November 9, 2001

From the Edge:	Extending the use of RBLOB.DLL
Section:	Forms/Reports/Labels
Chapter:	Running R:BASE Your Way!
Platform:	R:BASE 2000 (ver 6.5++) for Windows
Build:	1.845xRT03 and Higher

Background:

The R:BASE 2000 (version 6.5) for Windows, first released on February 14, 2000, introduced a powerful feature of running external R:BASE specific DLLs in Forms, Reports and Labels.

A few sample DLLs were also bundled to demonstrate the functionality of using external DLLs in R:BASE 2000 (version 6.5) for Windows.

The Annual 2000 R:BASE Developers' Conference CD also includes a COOL collection of custom designed R:BASE DLLs.

Configuring R:BASE Specific DLLs:

A DLL to be used with Forms, Reports or Labels must be entered into the [PlugIn] section of the RBASE.INI file.

Take for example three DLL's. The first, RBARCODE.DLL is used with both Forms and Reports or Labels, the second, RCALEN.DLL is used only with Forms and the third RPOSTBAR.DLL is used only with Reports or Labels. Given these three DLL's you might find a [PlugIn] section that resembles the following.

```
[PlugIn]
FDRAWDLL0=RBARCODE.DLL
FDRAWDLL1=RCALEN.DLL
RDRAWDLL0=RBARCODE.DLL
RDRAWDLL1=RPOSTBAR.DLL
```

The upcoming release of inline patch-1 for R:BASE 2000 (ver 6.5++), Build: 1.846xRT03, will include the updated and enhanced version of RBLOB.DLL.

Updated and Enhanced RBLOB.DLL

You can use the custom drawing feature of RBLOB.DLL in association with any column or variable of type TEXT on your forms, reports and labels.

Highlights:

- Ability to read a bitmap from a file and display it on a form and then stretches to fit in the space you provide.
- Ability to handle many file formats, notably BMP, GIF, TIF and JPGs.
- Ability to display the image in clip mode, scale mode (largest possible that will fit in the space provided without stretching), stretch mode, and grow mode (where the picture will display in its native size even if it has to grow larger than the space you provide).
- Ability to display in color or monochrome (for use on black and white printers)
- Ability to rotate the image in 90 degrees.
- Ability to display the image at the center of area provided.

Features:

- Custom image drawing supports Bitmap, GIF, JPG and TIF formats.
- It can display images in Forms, Reports and Labels in following modes:
  .dmScale
  .dmStretch
  .dmGrow
  .dmClip
  .dmCenter
- Custom drawing works with disk files only. If you have your images stored in database BLOB fields you must first write the image to a file.
- You must have the file RBLOB.DLL included in [PlugIn] section of R:Base.INI file.

Using RBLOB.DLL

All DLLs must be listed in RBASE.INI file to display as [Custom] option for any column/variable object properties in Forms, Reports and Labels.

To use RBLOB.DLL, you would apply the following strings after the [PlugIn] tag in the RBASE.INI:

```
FDRAWDLL1=rblob.dll
RDRAWDLL1=rblob.dll
```

so that the finished product would look like:

```
[PlugIn]
FDRAWDLL0=rbarcode.dll
RDRAWDLL0=rbarcode.dll
FDRAWDLL1=rblob.dll
RDRAWDLL1=rblob.dll
```

Then, start R:BASE and place a column or variable on a form, report or label. Select CUSTOM on the properties, and then select Blob Draw from the drop down list. Your column or variable must have a text value in the
form FileName, DrawMode where FileName is a BMP, GIF, JPG or TIF file on disk and DrawMode is one of dmScale, dmStretch, dmGrow, or dmClip.

Syntax

```
FileName, DrawMode
```

where FileName is the file on disk that you want to draw, and DrawMode is one of the following:

dmClip:	Causes R:BASE to display as much of the picture as possible within the space provided without changing the actual dimensions of the image. This is similar to the default R:BASE behavior.
dmScale:	Causes R:BASE to scale the image to be as large as possible without changing the aspect ration.
dmStretch:	Cause R:BASE to make the image fit exactly within the space provided. If necessary R:BASE will stretch the image vertically or horiztonally.
dmGrow:	R:BASE will draw the image on the form or report in its actual dimensions, even if this requires more space than you provided.

dmMode: is a setting from the current version of RBLOB. It determines whether you want the picture to stretch to fit the dimensions given, scale to the largest size that will fit in the dimensions without stretching, clip the image so it appears in its "natural" size (but only as much as fits in the dimensions) or grow the dimensions so the entire picture prints in its"natural" size.

dmCenter: Cause R:BASE to display the image in the center of defined area.

Steps:

You can use the custom drawing feature in association with any column or variable of type TEXT on your forms and reports. Do the following:

01. Make sure your TEXT column or variable has a valid value (see below).

02. Place the variable on the form, report or label. Size the field so it is as large as you want the image to be when displayed.

03. On the properties form for variable make sure the box Custom is checked. Also, make sure that in the Custom drop down you have selected Blob Draw.

04. Save the form report or label. When you EDIT USING (for forms) , PRINT (for reports) or LBLPRINT (for labels) you will see your images displayed.

05. If you intend to print your reports or labels to the printer, on some systems you may have to change the spooling format for the printer to RAW.

    The size of object you place on the form, report or label will control the size of the picture and the text contained in the column or variable will control the custom drawing.

Examples:

In a form, you would use the following syntax to define the variables:

```
vDrawString = ('Signature.BMP, dmScale')
fvLogoDisplay = ('MyLogo.BMP, dmStretch')
vBlobDraw = ('Images\'+ImageFile+','+'dmCenter')
```

In a command file, you would define the variable using the following structure:

```
SET VAR vImage text = 'c:\dir\filename.bmp,dmstretch'
```

```
Forest.BMP, dmGrow
```

would cause the forest.bmp file to be displayed, and it would grow as large as it needed to be to display the entire picture.

```
Forest.BMP, dmStretch
```

would cause forest.bmp to be drawn, stretched to fit exactly in the borders of the object as you placed it on the form or report.

Then, place the variables on the forms, reports or labels, and watch RBLOB.DLL work its magic!