

What's eXclusive to R:BASE eXtreme 9.5



R:BASE Technologies, Inc.



What's eXclusive to R:BASE eXtreme 9.5

by R:BASE Technologies, Inc.

Welcome to R:BASE eXtreme 9.5!

This document details the "9.5" specific features that have been added to R:BASE eXtreme.

R:BASE eXtreme for Windows is a new relational database development environment that has been amplified to provide the latest menu-driven features to database professionals. With the R:BASE engine established as the foundation of stability, the program interface and designers have been enhanced to fully exhibit a higher quality of development usability.

The "eXtreme" in the product's name signifies the cutting-edge development interface incorporated into the R:BASE program making database and application development more productive.

What's eXclusive to R:BASE eXtreme 9.5 for Windows

Copyright © 1982-2016 R:BASE Technologies, Inc.

Information in this document, including URL and other Internet web site references, is subject to change without notice. The example companies, individuals, products, organizations and events depicted herein are completely fictitious. Any similarity to a company, individual, product, organization or event is completely unintentional. R:BASE Technologies, Inc. shall not be liable for errors contained herein or for incidental consequential damages in connection with the furnishing, performance, or use of this material. This document contains proprietary information, which is protected by copyright. Complying with all applicable copyright laws is the responsibility of the user. Without limiting the rights under copyright, no part of this document may be reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), or for any purpose, without the express written consent of R:BASE Technologies, Inc. We reserve the right to make changes from time to time in the contents hereof without obligation to notify any person of such revision or changes. We also reserve the right to change the specification without notice and may therefore not coincide with the contents of this document. The manufacturer assumes no responsibilities with regard to the performance or use of third party products.

Products that are referred to in this document may be either trademarks and/or registered trademarks of the respective owners. The publisher and the author make no claim to these trademarks.

The software described in this document is furnished under a license agreement. The software may be used or copied only in accordance with the terms of that agreement. Any unauthorized use or duplication of the software is forbidden.

R:BASE Technologies, Inc. may have patents, patent applications, trademarks, copyrights, or other intellectual property rights covering subject matter in this document. Except as expressly provided in any written license agreement from R:BASE Technologies, Inc., the furnishing of this document does not give you any license to these patents, trademarks, copyrights, or other intellectual property.

Trademarks

R:BASE®, Oterro®, RAdmin®, R:Scope®, R:WEB Suite®, R:Mail®, R:Charts®, R:Spell Checker®, R:Docs®, R:BASE Editor®, R:Scheduler®, R:BASE Plugin Power Pack®, R:Style®, R:Code®, R:Struc®, RBZip®, R:Fax®, R:QBDataDirect®, R:QBSynchronizer®, R:QBDBExtractor®, R:Mail Editor®, R:Linux®, R:BASE Dependency Viewer®, R:Archive®, R:Chat®, RDCC Client®, R:Mail Editor®, R:Code®, R:Column Analyzer®, R:DF Form Filler®, R:FTPClient®, R:SFTPClient®, RBMap®, R:GeoCoder®, R:PDF Form Filler®, R:PDFWorks®, R:PDFMerge®, R:PDFSearch®, RBInstaller®, RBUpdater®, R:Capture®, R:RemoteControl®, R:Synchronizer®, R:Biometric®, R:CAD Viewer®, R:DXF®, R:Twain2PDF®, R:Tango®, R:SureShip®, R:BASE Total Backup®, R:Scribbler®, R:SmartSig®, R:OutLink®, R:JobTrack®, R:TimeTrack®, R:Syntax®, R:WatchDog®, R:Manufacturing®, R:Merge®, R:Documenter®, R:Magellan®, R:WEB Reports®, R:WEB Gateway®, R:Stat®, R:ReadyRoute®, R:Accounting®, R:Contact®, R:DWF Viewer®, R:Mail Viewer®, R:Java®, R:PHP® and Pocket R:BASE® are trademarks or registered trademarks of R:BASE Technologies, Inc. All Rights Reserved. All other brand, product names, company names and logos are trademarks or registered trademarks of their respective companies.

Windows, Windows 10, Windows 8.x, Windows 7, Vista, Windows Server 2003-2012 R2, XP, Bing Maps, MapPoint, and Outlook are registered trademarks of Microsoft Corporation.

Printed: September 2016 in Murrysville, PA

First Edition

Table of Contents

Feature I	PDF Form Controls for Reports and Labels	1
1	PDF Annotation	1
2	PDF Push Button	2
3	PDF Text Field	2
4	PDF Check Box	3
5	PDF Radio Button	4
6	PDF Combo Box	4
7	PDF List Box	5
8	PDF Signature Field	5
Feature II	Enhanced Form/Report/Label DOS to Windows Conversion	5
Feature III	Legacy Application File Conversion	7
Feature IV	Integrated Windows Authentication (IWA)	8
Feature V	New GUID Data Type	9
Feature VI	New "Time Picker" Form Controls	9
Feature VII	New "Enhanced Calendar" Form Controls	10
Feature VIII	New "Collapse Panel" Control	10
Feature IX	New CVAL Functions	12
Feature X	Alternative Toolbar Layout for Designers	13
Feature XI	Context Help for Form, Report, and Label Designers	15
Feature XII	Single Click Form Object Conversions	17
Feature XIII	New Interface for Database Events	18
Feature XIV	Additional "Apply" Button for Form Control Properties	19

Feature XV	Form Control "Locks" are Saved within the Form	20
Feature XVI	DIALOG Command Enhancements	22
Feature XVII	Load Defaults for Configuration Settings	24
Feature XVIII	Additional Data Dictionary Features	24
Feature XIX	New Enhanced DB Grid Hot Key Features	27
Feature XX	Tree View Search Functionality	31
Feature XXI	Copy/Paste Pop-up Menu Properties	32
Feature XXII	New UNLOAD STRUCTURE Functionality	33
Feature XXIII	Pop-up Menu in Default Form Settings	35
Feature XXIV	Drag Form Property for Enhanced Panels	35
Feature XXV	New "Copy Database to..." option	36
Feature XXVI	New Favorites Toolbar for Form/Report Designers	37
Feature XXVII	New Margins Setting for Form Controls	38
Feature XXVIII	Additional "Find in Files" Settings	41
Feature XXIX	Variable Form to External Form Conversion	42
Feature XXX	Truncated Data Warning for the Data Designer	44
Feature XXXI	Autosize Buttons for the DB Navigator	44
Feature XXXII	New R> Prompt Enhancements	46
Feature XXXIII	Enhanced Image Support for Drop Down Menu and Bit Buttons	47
Feature XXXIV	Additional LAUNCH command parameters	48
Feature XXXV	New RNDDOWN Function	49

Feature XXXVI	Cue Banner Display in DB/Variable Edit Fields	50
Feature XXXVII	R:BASE On-Screen Keyboard (ROSK)	51
Feature XXXVIII	Balloon Tip Hint in DB/Variable Edit Fields	53
Feature XXXIX	New BLOB Editor Multi-Page Image Features	54
Feature XL	Comment and Version for External Form Files	55
Feature XLI	Column Comment Hints in WHERE/Expression Builders	55
Feature XLII	Clear Error List in Trace Debugger	57
Feature XLIII	Character Case for Report Memo Objects	58
Feature XLIV	RBA Application File Conversion	59
Feature XLV	Toolbar Designer	60
Feature XLVI	Popup Menu Designer	63
Feature XLVII	Image List Editor	64
Feature XLVIII	New Image Folder System Variable	65
Feature XLIX	Duplicate Row in Data Browser/Editor	66
Feature L	DROP Multiple Views	66
Feature LI	Capture a Report Page Number	67
Feature LII	New Spinner Controls	67
Feature LIII	Modal External Form Designer	67
Feature LIV	Enhanced LIST Command	68
Feature LV	Additional Character Case Options	70
Feature LVI	Enhanced REFF Command	72

Feature LVII	Enhanced ATTACH Command	73
Feature LVIII	Additional Logical Functions	74
Feature LIX	Enhanced RBBEDIT Command	74
Feature LX	New RUNRBA Command	76
Feature LXI	Persistent Space for Page Footer/Header Bands	76
Feature LXII	New Selected Row Color Options for List Views	77
Feature LXIII	New "On After Start" Action for RBA Application Files	78
Feature LXIV	New IFF Function	79
Feature LXV	Support to Capture Images to the Clipboard	80
Feature LXVI	Dynamic Enhanced DB Grid Column Sorting	81
Feature LXVII	Capture Cell Value Within Enhanced DB Grid	82
Feature LXVIII	Button Alignment for Radio Group Controls	82
Feature LXIX	Bidirectional Mode Support	83
Feature LXX	Find in Database Explorer Utility	83
Feature LXXI	Additional Form RBTI System Variables	85
Feature LXXII	Reset Form, Report, Label Version Number	85
Feature LXXIII	Default Settings for the BLOB Editor	86
	1 Image	86
	2 Note/VarChar	87
	3 Rich Text	88
	4 Unicode/BSTR	89
	5 Hex	90

Feature LXXIV	New Temporary Option for JOIN, INTERSECT, SUBTRACT, and UNION	91
Feature LXXV	Enhanced DIALOG Command to Resize a Custom Image	94
Feature LXXVI	Password Protection for Reports/Labels	94
Feature LXXVII	R:BASE On-Screen Keyboard Settings	95
Feature LXXVIII	Custom Expression Memo Field Font	97
Feature LXXIX	Enhanced Print Form Options	97
Feature LXXX	Show Row Numbers in List Views	98
Feature LXXXI	Enhanced Print Preview Page Scrolling	99
Feature LXXXII	Capture Enhanced DB Grid Sorting	101
Feature LXXXIII	Shortcut Key support for Custom Form Actions	101
Feature LXXXIV	Capture Keyboard Events With New Form EEPs	102
Feature LXXXV	Enhanced Compare by Content Utility	104
Feature LXXXVI	SATTACH With Limited Columns	105
Feature LXXXVII	Default Printer Selection in Print Preview	106
Feature LXXXVIII	New Count Down Timer Control	106
Feature LXXXIX	Additional Form RBTI System Variables	108
Feature XC	New Advanced Variable Rich Edit Control	108
Feature XCI	New Filter Features for Enhanced DB Grids	109
Feature XCII	Preselected Values Within CHOOSE	111
Feature XCIII	Custom Menu Bar Colors	111
Feature XCIV	New CHECKPROP Setting	113

Feature XCV	Check Box Support in List View Controls	113
Feature XCVI	New NOCALC Setting	115
Feature XCVII	Set Background Color for Multiple Forms	116
Feature XCVIII	R:BASE Optimizations	118
Feature XCIX	Reset Property for List View Controls	118
Feature C	Exclusive Mode in Tree Views	118
Feature CI	Data Browser Export Options	119
Feature CII	Check Box Support in List Box Controls	120
Feature CIII	Relational Operators in Enhanced DB Grid Background Color Mapping	122
Feature CIV	Expand Nodes in LoadDirectoryName Plugin	123
Feature CV	New Date/Time Picker EEPs	124
Feature CVI	Find and Expand Tree View Nodes	125
Feature CVII	Column-Level Filter Types for Enhanced DB Grids	126
Feature CVIII	Added "Reset User Count" Option	126
Feature CIX	Enhanced ODBC Table Attaching	127
Feature CX	R:BASE Editor "Hot Key" Tab Navigation	128
Feature CXI	Enhanced Replacing Values in the Data Browser	128
Feature CXII	Enhanced Button Options for PAUSE Command	129
Feature CXIII	Enhanced YES/NO Button Options for DIALOG Command	130
Feature CXIV	New Support for Native Form Display	132

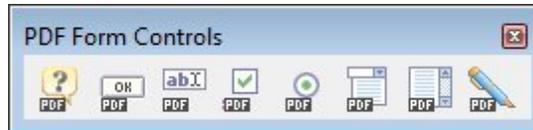
Feature CXV	New Support for Native Control Display	133
Feature CXVI	Display Format for Form Database and Variable Controls	134
Feature CXVII	Enhanced DB Grid - On After Cell Click EEP	135
Feature CXVIII	Blank When Zero and NULL Format Properties	136
Feature CXIX	Automatic Backup Option for External Form Files	137
Feature CXX	Enhanced DATETIME support for DB/Variable Edit controls	138
Feature CXXI	New Query Driven RBTI System Variable	139
Feature CXXII	Added R:BASE Editor Setting for Trailing Spaces	139
Feature CXXIII	New COLCHECK View Setting	140

1 PDF Form Controls for Reports and Labels

PDF Form Controls allow for PDF output to be provided to others so data can be inserted into fields.

