the sections:

Configuration

This section is specially designed to specify important settings that affect the entire report such as orientation, paper size, default printer, report title, etc.

Usually, all the accepted parameters have default value. For that reason, we only specify those that need other value than default.

[Header]

Recognized by the clause [header], this section contains ALL THE DATA THAT WILL BE SHOWN / PRINTED ON ALL THE PAGES OF THE REPORT.

This section is the indicated to place the titles of your report. However, even when it is required that HEADER section exists, it can be empty.



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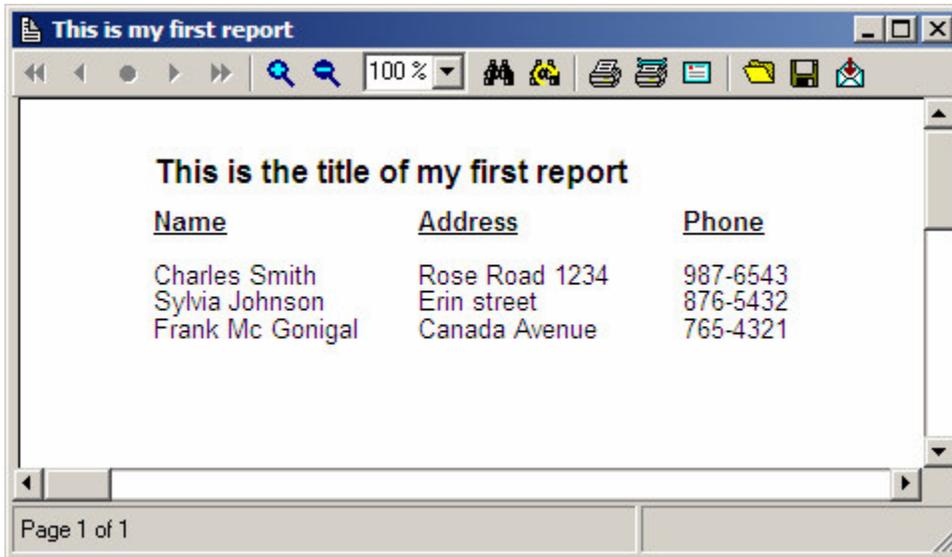
[Data]

This is the most important section of the report and it contains all the data of it.

An example of an Rpv Report

```
Report_title=This is my first report
[header]
{f=arial;s=12;b=y}
{\n;\n}
{1000} This is the title of my first report {\n;\n}
{u=y;s=10}
{1000} Name {3000} Address {5000} Phone {\n;\n;u=n;b=n}
[data]
{1000} Charles Smith {3000} Rose Road 1234{5000} 987-6543 {\n}
{1000} Sylvia Johnson {3000} Erin street {5000} 876-5432 {\n}
{1000} Frank Mc Gonigal {3000} Canada Avenue {5000} 765-4321 {\n}
```

This is how you see the file with Rpv Reports viewer.



This was a very simple example, but we expose some faqs you may have about it.

What if we have 10000 names instead 3? Simple. Since those records are in the **[data]** section, Rpv will recognize the end of the page and it will start a new one automatically without any additional command. Every time a new page is inserted the **[header]** section is shown / printed again.

What if I want to force for a new page? You can do it. All you have to do is to force a new page by using “\np” command when you need it.

What are those numbers? 1000, 3000, 5000? Those numbers indicate the horizontal position on the paper. **Practically: the columns.**

The values are expressed in “twips”. Each inch contains about 1440 twips and each centimeter contains about 567.



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That means that the first text will be placed 1000 twips after the left margin, the second and the third will be 3000 twips and 5000 respectively.

Declaring columns in your report

In the configuration section you can declare columns to be used in the entire report. The advantage of declaring the columns is that to move all the values together, is necessary to change only one value.

The columns must be declared in the configuration section using the following syntax:

```
$column=value
```

The column name must begin with "\$" char. Once the columns have been declared, it will not be necessary to use the numbers.

Example in the configuration section:

```
$1=1000  
$2=3000  
$3=5000
```

Example in [header] and [data] sections.

```
{$1} Charles Smith {$2} Rose Road 1234 {$3} 987-6543 {\n}
```

What your program has to do to generate an Rpv report

What you need is to obtain a file that follows the syntax that we saw before. Your program has to generate that file by reading your database or your data files the same way that we generated the reports for printers using ESC-Commands.

Now, instead of ESC-Commands, we will place Rpv commands there, and the results will be quite different. Our examples page will show you how to generate an Rpv file in several languages.

How to start Rpv Reports to preview the reports

To start the viewer is really simple and it will be necessary to call RPV.EXE with the name of the file as the argument.

