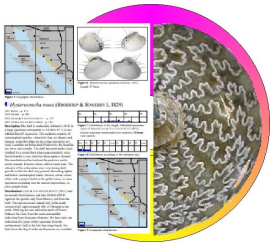

Hdb2Win 2.6.0

Creating RTF Templates and RTF files

Programme Version 2.6 (March 2025)

Content

1 Introduction

The database system Hdb2Win is able to create preformatted text files in the Rich Text Format (RTF). RTF produces small files, can hardly bear any viruses, and can be easily imported in many applications. It is well documented. The output of text files became in the past decade more important to Hdb2Win. The database programme is increasingly used to create large text files (we are talking here about hundreds of pages) that may include both vector and bitmap images, supporting multiple sections with one or more columns (Fig. 1).

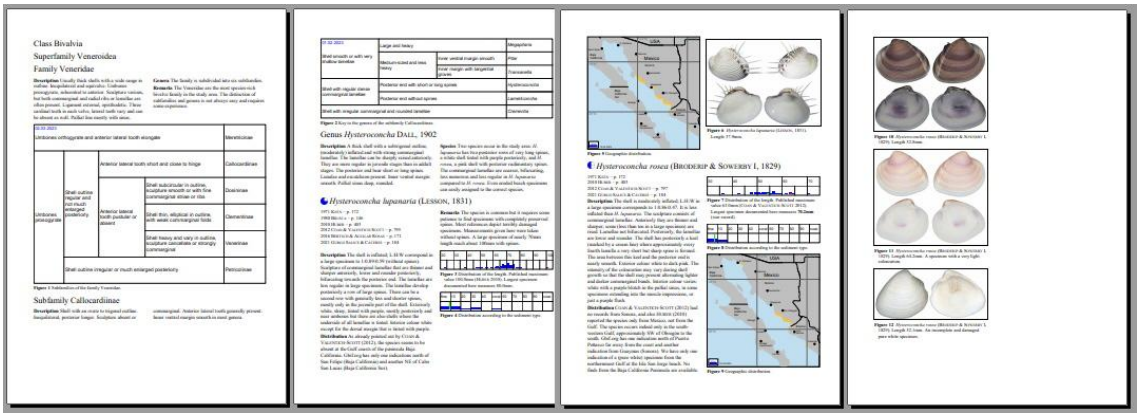

Figure 1. Example of text pages created by Hdb2Win and converted to RTF, including tables, vector graphs and bitmap images.

With version Hdb2Win 2.6, the Template Editor requires a screen width of at least 1024 pixels and a screen height of 800 pixels. In this version, line distance and font selection was added.

2 Text formatting

2.1 Introduction

In text processors exist two different ways of formatting: direct and indirect. Direct formatting means that a paragraph or character format is directly assigned to a portion of text, as for instance by clicking on a format symbol in the tool bar at the top of the application. Indirect formatting means that for a specific paragraph or character a template is created. The format is assigned to the template. And the template is assigned to paragraphs or characters in the text. Any larger documents contains different types of paragraphs, such as the main text, smaller text with indention, images, caption of images etc. When for each of these paragraph types a template is created, the formatting of this type of paragraph can be modified globally only by modifying the template, but not the text itself. Templates can be also assigned to character formatting. Indirect formatting is more elegant and more efficient than direct formatting.

The RTF files created by Hdb2Win are always indirectly formatted. When you create a set of specimen labels and you wish to modify the format of some parts, there are two options. You may modify the template within the text processor or you modify the template that is applied by the database.

2.2 Levels of text formatting

The Rich Text Format distinguishes three different types of formatting as follows:

Section – The section defines the paper format, margins and number columns. It may also define a global language.

Paragraph – The paragraph formatting defines tabulators, text alienation, distance before and after the paragraph, line distance, lines, boxes etc. The paragraph formatting may contain also a global character formatting.

Character – The character formatting defines the text font, size, colour, and special text characteristics such as bold, italics, underline, and the text position.