There are eight different form controls. Each tool is used to create the respective field type.

After creating a field, users can right click on the control for added properties.



1.1 PDF Annotation

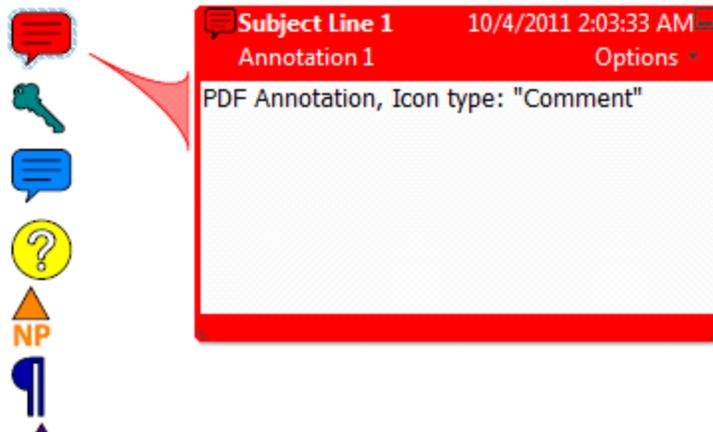
This object looks like a "sticky note". Users can pre-define the following type of annotations:

- Comment
- Key
- Note
- Help
- New Paragraph
- Paragraph
- Insert

PDF Annotation Examples:



Annotation display in a PDF file when the mouse button has been clicked:



The following properties for PDF Annotation object are also available:

- Border Color
- Subject
- Title
- Contents

1.2 PDF Push Button

Push buttons can be one of the three kinds:

- Submit button
- Reset button
- Java Script button.

Submit button can be used to submit data from the form fields to e-mail or http, reset button will return all form fields to original state and java script button will start a java script after click.

Other properties available for Push Buttons:

- Border Color
- Background Color
- Down Caption
- Field Name
- Normal Caption
- Rollover Caption

Push Button Examples:



1.3 PDF Text Field

Text fields in PDF Forms can be used for entering text data. They can be single line or multi-line. Text field data can be accessed by a java script function.

Other properties available for Text Fields:

- Border Color
- Background Color
- Field Name
- Border
- Do not Scroll
- Do not Spell Check
- Password
- Max Length

Text Field Examples:

Regular Text Field:

Multiline Text Field:

Password Field:

Limited Length Field:

1.4 PDF Check Box

Check Box controls are shown in the PDF document as a square box that can contain white space (for false) or a tick mark (for true).

Check Box fields in PDF Forms can be the following:

- Check
- Circle
- Cross
- Diamond
- Square
- Star

Other properties for Check Box controls:

- Background Color
- Border Color
- Checked
- Field Name

Check Box data can be accessed by a java script.

Check Box Examples:



1.5 PDF Radio Button

A Radio Button is a type of PDF control element that allows the user to choose only one of a predefined set of options. These set is controlled by property "Field Name" property, e.g. different Radio Buttons with same "Field Name" forming the one group. It is possible that initially none of the radio buttons in a group are selected.

Other Radio Button properties:

- Background Color
- Border Color
- Checked
- Field Name
- Value

Radio Button data can be accessed by a java script.

Radio Button Examples:



1.6 PDF Combo Box

Combo Box in PDF document is a combination of a drop-down list or list box and a single-line text box, allowing the user to either type a value directly into the control or choose from the list of existing options.

Combo Box data can be accessed by a java script.

Other Combo Box properties:

- Background Color
- Border Color
- Field Name
- Editable
- Sort List
- Items
- Selected Item Index
- Value

Combo Box Examples:

Regular:

Editable:

1.7 PDF List Box

A List Box is a PDF Control that allows the user to select one or more items from a list contained within a static, multiple line text box. The user clicks inside the box on an item to select it.

List Box data can be accessed by a java script.

Other Combo Box properties:

- Background Color
- Border Color
- Field Name
- Multi Select
- Sort List
- Items
- Value

List Box Example:



1.8 PDF Signature Field

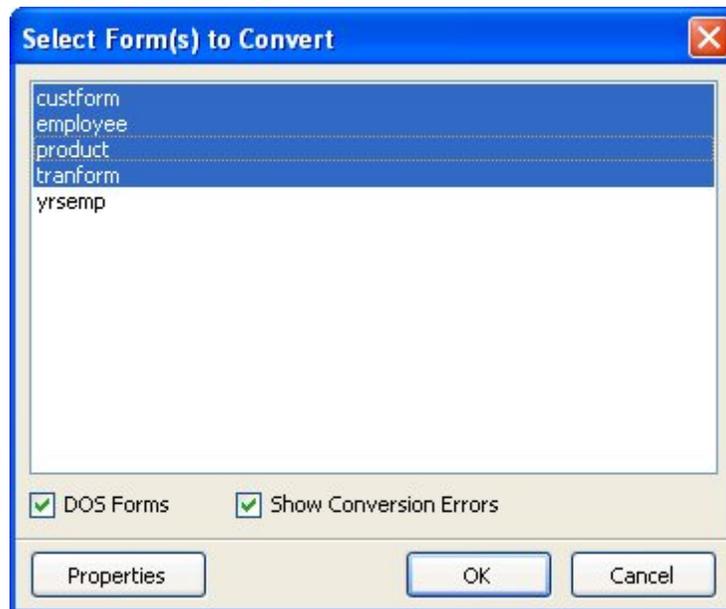
A Signature Field is a specialized type of form field used for collecting signatures.

2 Enhanced Form/Report/Label DOS to Windows Conversion

The conversion process for DOS database to Windows has been enhanced a great deal to streamline the transition to R:BASE eXtreme 9.5 for Windows.

The CONVERT command was updated to support the conversion of 4.5 and higher databases. Support for password protected databases is included.

Individual forms can be selected and converted. Multiple forms can be converted by holding the [Ctrl] key and selecting individual form names. Or pressing the [Ctrl]+[A] keys will select all listed forms. Combined text lines are automatically separated into separate text fields. All controls are converted using a standard mono-spaced font for proper display.

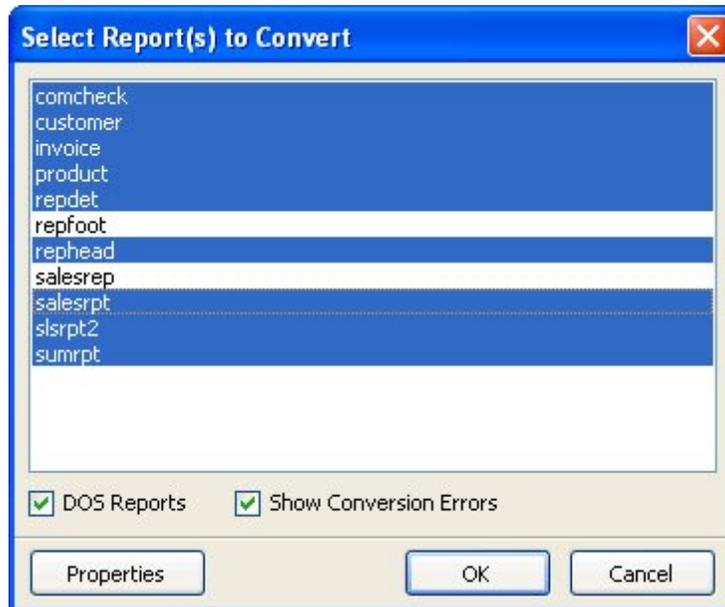


The "Properties" button provides a form conversion option to change single and double line characters to blanks.

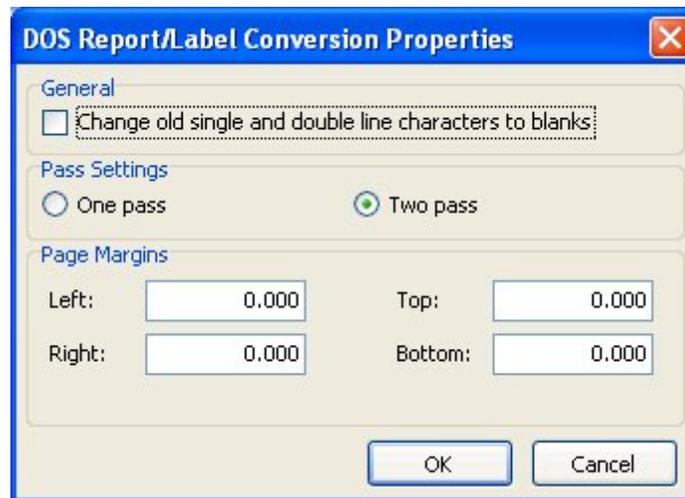


Individual reports/labels can be selected and converted. Multiple items can be converted by holding the [Ctrl] key and selecting individual names. Or pressing the [Ctrl]+[A] keys will select

all listed items. In the process hyphen and equal characters are converted to lines and double lines. All controls are converted using a standard mono-spaced font for proper display. Compressed DOS reports/labels will convert using the Size 6 Courier New font.

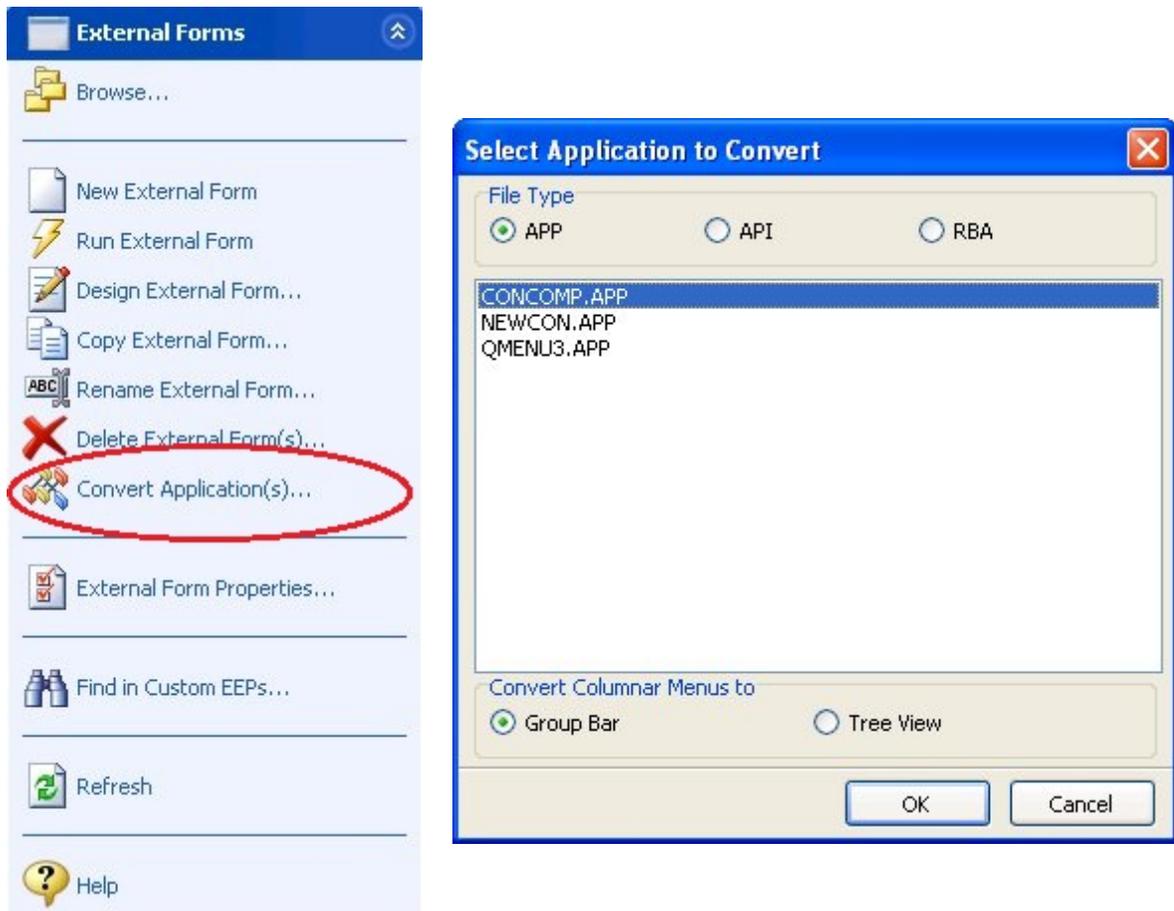


The "Properties" button provides conversion options to change single and double line characters to blanks, a pass setting, and margins (figure 5).