Examples:

Using VB:

```
Shell ("c:\program files\rpv\rpv.exe c:\myreports\report01.rpv")
```

Using RM/Cobol

```
Call system using 'c:\program files\rpv\rpv.exe c:\myreports\report01.rpv' .
```

Never forget to close the file before launching Rpv.exe file. The report could be incompleated.



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List of commands

Parameters of the configuration section.

The configuration section is defined by the first lines of the Rpv file until **[header]** section begins. In that section the programmer will define values for settings.

The syntax for settings the parameters is the following:

SETTING=VALUE

BarWidth

Defines the width of lines and separations of the bars for printing/showing barcodes. Possible values are 1 (default, for laser printers), 2 (wider, for inkjet printers) or 3 (widest for dot matrix).

Example:

```
Barwidth=3
```

Common

Defines a string with Rpv commands that will be sent immediately after the header is printed or shown. This setting won't be necessary if all the commands are opened/closed properly.

Default value: empty

Example:

```
Common={f=arial;s=10;b=n;u=n}
```

Export_Allowed

Defines if exporting the report will be permitted. Values Y or N. Default value: Y

Example:

```
Export_allowed=N
```

FixedHor *

Defines the horizontal position to fix the titles. Default value: 0

Example:

```
FixedHor=1000
```

FixedVer *

Defines the vertical position to fix the titles. Default value: 0

Example:

```
FixedVer=1000
```

LinkTips

Defines if the tips of each link will be shown or not. Default value: Y

Example:

```
Linktips=N
```

Lm

Defines the left margin (in twips). Default value: 0.

Example:

```
LM=500
```



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MaxY

Defines the maximum value for Y (in twips). **Practically it indicates when to end the current page and start a new one.** Default value: the length of the page (in twips).

Example:

```
Maxy=10000
```

Open_View

Tells the print server to open the viewer instead of send the report to the printer. (This works for those reports that are printed using the print server only).

Default value: N

Example:

```
Open_view=Y
```

Orientation

Defines if the report will be printed / shown portrait or landscape orientation.

Possible values: 1 = Portrait (default) 2 = Landscape

Example:

```
Orientation=2
```

PageLenght and PageWidth

Defines the length and width of the page (in twips). These parameter have no default value. These parameters must be set together. If one of those is not defined, the page will not be shown. Additionally, parameter papersize **MUST NOT** be set when these parameters are used.

Example:

```
Pagelenght=14000
```

```
Pagewidth=11000
```

PaperSize

Defines which paper will be used. This parameter is not compatible with PageLenght and PageWidth.

Accepted papers are: A4, LETTER, EXECUTE, LEGAL, B5, ENVELOPE10 and ENVELOPEDL

Default value: A4

Example:

```
Papersize=Letter
```

Print_Allowed

Defines if printing the report will be permitted. Values Y or N. Default value: Y

Example:

```
Print_allowed=N
```

Printer

Defines the default printer for the current report. The value for this settings must be the name of the printer for Windows. Not case sensitive. Default value: default printer

Example:

```
Printer=Hp deskjet 500c
```

Report_Title

Defines the title of the report (window title). Default value: the name of the file.

Example:

```
Report_title=Detail transactions report
```



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Save_Allowed

Defines if saving the report will be permitted. Values Y or N. Default value: Y

Example:

```
Save_allowed=N
```

Spacing (setting)

Defines the space (in twips) between lines. This parameter affects the entire report. However, it can be changed by using **Spacing command**.

Default value: 200 twips.

Example:

```
Spacing=250
```

Tm (Top margin)

Defines the top margin (in twips). Default value: 0.

Example:

```
TM=500
```

PagAux

Defines a number to be added to the current page number. For example, if you define the **setting** PAGAUX=5, the **function** {pagaux} will be 5 + {pag}. This setting is indicated to begin a report with a page different than 1. Default value: 0. *See also function PagAux*

Example:

```
Pagaux=10
```

Header and data sections.

The difference between header and data is that the **header** section will be repeated for every page that is displayed or printed.

This means that the titles of a report will be placed on the **header** section but it is not required. What is **required** is that the **header section exists** even when it can be empty.

The data section will be the body of the report and Rpv Reports will separate them by pages automatically displaying a **[header]** on each new page.

The syntax of the commands are the same for both sections.

Text commands

\N (New line. One line down)

Ends the current line and starts a new one. Goes one line or the number of twips declared in Spacing down.

No arguments. This command is the most used command and one of the most importants. *See also spacing command & spacing setting*

Example:

```
{ $1 } This for line #1 { \n }  
{ $1 } This for line #2 { \n }
```



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A (Alignment)

Defines the alignment of text. Expressed with **L**, **R** or **C**. Default value for alignment is "L".