Hdb2Win only allows to define paragraph and character formatting. If you want to distinguish sections you need to insert the RTF codes directly in the text (see below for more explanation).

3 Template files in Hdb2Win

Each RTF template in Hdb2Win consists of three files as follows:

name.FDN – The description of the template. This is the most important file. It is a simple text file. An older name is name.FD for version 1.x. The converter may read – at the moment – both formats but the programme that creates style sheets only writes name.FDN (what corresponds to version 2.x). In older database applications you will find more name.FD than name.FDN files.

name.FCH – The header section for a RTF file that is formatted with this template. This file is automatically created when the FDN file is saved.

name.TCV – The format description for a RTF file that is formatted with this template. This file is automatically created when the FDN file is saved.

4 Create and edit template files

4.1 General remarks

You may create and modify templates. This function is located in Hdb2Win > Application library > Options > Tools > Edit Style Sheets. If you start this programme, a new (empty) template is opened. There is a menu bar at the top.

Figure 2. Tool bar.

Load – Loads an existing file.

Save – Saves the current file.

Save as – Saves the current file under a different name.

New – Opens a new empty template.

Quit – Terminates the programme.

There are generally two options, load and modify an existing file or start with a new file.

4.1.1 Modify an existing template

If you modify an existing template, you better create a copy of the FDN file. You need only to backup the FDN file because the FCH and TCV files are created when saving a FDN file. As for instance if you want to modify PTX2RTF.FDN you create a copy before, such as PTX2RTF_ori.FDN. To modify a template, select a format from the 'Select format' list.

4.1.2 Start with a new template

If you start with a new template, there are always two predefined formats that cannot be modified or deleted. These are the standard formats, each for the paragraph and one for the character. Before starting it is better to make a list of formats you will need. Fill in first a comment and the formatting of the section.

4.2 Formatting

The templates for paragraphs and characters differs. Whereas characters only encompasses the formatting of characters such as bold, italics or underline, in the paragraph template encompasses the formatting of the paragraph and the characters. If the character format is not defined within a paragraph template, the character formatting follows the standard character formatting.

To create a new format click in the 'New' button in the Formats panel. A menu will appear asking for the name and whether the new format is for character or a paragraph.

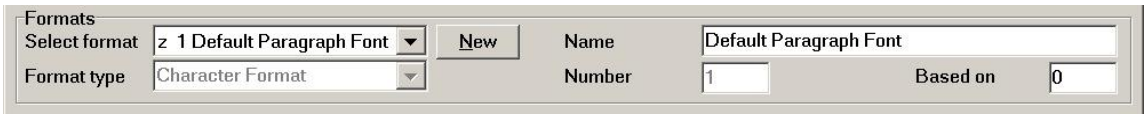

Figure 3. Format panel.

4.2.1 Section formatting

The panel Files / Standard contains a comment and part of the section formatting. Section formatting encompasses the standard font, the language, paper size and margins.

Figure 4. Files/Standard panel.

4.2.2 Paragraph formatting

A paragraph is a portion of text finished with CR/LF (carriage return/line feed). In some text processors it is marked with the sign shown here on the right. ¶

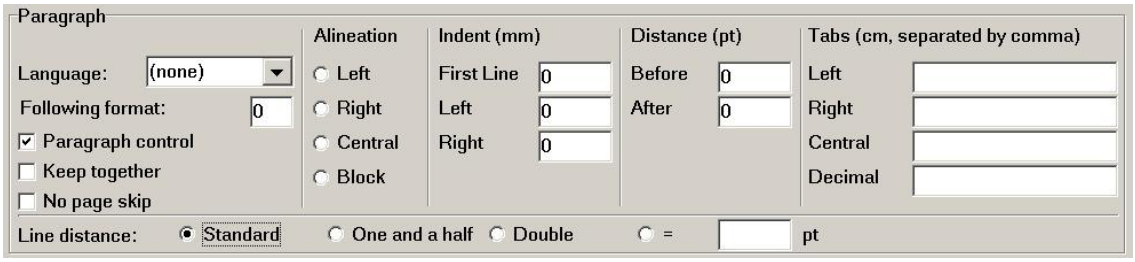

Figure 5. Paragraph formatting panel.