3 Legacy Application File Conversion

Within the External Form File portion of the Database Explorer, a new "**Convert Application(s)...**" option is available. This feature converts Windows and DOS legacy application files (.APP/.API) to an External Form File.



Selecting this option will parse through the \$COMMAND blocks legacy application file and store each as a Custom Form Action within an External Form.

For legacy application files that contain \$MENU Blocks, a menu system will be created within the External Form. If the legacy application file uses a "pull down" type of menu system, the converted result will be a Menu Bar layout in R:BASE eXtreme for Windows. If the legacy application file uses a "columnar" type of menu system, a Group Bar or Tree View can be specified as the converted result.

4 Integrated Windows Authentication (IWA)

Integrated Windows Authentication (IWA) is the automatically authenticated connections between Microsoft IIS, Internet Explorer, and other Active Directory aware applications.

In R:BASE, support for Integrated Windows Authentication uses the security features of Windows clients and servers and allows access to an R:BASE database when the Windows user name and password matches a defined R:BASE database user name and password. The current Windows user information on the client computer is supplied to R:BASE and does not prompt user for additional user name and password.

In order to use this feature, R:BASE database administrators must create an owner and user privileges for the database files to take full advantage of IWA support.

In addition to creating the database user privileges, the operating condition WINAUTH must be

set to ON when prior to users connecting to the database. WINAUTH can be set within the R:BASE configuration file, or defined within an application startup file.

Requirements:

- WINAUTH must be set ON before connecting to the database.
- Database must contain an owner and user privileges that match Windows network accounts.

Notes:

- R:BASE will accept user names that contain spaces.
- Passwords are case-sensitive.
- If the authentication exchange initially fails to identify the user, R:BASE will prompt the user for a user name and password.
- A new CVAL Function (CVAL('WINAUTH')) has been established to check if WINAUTH is on.
- When an R:BASE user successfully connects to the database via IWA, the current R:BASE USER identifier is set to the current Windows user name.
- The WINAUTH setting is specific to R:BASE eXtreme 9.5 (64).

5 New GUID Data Type

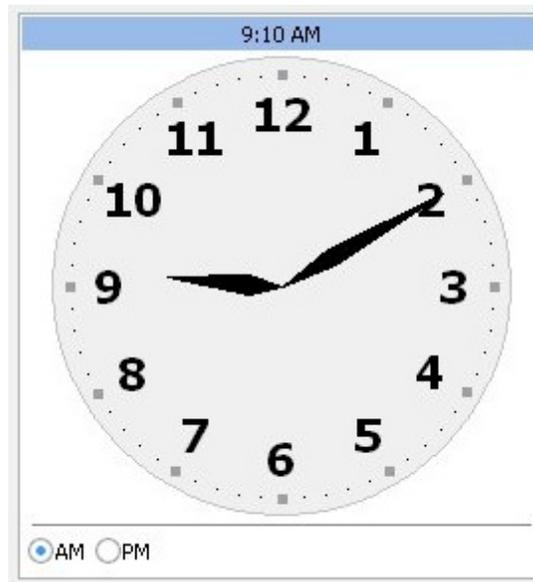
The new GUID data type allows for the use of a globally unique identifier value to store 100% unique values into a primary key column. As the GUID data type is a binary value, it will increase retrieval of data from tables.

An example of a GUID value is: **8C20005C-0E2A-47E0-B2BE-57E67961628B**

This data type is only available in R:BASE eXtreme 9.5 (64).

6 New "Time Picker" Form Controls

A new Time Picker control has been added to the Form Designer to display a clock to edit time values. A standard Time Picker, DB Time Picker, and Variable Time Picker is available.



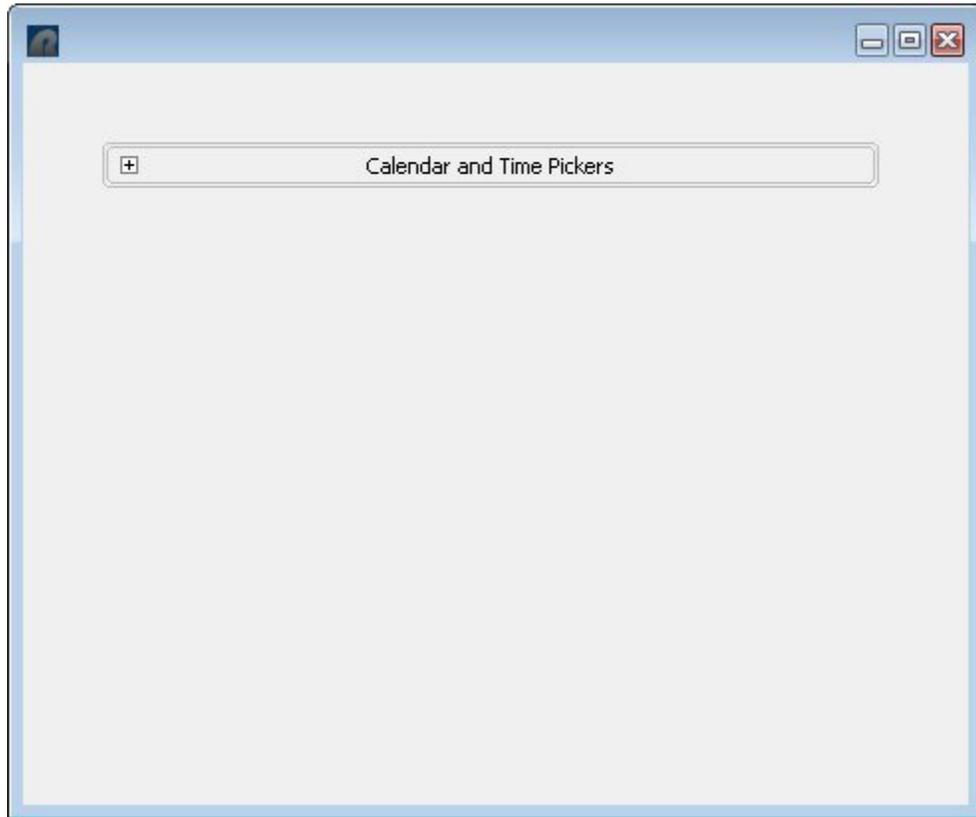
7 New "Enhanced Calendar" Form Controls

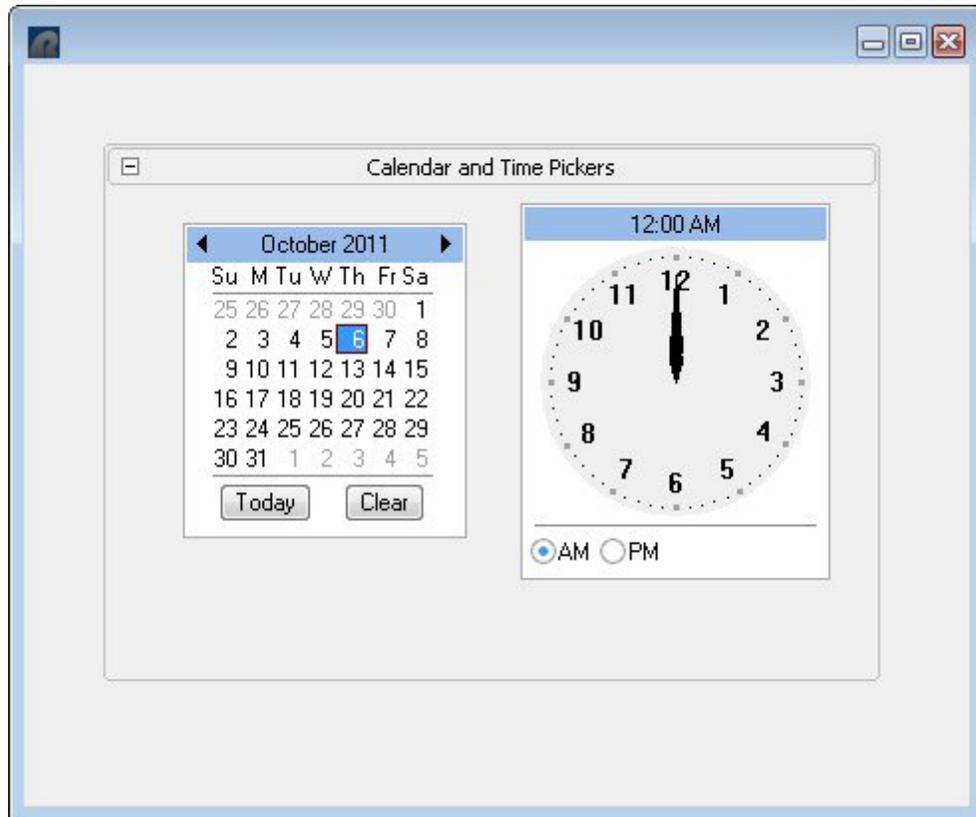
A new Enhanced Calendar control has been added to the Form Designer to display an improved calendar to browse and select dates. A standard Enhanced Calendar, Enhanced DB Calendar, and Enhanced Variable Calendar is available.



8 New "Collapse Panel" Control

A new Collapse Panel control has been added to the Form Designer to display a special panel that will collapse and recede when clicked upon to contain form controls. A more recent enhancement allows for an EEP to be executed when the collapse state for the panel is changed.





9 New CVAL Functions

01.

A new CVAL Function (CVAL('WINAUTH')) has been established to check if WINAUTH is on. WINAUTH toggles the support for Integrated Windows Authentication when connecting to R:BASE databases.

```
SET VAR vWinAuthChk TEXT = (CVAL('WINAUTH'))
SHOW VAR vWinAuthChk
```

Variable	= Value
Type	

-----	-----
vWinAuthChk	= OFF
TEXT	

02.

A new CVAL Function (CVAL('GUID')) is available to generate a globally unique identifier value.

```
SET VAR vNewGUID = (CVAL('GUID'))
SHOW VAR vNewGUID
```

Variable Type	= Value
-----	-----

vNewGUID TEXT	= BEDA7594-F6C1-44BD-A732-4BB72F17A1DA

03.

A new CVAL Function (CVAL('NETGROUP')) is available to retrieve a list of global groups to which a specified user belongs.

04.

A new CVAL Function (CVAL('NETLOCALGROUP')) is available to retrieve a list of local global groups to which a specified user belongs.

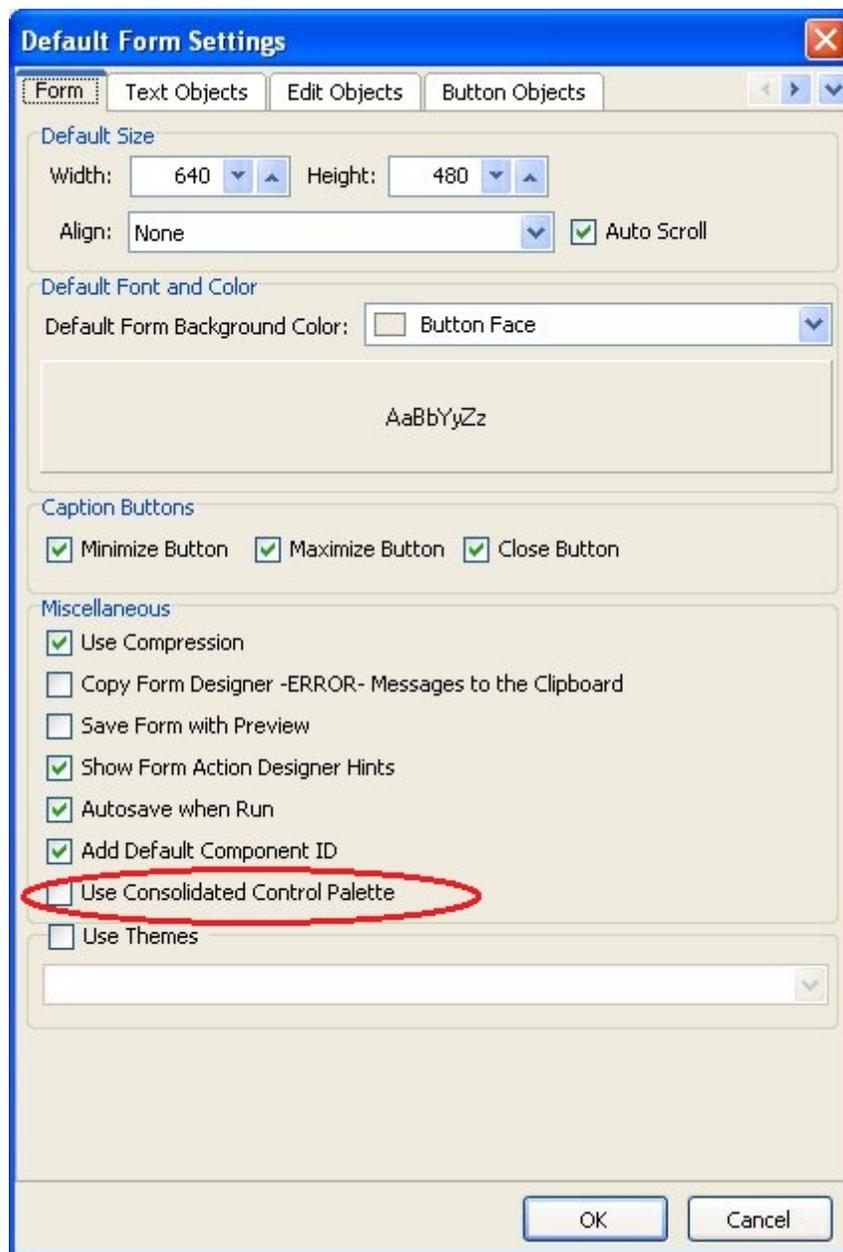
```
SET VAR vNetGroup = (CVAL('NETGROUP'))
SET VAR vNetLocalGroup = (CVAL('NETLOCALGROUP'))
SHOW VAR
```