Example:

```
{A=R} 10,000 {A=L;\n}
```

Important note about the alignment. Always pay attention to close alignment attribute, specially after using right alignment. Omitting this could cause that the entire report is aligned incorrectly.

F (Font name)

F Defines the name of the font. Expressed in letters.

Syntax:

```
F=Name of the font
```

Example:

```
{F=Times new roman}
```

S (Size of font)

Defines the size of the font. Expressed in points.

Syntax:

```
S=Points
```

Example:

```
{S=18}
```

U (Font underlined)

Expressed with **Y** or **N**. Default value: **N**

Example:

```
{U=Y}
```

I (Font Italic)

Expressed with **Y** or **N**. Default value: **N**

Example:

```
{I=Y}
```

B (Font bold)

Expressed with **Y** or **N**. Default value: **N**

Example:

```
{B=Y}
```

ST (Font strike)

Expressed with **Y** or **N**. Default value: **N**

Example:

```
{ST=Y}
```



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C (Color)

Defines the color of the font.

This command has two possible syntaxes:

`{C=Number}` Where the value is a number between 0 and 16.

`{C=Red, Green, Blue}` where the values are numbers from 0 to 256 indicating the amount of red, green and blue respectively.

Example:

```
{C=12} Color red {\n}
{C=245,245,245} Light grey {\n}
{C=0} Color black again
```

Tab

Inserts an space. This command is useful to separate texts into the report.

Syntax:

`Tab=number_of_twips`

Example:

```
{$1} One {color=12;tab=50} Two {\n}
```

Graphic commands

Pic (Inserts images into the report)

The command Pic Inserts an image file into the report.

Syntax:

`PIC=FILE.BMP,X, [Y], Width, Height[,Link]`

The values after the filename must be expressed in twips.

In case “Y” is ommited, the image will be placed in the current Y position.

In case that link is specified, the entire picture will become into a hyperlink. [See also Link command.](#)

Box (Draws a box into the report)

Draws a box into the report. Expressed in twips.

Syntax:

`Box=X1, [Y1], Width, Height`

Example:

```
{Box=100,1000,500,500}
```

Boxf (Draws a filled box into the report)

Draws a box into the report. Boxf will fill the box with the color defined using “C” command.

Expressed in twips.

Syntax:

`Box=X1, [Y1], Width, Height`

Example:

```
{Boxf=100,1000,500,500}
```



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Line (Draws an horizontal line into the report)

Draws an horizontal line into the report. The value of Y will be the current value. Expressed in twips.
Syntax:

```
LINE=X1,X2[,Type]
```

Argument "type" indicates the following:

- 0 (default) solid line
- 1 dashed line

Example:

```
{Line=400,12000}  
{Line=400,12000,1}
```

XYLine (Draws any line into the report)

Draws an horizontal line into the report. Expressed in twips.

Syntax:

```
XYLINE=[X1],[Y1],[X2],[Y2][,Type]
```

Even when all the arguments can be optional, at least a couple of them must be provided to obtain a line. In case that an argument is omitted for X or Y, it/they will be current values. Command XYLine accepts have been imEl comando XYLine ha sido enriquecido aceptando, como se ve en la sintaxis, los valores opcionalmente. En caso de omitir los valores de X o de Y, los mismos serán los actuales.

W (Width of the line)

W Defines the width of the lines that will be drawn.

These values are expressed in pixells.

Default value: 1.

Example:

```
{W=3}
```

Print & NoPrint *

Defines if the text will be shown but not printed. Default value: PRINT

Example:

```
{NoPrint} This text will be shown but not printed {\n}  
{Print} This text will be shown AND printed {\n}
```

Execution commands

Link

Inserts a link into the report. The link executes an EXE file, a file with proper association (for example BMP to Paint, DOC to Word, etc) or an RpvCmd command to execute internal tasks of AN Business Reports.

Example:

```
{Link=Calc.exe} Start calculator  
{Link=mailto:support@rpvreport.com} Ask for support  
{Link=c:\mp3s\song1.mp3} Play an Mp3
```



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Execute

Executes an EXE file, a file with proper association (for example BMP to Paint, DOC to Word, etc) or an RpvCmd command to execute internal tasks of AN Business Reports.

Syntax

Execute=what_to_execute, mode, context

What_to_execute is the name of an executable file, or a file that is associated to an application, a website, etc.

Mode defines if the execution will be performed ONCE or ALWAYS.