The paragraph formatting consists of six sections. The first section described general characteristics. You may select the language of the paragraph, the format that follows after this format, and multiple controls. Paragraph control – No single line at end or top of page is allowed.

Keep together – Keep this paragraph together will the following (for instance, image and image caption).

No page skip – Does not allow page skip within the paragraph.

The second group defines the Text alienation. The third group the indentation of the text. The fourth group defined the distance before and after the paragraph. The fifth group defines the different types of tabulators. Tabulators (in cm) are separated by commas and may have decimals ("1.5, 2, 3.5,6,7"). The fifth group defines the distance of lines; it can be standard, one and a half line, double, or a fixed value (that must be written in the box).

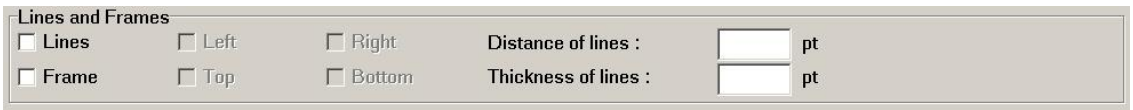

Figure 6. Paragraph formatting panel (lines and frames).

Lines and frames are also part of the paragraph formatting and can be modified here. When selecting 'Lines' you may select which lines are drawn. You may define its from the text and its width.

4.2.3 Character formatting

Character formatting encompasses the font type, font size, font style and the font colour.

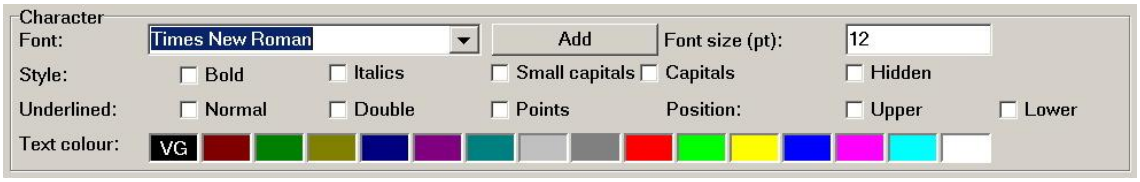

Figure 7. Character formatting panel.

If you cannot find a specific font in the list, you need to click on 'Add'. A font selection table will open. Select in a fist step the font, in a second step the font family. There are four font families. The first (Serif font) is for fonts with small feet of letters where touching the ground line. This is for instance Times New Roman or Garamond. The second family (Fonts without serifs) encompasses all fonts without serifs, such as Arial or Helvetic. The third font family is for system fonts where all letters have the some width (not the case in the both preceding families), such as Courier. The fourth family (Other fonts) is for symbols or icons, such as Wing Dings or Web Dings. It is important to assign the correct family.

The character formatting is self explaining. Please note that the type of character formatting are very basic and cover only most needed. If you miss a special type of formatting, just create a character format and assign a different colour. Later, in your word processor, you can modify the template and assign any special formatting not available here.

5 Formatting in Hdb2Win

RTF files can only be created using the interpreter of the database. In the header section of the programme the format must set to RTF:

```
#format    RTF
```

All output commands (OUT, OUTL) must be accompanied by a format that is separated by a comma from the output text. Characters formats have two digits, paragraph one digit or a letter. Format information starts with a broken bar (¦). The broken bar is inserted via ALT+< or by selecting from the character table (F2, No. 166). It must be the broken bar, not the vertical bar (|). Paragraph formatting cannot stand alone, it must be accompanied with a character and character format. A paragraph should be also finished with an Enter (CR/LF). See examples below:

```
out        name,¦03
outl       ', '+townname, ¦01¦1
```

In templates delivered with application libraries, the following character formatting are pre-defined:

01 – Standard

02 – Italics

03 – Small capitals

04 – Bold

07 – Hidden.