Variable Type	= Value
-----	-----

vNetGroup TEXT	= None
vNetLocalGroup TEXT	= Administrators

10 Alternative Toolbar Layout for Designers

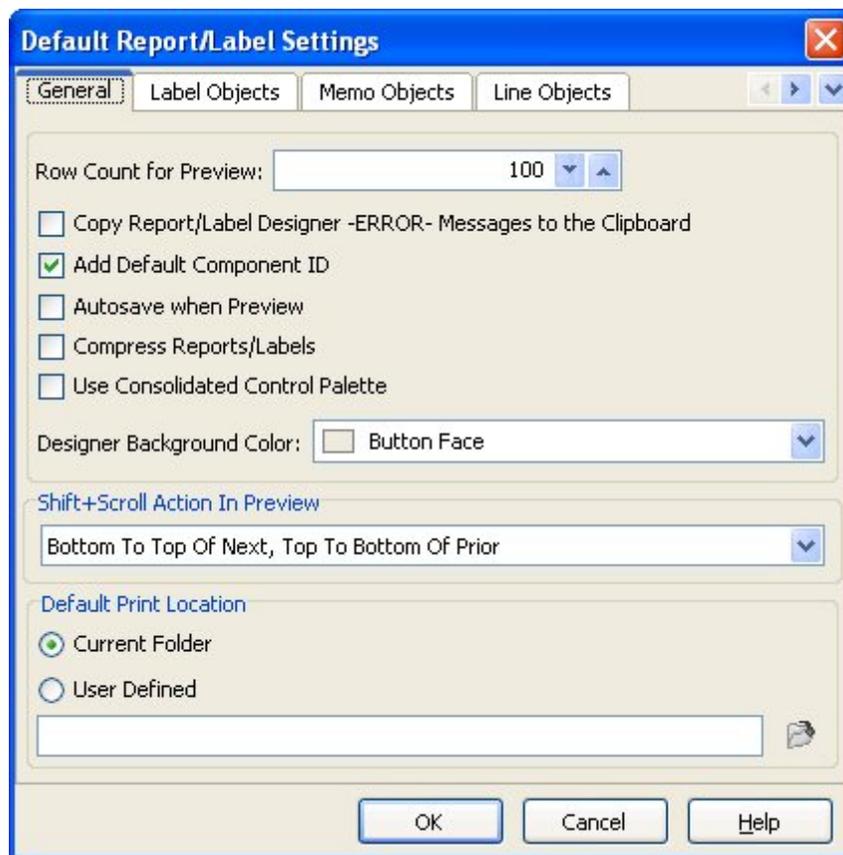
In order to consolidate the many Form Designer Control Toolbars into a single toolbar for better screen use, a new option is now available within the Form Properties to do so.



After enabling the setting, the Standard Controls, Database Controls, Variables Controls, Additional Controls, Legacy Controls, Internet Controls, and File System Controls toolbars are consolidated on one single toolbar palette.



The "Use Consolidated Control Palette" setting is also available within the Report/Label Designers.



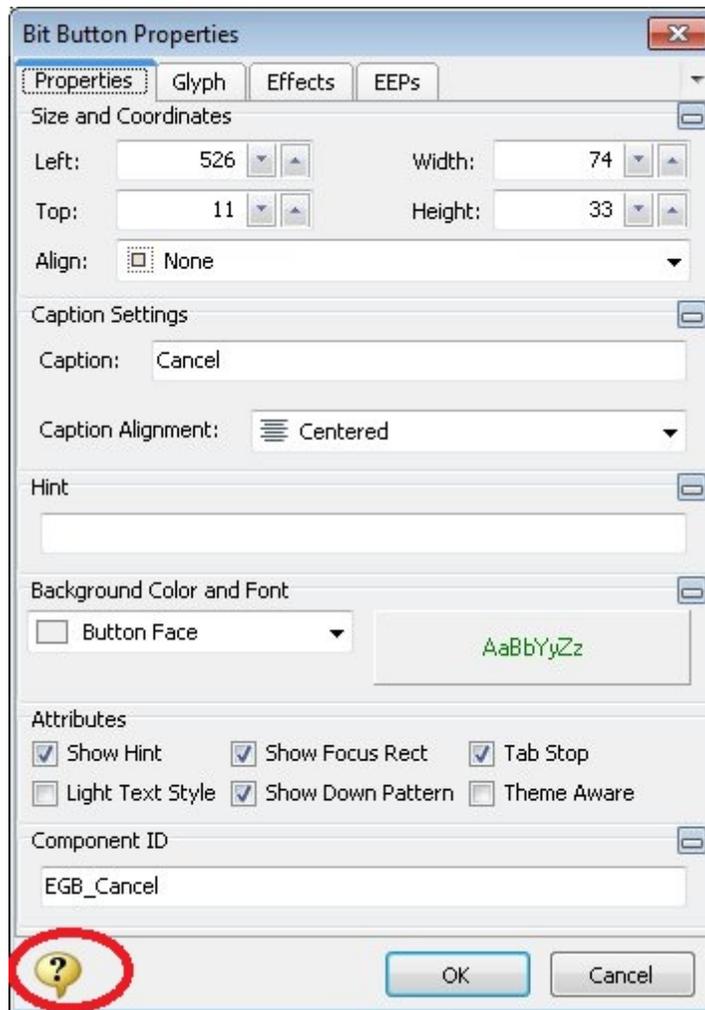
After enabling the setting, the Standard Controls, Database Controls, Variables Controls, Advanced Controls, and PDF Form Controls toolbars are consolidated on one single toolbar palette.



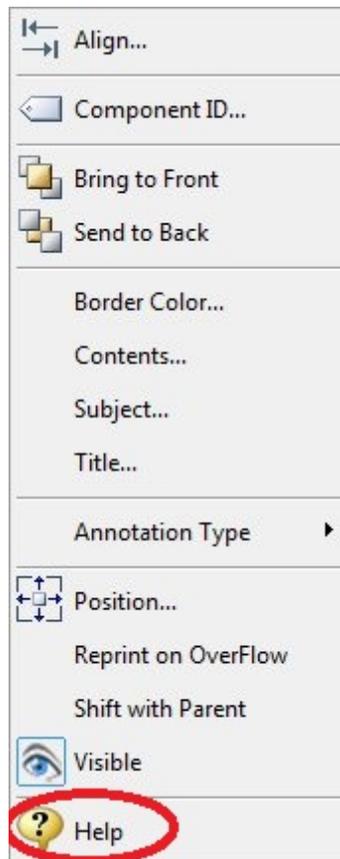
11 Context Help for Form, Report, and Label Designers

The Form, Report, Label, and External Form Designers have been enhanced to support the ability to launch the specific chapter within the Help documentation directly from a selected object or control. This time saving allows for fast reference to the documentation for some controls that seem buried within chapters of pages.

For form controls, an added button is located on the bottom left corner of every properties dialog.



For report and label controls, an added option is located on the bottom of every menu when you right click on the control. Pressing [Shift]+[F1] while the control is selected will also launch the Help chapter for the specific control.

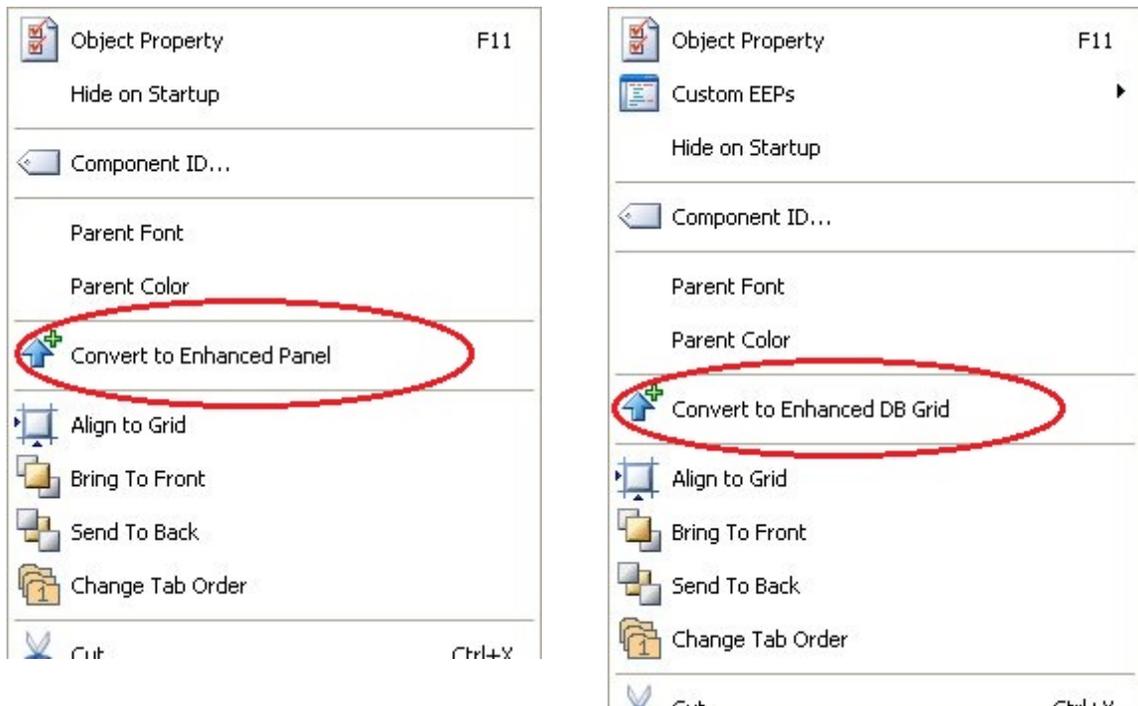


12 Single Click Form Object Conversions

Several Form Designer controls are listed twice, as the standard version and as an "Enhanced" version (i.e **Panel** and the **Enhanced Panel**). The original control remains available for backwards compatibility for those converting from pre-9.x releases. In previous versions, in order to take advantage of the "enhanced" control, the form object would need to be recreated on the form to replace the original.