Context indicates if the execution will be for VIEWER, PRINT or BOTH

Example

```
{execute=calc.exe,once,viewer}
```

Depending on the task that you need to perform, the option ONCE is the most recommended. For instance, if you specify "{exec=x.exe,always,viewer}", everytime that the page in which the "exec" command is shown, "x.exe" will be executed. Same effect will take place if the "exec" command is in mode "always" and is into the [header] section.

Special note for AN Business Reports users.

AN Business Reports accepts the use of the EXECUTE at the configuration section if needed using the following syntax:

```
Report_title=Test of report  
Execute=Calc.exe  
Papersize=Legal
```

Postshow *

Similar to EXECUTE, this command performs the action after the page was shown.

Syntax:

Postshow=What_to_execute

Example:

```
PostShow=RpvCmdWait=10  
PostShow=RpvCmdNextPage
```

Other commands

\N (New line. One line down)

Ends the current line and starts a new one. Goes one line or the number of twips declared in Spacing down.

No arguments. This command is the most used command and one of the most importants. [See also spacing command & spacing setting](#)

Example:

```
{$1} This for line #1 {\n}  
{$1} This for line #2 {\n}
```

\P (One line up)

Goes one line or the number of twips declared in spacing up. [See also spacing command & spacing setting](#)

No arguments.



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Spacing command (space between lines)

Defines the value of spacing setting for next **\N** or **\P** operation.

After a \n or \p operation, this value will be the original value. See also spacing setting.

E.g. {spacing=4000;\n}

\NP (New page)

Ends the current page and starts a new one. This command is specially useful to control when the page ends and starts a new one. No arguments.

TopOfPage (Goes to the top of the page)

This command goes to the very top of the **current** page. (Y=0).

Its use is recommended sometimes to go back to the initial position. However, its is recommended rational use of this command not to create confuse reports. No arguments.

Rem (Inserts a comment)

This command inserts a comment into your report.

Syntax: REM=comment

Example:

```
{Rem=Your comment here}
```

Circle

Draws a circle into the report.

Syntax:

Circle=[X], [Y], [Ratio]

Example:

```
{Circle=,,;tab=200;circle=,,}
```

Trim

Determines if the left and right spaces of a string will be cut or not.

Syntax:

Trim=Y|N

Example:

```
{Trim=N} do not cut left and right spaces {\n}
```

Copy (Inserts an external file into the report)

The command copy inserts an external file into the Rpv report.

The external file (**with Rpv format, extension .INS**) will be inserted in the place of the copy command.

Syntax:

COPY=FILENAME

E.g. {COPY=\TEMPLATES\INVOICE.TXT}

E (export line)

Tells Rpv to export the current line in an exporting operation. Without arguments, **this must be the first command of the line.**

T (Inserts a delimiter)

Inserts a delimiter on its place when exporting. The delimiter is “;”. No arguments.



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Barcode commands

Bar (Begins a 3-9 barcode)

Bar Defines that the text/numbers that are printed will be expressed in barcodes.
No arguments, ends with **NoBar**

NoBar (Ends barcodes)

NoBar ends Bar.
E.g. {Bar} 1234567890123 {NoBar}

Ean13 **

Begins EAN-13 barcode. An EAN-13 barcode **must** contain 13 numeric characters. If not, nothing will be shown.
Use NoBar to end Ean13.

Example:

```
{Ean13} 1234567890123 {nobar}
```

B128B **

Begins 128-B barcode. Code 128B barcode **must** contain numeric characters. If not, nothing will be shown.
Use NoBar to end B128B.

Example:

```
{B128B} 12345{nobar}
```

Functions

Pag (Current page)

Shows the number of the current page. No arguments.
Example: {Pag}

PagAux (Shows the current "PagAux" of the report) *

Shows the current "PagAux" of the report. PagAux is the number to be added to the current {Pag}
If setting PagAux was not defined, then PagAux will be the same as {Pag}.
If the setting PagAux is set to 10 for example, then PagAux will be the current page number plus 10.
Example: {Pagaux}

Date (Current date)

Shows the current date using the format that your operating system has configured in the "regional settings". No arguments.
Example: {Date}

Time (Current time)

Shows the current time using the format that your operating system has configured. No arguments.
Example: {Time}

Hour (Current hour)

Shows the current hour. No arguments.
Example: {Hour}

Minute (Current minute)

Shows the current minute. No arguments.
Example: {minute}



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Second (Current second)

Shows the current second. No arguments.

Example: {second}

Day (Current day)

Shows the current day (in numbers). No arguments.

Example: {Day}

Month (Current month)

Shows the current month (in numbers). No arguments.

Example: {month}

Year (Current year)

Shows the current year (in numbers). No arguments.

Example: {year}

(*) Only available on AN Business Reports