As a final step, the created ASCII file must be converted into a RTF file:

```
CVT        SOURCE.ASC,TEMPLATE
```

The template is the name of the template file created before.

6 Additional RTF-codes

It is possible to insert additional RTF code in your source file. For RTF code the format must be switched to another output format. See the example below for a page skip.

```
#format    plain
OUTP       '\page '
#format    rtf
```

Inserting links to images requires some RTF coding:

```
#format plain
OUTP       '{\field{\*\fldinst INCLUDEPICTURE "'
OUT        'C:\\\\Data\\\\Img\\\\Img1.pcx'
OUTP       '" \\* MERGEFORMAT \\d }{\fldrslt {\b\lang1024 }}}'
#format RTF
```

Note that a normal slash (\) must be replace by four of them (\\\\). This can be done by a small programme:

```
; define section (call only once at the beginning)
define     ImageName,c
define     NewFileName,c
define     itemp,i
; programme, best as macro
; in : ImageName
; out : NewFileName
:ConvertImageName
MOV        NewFileName,''
MOV        itemp,1
:AbbName
MOV        NewFileName,NewFileName+IFF(substr(ImageName,itemp,1)
='\','\\\\',substr(ImageName,itemp,1)) ; this is one line
MOV        itemp,itemp+1
CMP        len(ImageName),itemp
JAE        AbbName
#format plain
OUTP       '{\field{\*\fldinst INCLUDEPICTURE "'
OUT        NewFileName
OUTP       '" \\* MERGEFORMAT \\d }{\fldrslt {\b\lang1024 }}}'
#format RTF
outl       #32,¦01
```

Note that the image must also have a character formatting.

Another common RTF code is the creation of keywords for an index:

```
#format    plain
OUT        '{\xe\v {'+c_genus.gname+'}}¦07'
#format    rtf
```

Note that the format follows without comma. Format 07 must be hidden.

It is possible to start with a new section, as for instance from one to two columns:

```
#format    plain
; Format DIN A4
outp       '\sect \sectd \sbknone\headery709\footery709\cols2\'
outp       'colsx293\ colno1\colw4673\colsr293\colno2\colw4673'
```

```
; Format Letter
outp       '\sect \sectd \sbknone\headery709\footery709\cols2\'
outp       'colsx293\colno1\colw4850\colsr293\colno2\colw4840'
#format    rtf
```

The keywords have the following meaning:

\sect	Starts a new section.
\sectd	Resets all values and set the values according to the first section (this is the section defined in the template file)
\sbknone	Suppresses a page skip with the new section.
\headeryN	Defines the vertical position of the head line (from above). The unit is twips. A twip is a twentieth of an inch point, e.g. 1/20 point = 1/1440 inch. One twip corresponds to a metric 17.639 µm or 0.017639 mm.
\footeryN	Defines the vertical position of the foot line from below.
\colsN	Number of columns.
\colsxN	Space between two columns.
\colnoN	Starts the description of a specific column.
\colwN	Width of the column.
\colsrN	Horizontal position of the right column.

The commando to return to a single column as follows:

```
#format    plain
; Format DIN A4
outp       '\sect \sectd \sbknone\headery709\footery709\'
outp       'colsx709\colno1\colw9640'
; Letter
outp       '\sect \sectd \sbknone\headery709\footery709\'
outp       'colsx709\colno1\colw9974'
#format    rtf
```

7 Problems and limitations

In RTF files it is not possible to define the size of bitmap images. Conventional text processors rarely read the resolution of the image, they assume a value of 120dpi or 180dpi. In some text processors, the width of the image is adapted to the width of the page or column, in others not. In some processors the PCX (ZSoft Paintbrush) format is red and displayed correctly. The problem is generally known. A common recommendation is, to limit the size of the image with a one-cell-table, but this does not change the size of the image, it only crops it. So do not wonder when your images appear much to large or too small.

8 Imprint

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Creating RTF Templates and RTF files

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