With R:BASE eXtreme 9.5, an additional option is available for each object that has an "Enhanced" version, when a user right clicks on it within the Form Designer. The list of controls are as follows:

- Panel > Convert to Enhanced Panel
- Group Box > Convert to Enhanced Group Box
- Speed Button > Convert to Enhanced Speed Button
- Tab Control > Convert to Enhanced Tab Control
- Variable Calendar > Convert to Enhanced Variable Calendar
- Variable Rich Edit -> Convert to Advanced Variable Rich Edit
- DB Calendar -> Convert to Enhanced DB Calendar
- DB Grid > Convert to Enhanced DB Grid
- DB Navigator > Convert to Enhanced DB Navigator
- DB Rich Edit -> Convert to Advanced DB Rich Edit

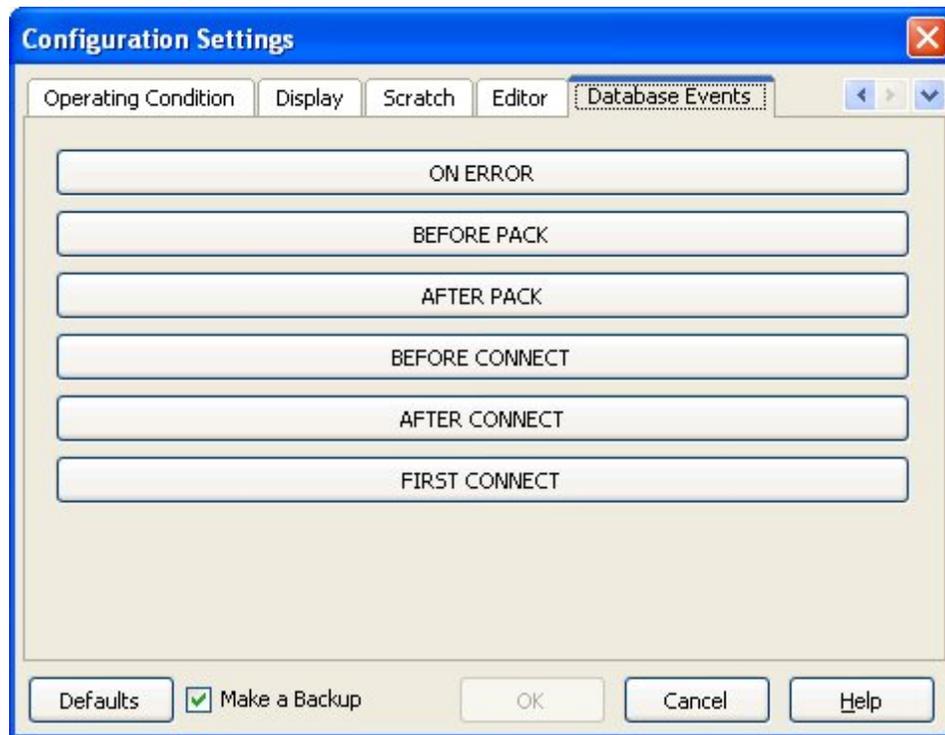


13 New Interface for Database Events

Users can utilize database events to run a command file whenever a database is connected or packed. Access to the database events is now available within the Configuration Settings dialog.

Database Events:

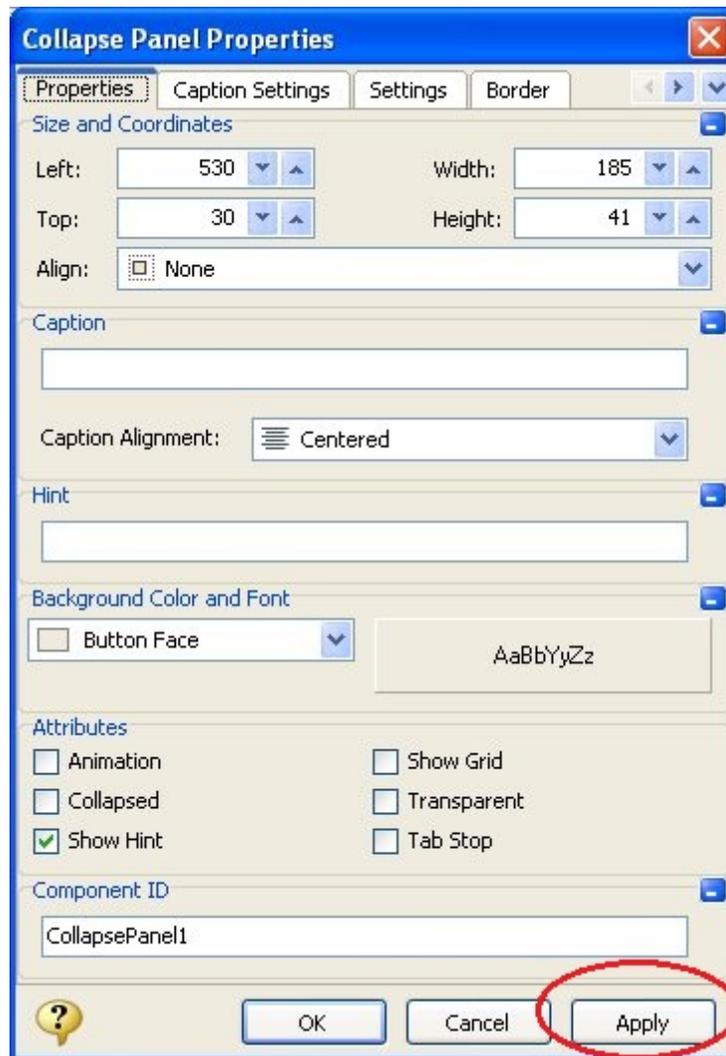
- ON ERROR
- BEFORE PACK
- AFTER PACK
- BEFORE CONNECT
- AFTER CONNECT
- FIRST CONNECT



A common use would be to run a command file that does an AUTOCHK command before connecting. The ABORT ON command could then be used to cause the CONNECT/PACK to be aborted after the command file finishes.

14 Additional "Apply" Button for Form Control Properties

On each form control, an additional "Apply" button has been added with "OK" and "Cancel" for all property dialog windows. This permits the changes to be seen on the form without exiting the properties dialog.

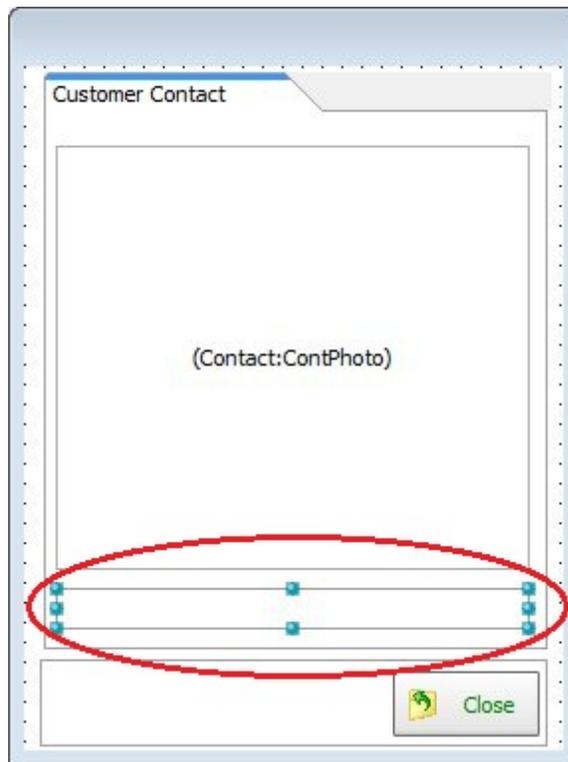


15 Form Control "Locks" are Saved within the Form

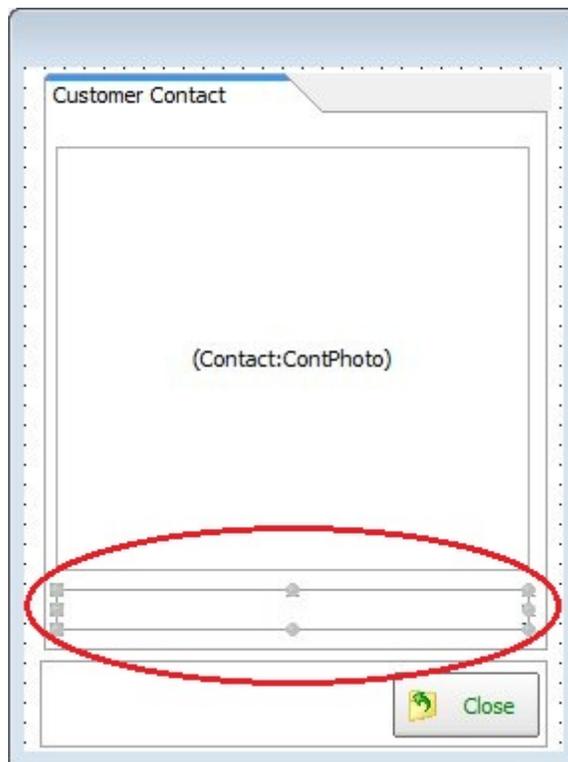
Form Controls can be locked to prevent accidental changes to their properties. To do so, right click on the control(s) and select "Lock Control" from the menu. This feature has been supported in previous versions, but the "lock" was only active for that Form Designer instance.

In R:BASE eXtreme 9.5, the lock setting is now saved with the form, so when the form is launched in the designer at a later time, the control(s) are still locked.

Normally, when a control is selected, the blue handlebars appear on the corners and sides of the control.



If a selected control is locked, the handlebars will be gray.



16 DIALOG Command Enhancements

Input Font

Four new parameters are available to customize the font name, font color, font size, and background color for the input field of the DIALOG message window.

- INPUT_FONT_NAME
- INPUT_FONT_COLOR
- INPUT_FONT_SIZE
- INPUT_BACKGROUND_COLOR

Using the following DIALOG syntax;

```
DIALOG 'Please enter last name to search:' vResponse vEndKey 1 +
CAPTION 'DIALOG Window' ICON INFO +
OPTION MESSAGE_FONT_COLOR 2147483647 +
|INPUT_FONT_NAME Tahoma +
|INPUT_FONT_COLOR RED +
|INPUT_FONT_SIZE 12 +
|INPUT_BACKGROUND_COLOR 9234160 +
|MESSAGE_BOLD ON
```

a DIALOG window will use a customized font for the field text.



Cursor Position

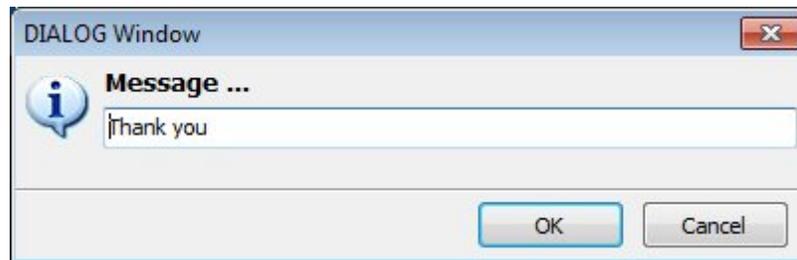
A new **CURSOR_POS** parameter has been added to the **DIALOG** command to place the cursor at any position for the specified text in the edit field.

Using the following DIALOG syntax;

```
SET VAR vResponse TEXT = 'Thank you'

DIALOG 'Message ...' vResponse vEndKey 1 +
CAPTION 'DIALOG Window' ICON INFO +
OPTION MESSAGE_FONT_COLOR 2147483647 +
|MESSAGE_BACK_COLOR -16777201+
|MESSAGE_FONT_NAME Tahoma+
|MESSAGE_FONT_SIZE 10+
|MESSAGE_BOLD ON
```

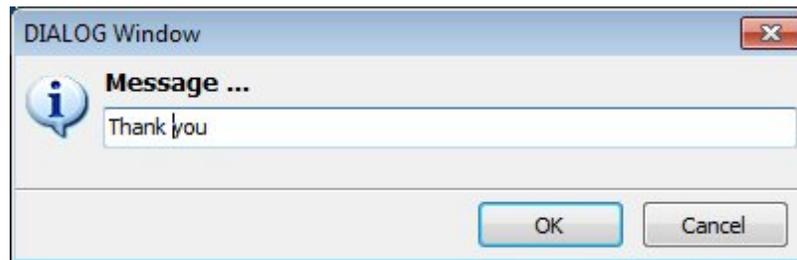
a DIALOG window will displays as follows, with the cursor located at the beginning of the text field.



With the **CURSOR_POS** parameter, the following DIALOG syntax can be used to place the cursor at the 6th position of the field.

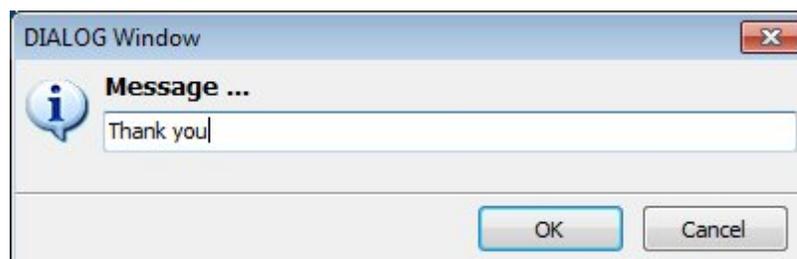
```
SET VAR vResponse TEXT = 'Thank you'

DIALOG 'Message ...' vResponse vEndKey 1 +
CAPTION 'DIALOG Window' ICON INFO +
OPTION MESSAGE_FONT_COLOR 2147483647 +
|MESSAGE_BACK_COLOR -16777201+
|MESSAGE_FONT_NAME Tahoma+
|MESSAGE_FONT_SIZE 10+
|MESSAGE_BOLD ON+
|CURSOR_POS 6
```



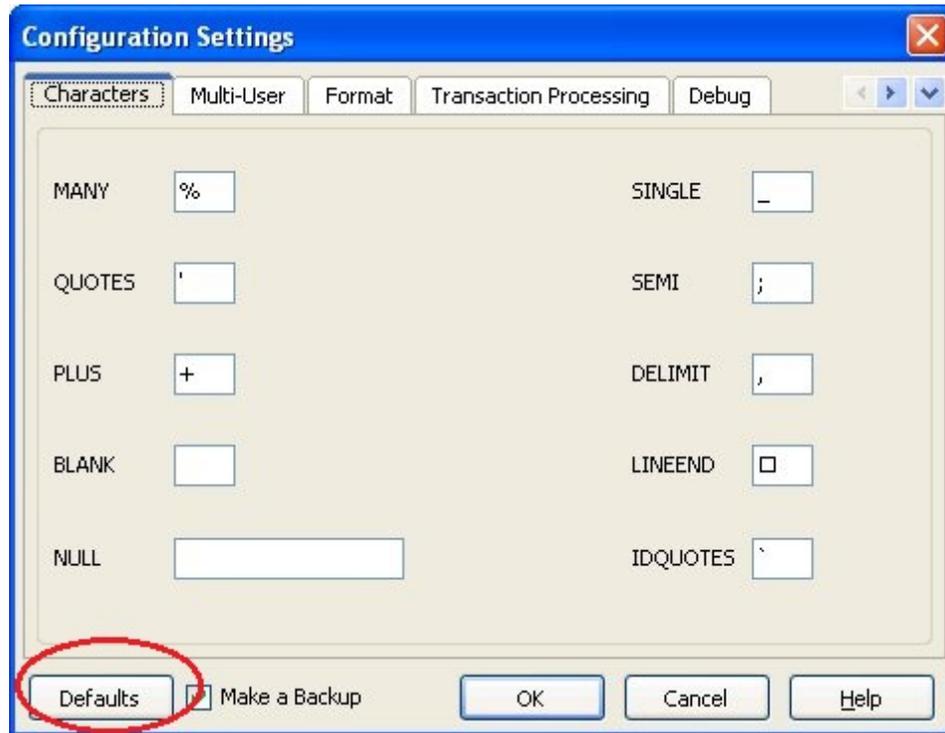
The following DIALOG syntax places the cursor at the end of the field.

```
SET VAR vResponse TEXT = 'Thank you'
DIALOG 'Message ...' vResponse vEndKey 1 +
CAPTION 'DIALOG Window' ICON INFO +
OPTION MESSAGE_FONT_COLOR 2147483647 +
|MESSAGE_BACK_COLOR -16777201+
|MESSAGE_FONT_NAME Tahoma+
|MESSAGE_FONT_SIZE 10+
|MESSAGE_BOLD ON+
|CURSOR_POS 9
```



17 Load Defaults for Configuration Settings

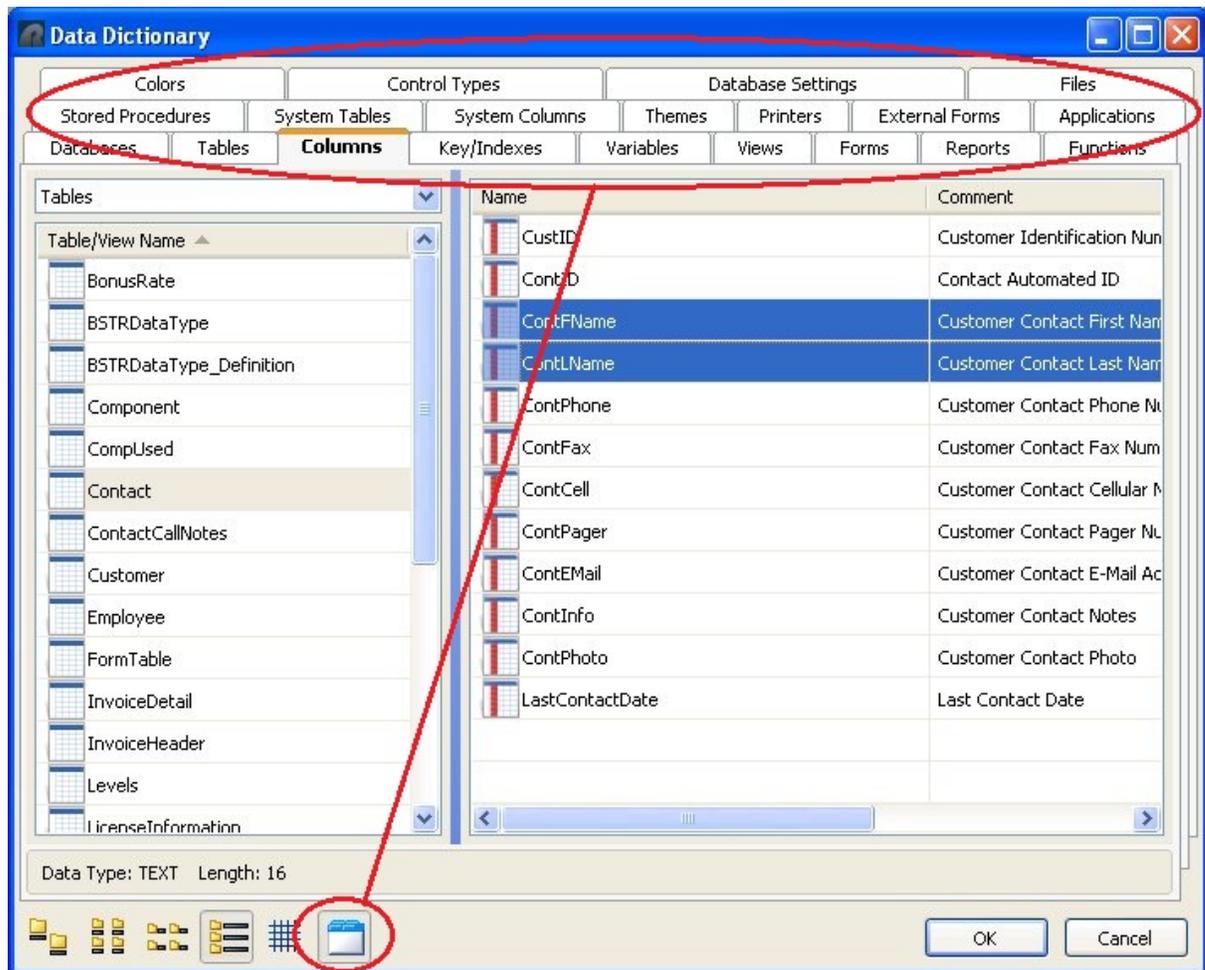
A "Defaults" button has been added to the Configuration Settings dialog box to restore the default settings for the R:BASE environment.



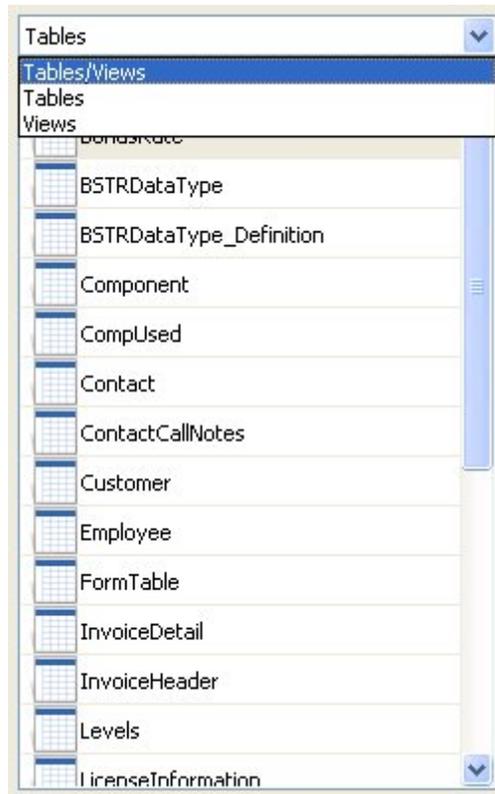
18 Additional Data Dictionary Features

New features have been added to the Data Dictionary, to increase productivity.

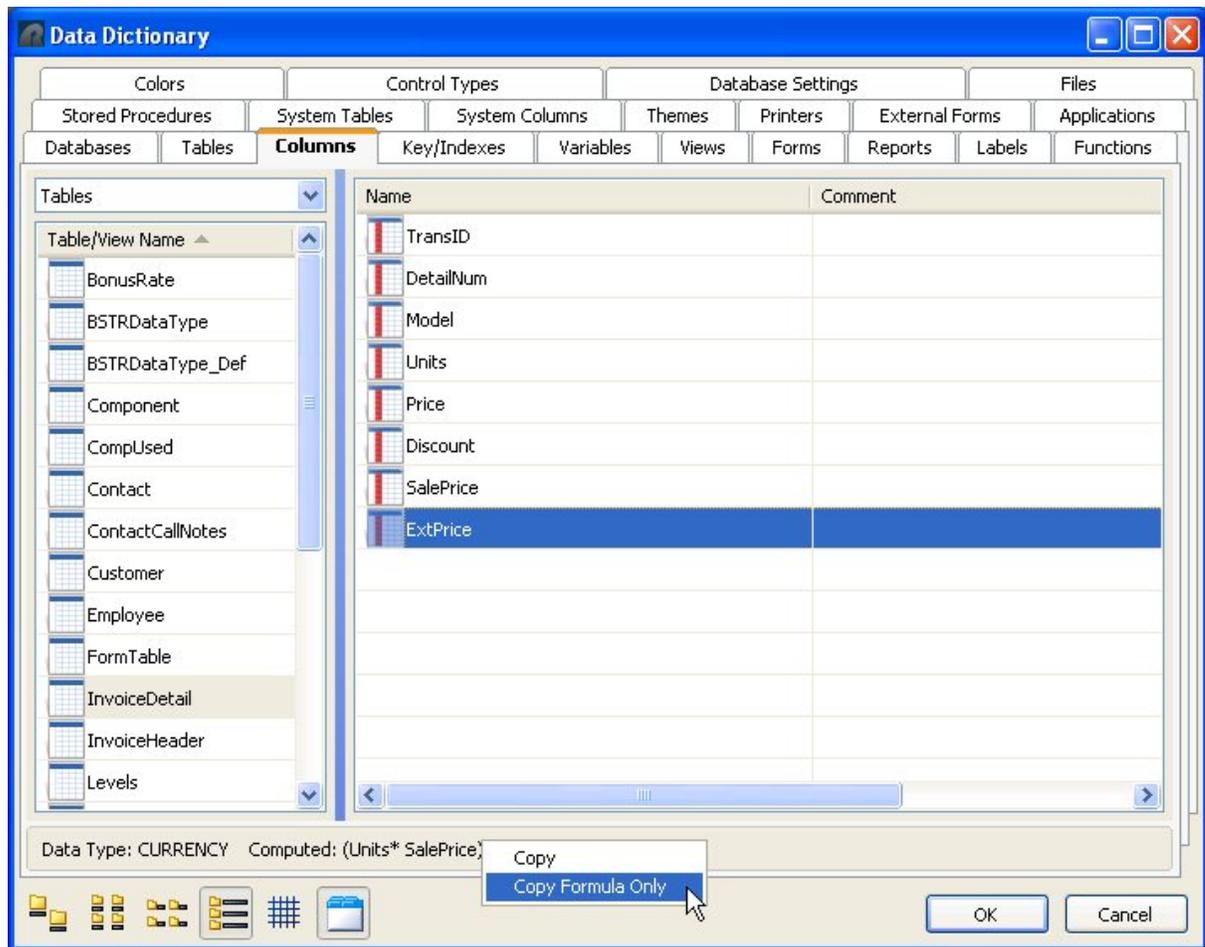
A "Multi-line Tabs" button has been added to the Data Dictionary to allow for the display of all available tabs.



When browsing the contents of the "Columns" tab, a drop down box is available to limit the available items of columns in just table or views. When "Tables" or "Views" is selected, the selection will be stored to streamline use at a later time.



When a computed column is displayed in the Data Dictionary, the ability to copy the entire column definition or just the formula is available by right clicking on the displayed computed column calculation in the Data Dictionary window.



19 New Enhanced DB Grid Hot Key Features

Several hot key features have been added to the Enhanced DB Grid control to allow advanced searching, filtering, column hiding, and multi-column sorting for the grid records. Dialog windows can be launched using hot keys or by using the PROPERTY command.

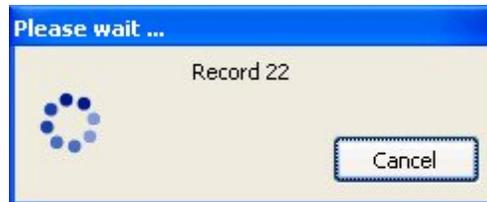
01. Record Search

The Enhanced DB Grid supports "Record Search" capabilities that can be launched while running the form.



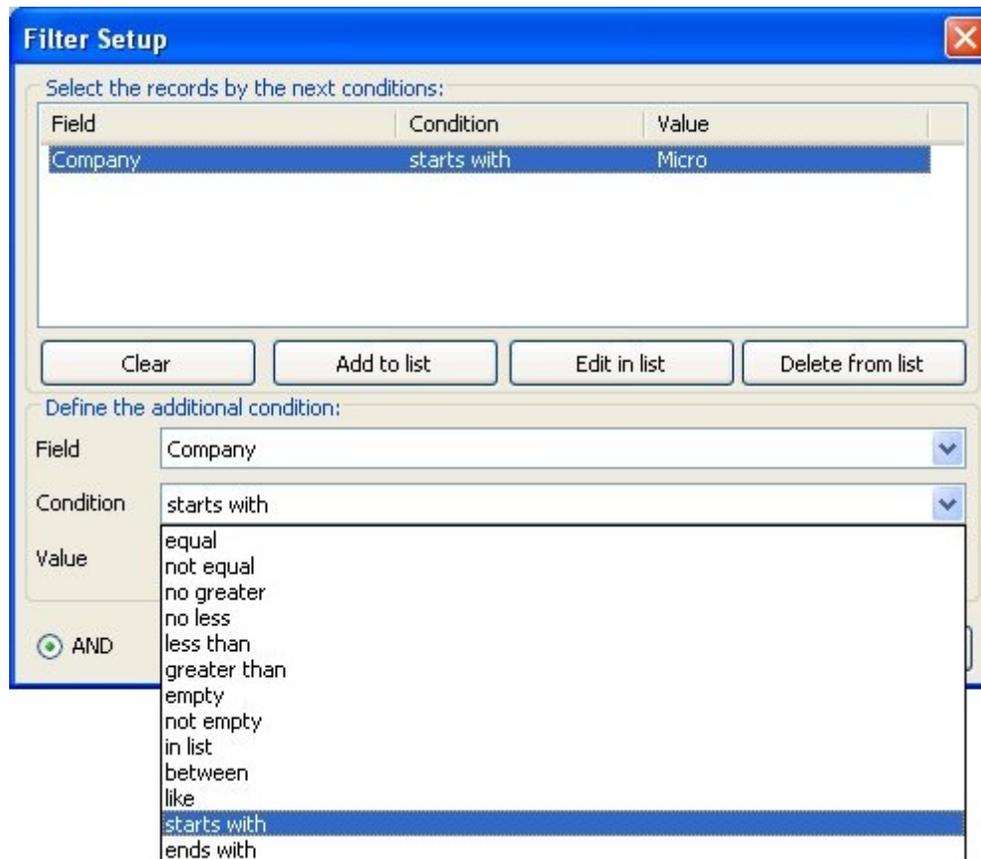
Hot Keys	Syntax
[Ctrl + F]	PROPERTY <Component ID> SHOWFINDDIALOG 'TRUE'

A progress dialog will now be displayed during the search process, so the user knows the search is working.



02. Filter Setup

The Enhanced DB Grid allows a filter to be created to limit the displayed rows, with many available conditions for specific results.



Hot Keys	Syntax
[Ctrl + L]	PROPERTY <Component ID> SHOWFILTERDIALOG 'TRUE'

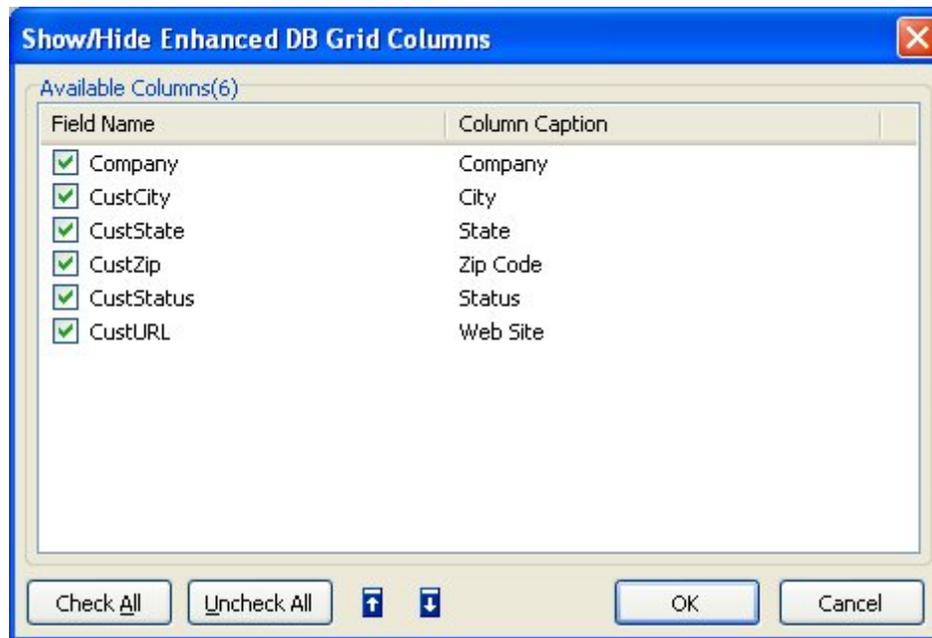
Capture the WHERE Clause

After the "Filter Setup" is launched and conditions are selected for the Enhanced DB Grid, the GETPROPERTY command can be used to return the current filter as a WHERE Clause. This is helpful if the current record set needs captured for export, report output, or used elsewhere.

```
GETPROPERTY TABLE TableName->FILTEREDWHERE vVarName
```

03. Show/Hide Columns

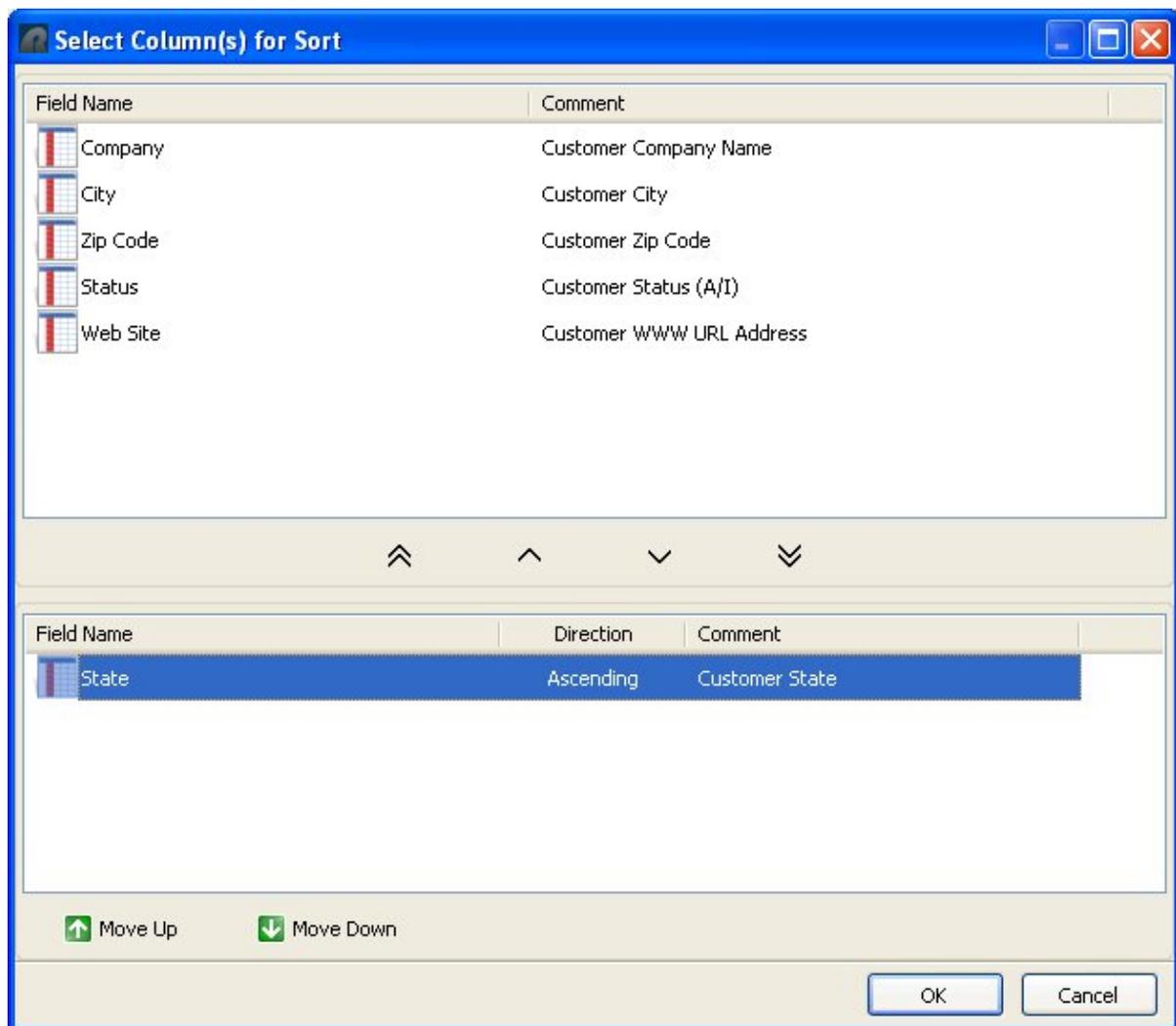
The columns headers of the Enhanced DB Grid can be hidden/displayed and rearranged. The check boxes control whether a column is displayed. The arrow buttons on the dialog are used to possibly reorder the columns.



Hot Keys	Syntax
[Ctrl + S]	PROPERTY <Component ID> SHOWCOLUMNDIALOG 'TRUE'

04. Multi-Column Sorting

One or more of the Enhanced DB Grid columns can be sorted in either ascending or descending order.

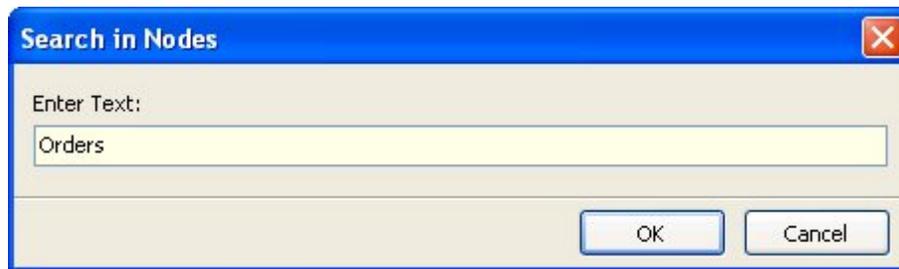


Hot Keys	Syntax
[Ctrl + D]	PROPERTY <Component ID> SHOWSORTDIALOG 'TRUE'

20 Tree View Search Functionality

The Tree View and DB Tree View controls now support the ability to search the nodes for text. This functionality is beneficial to the users where a Tree View contains many nodes with several levels.

Pressing [Ctrl] +[F] will display the following search dialog.



The PROPERTY command **FINDNODE** parameter has also been introduced to allow searching with the command syntax.

Example:

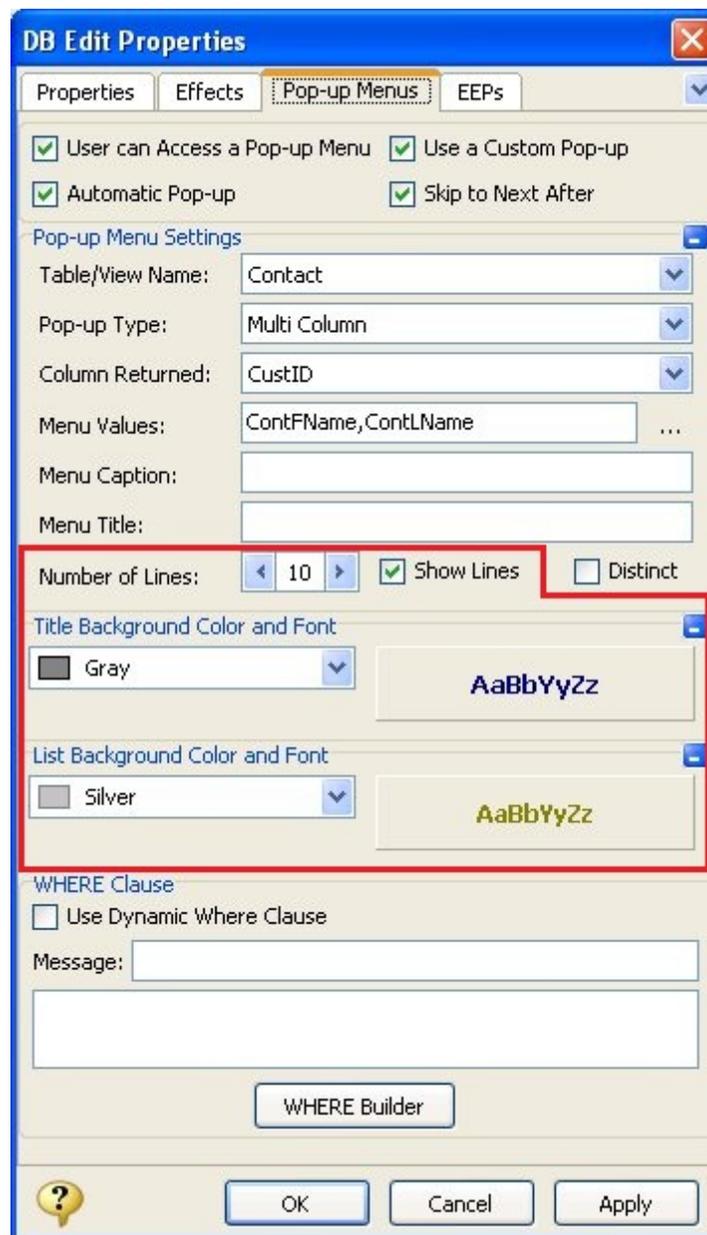
```
PROPERTY TreeViewControl FINDNODE 'Analysis'
```

21 Copy/Paste Pop-up Menu Properties

The ability to copy and paste form "Pop-up Menu" properties has been added to the Form Designer, allowing users to copy the following settings:

- Title Color
- Title Font
- List Color
- List Font
- Number of Lines
- Show Lines

To copy and paste Pop-up Menu properties, use [Ctrl]+[Alt]+[C] to copy and [Ctrl]+[Alt]+[V] to paste while previewing the "Pop-up Menus" tab of the DB Edit or Variable Edit control.



The Pop-up Menu properties can now be easily moved from Pop-up Menu to Pop-up Menu, and from form to form!

22 New UNLOAD STRUCTURE Functionality

The table UNLOAD functionality has been enhanced to allow the unloading of ODBC Server Table and dBASE table structure. This enhancement is available from within the Database Explorer as well as the UNLOAD command to use at the R> Prompt and within command files. Server Table or dBASE tables can be unloaded individually or all at once.

The Server Table unload lists the SCONNECT and SATTACH commands used to create the table(s). The dBASE Table unload lists the ATTACH commands used to attach the dBASE table(s).

UNLOAD Syntax for Server Tables:

```
UNLOAD STRUCTURE FOR SERVER_TABLES
```

```
SCONNECT 'Bluzvan_RBG91_32'  
SATTACH MusicType USING +  
    MusicType
```

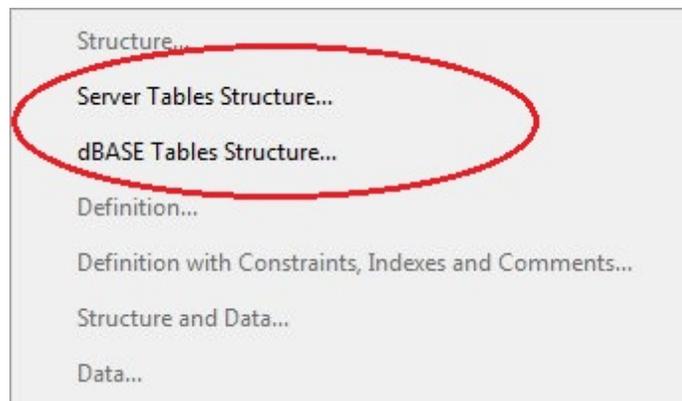
```
SCONNECT 'Bluzvan_RBG91_32'  
SATTACH Albums USING +  
    Album_ID , +  
    AlbumTitle , +  
    ReleaseDate , +  
    RecordLabel , +  
    Artist_ID , +  
    MusicType , +  
Comments1 ALIAS +  
    Album_ID , +  
    AlbumTitle , +  
    ReleaseDate , +  
    RecordLabel , +  
    Artist_ID , +  
    MusicType , +  
Comments1
```

UNLOAD Syntax for dBASE Tables:

```
UNLOAD STRUCTURE FOR dBASE_TABLES
```

```
ATTACH ISSUE  
ATTACH RCETYPE  
ATTACH DCAMP234
```

The same output will be generated when using the right click "Unload" menu option within the Database Explorer.



23 Pop-up Menu in Default Form Settings

A "Pop-up Menus" tab has been added to the Default Form Settings for the Form Designer to assign a default values for all new pop-up menus added to forms.

⇒ Lines

Number of Lines

Limits the number of values displayed in the Pop-up Menu

Show Lines

Displayed lines between the values in the Pop-up Menu

⇒ Title Background Color and Font

Specifies the background color of the title

AaBbYyZz

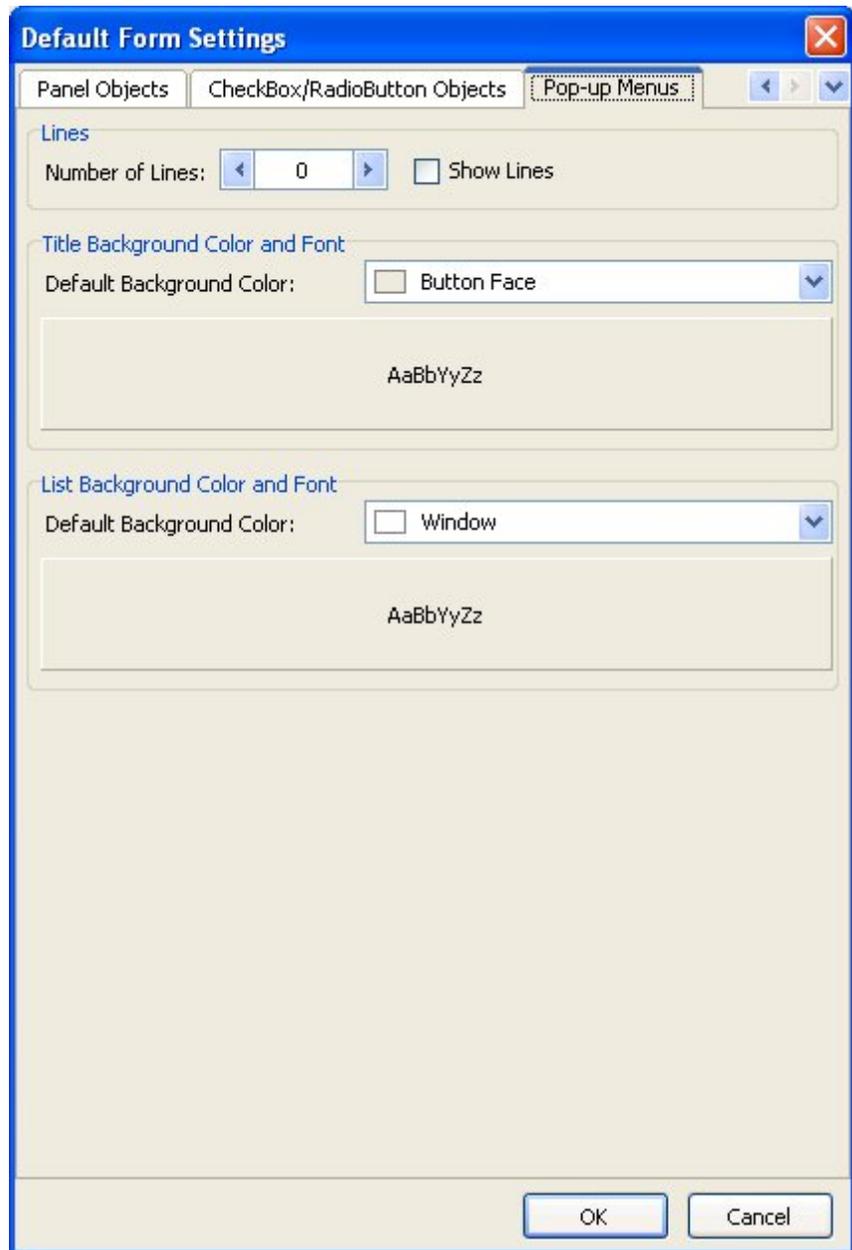
Specifies the font style, size and color for the title

⇒ List Background Color and Font

Specifies the background color of the list

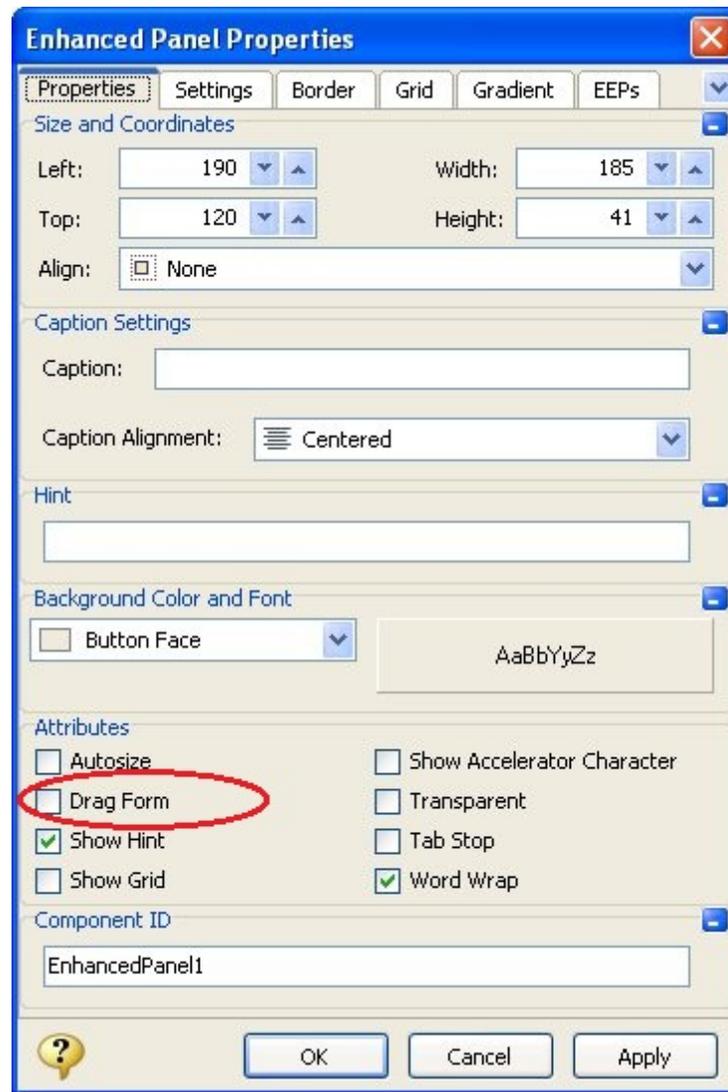
AaBbYyZz

Specifies the font style, size and color for the list



24 Drag Form Property for Enhanced Panels

A "Drag Form" property for the Enhanced Panel has been added to allow a user to drag a form by holding a left mouse button on the panel. This allows the user to move the form around the screen even if the form does not have a caption bar. By default, the property is false.



25 New "Copy Database to..." option

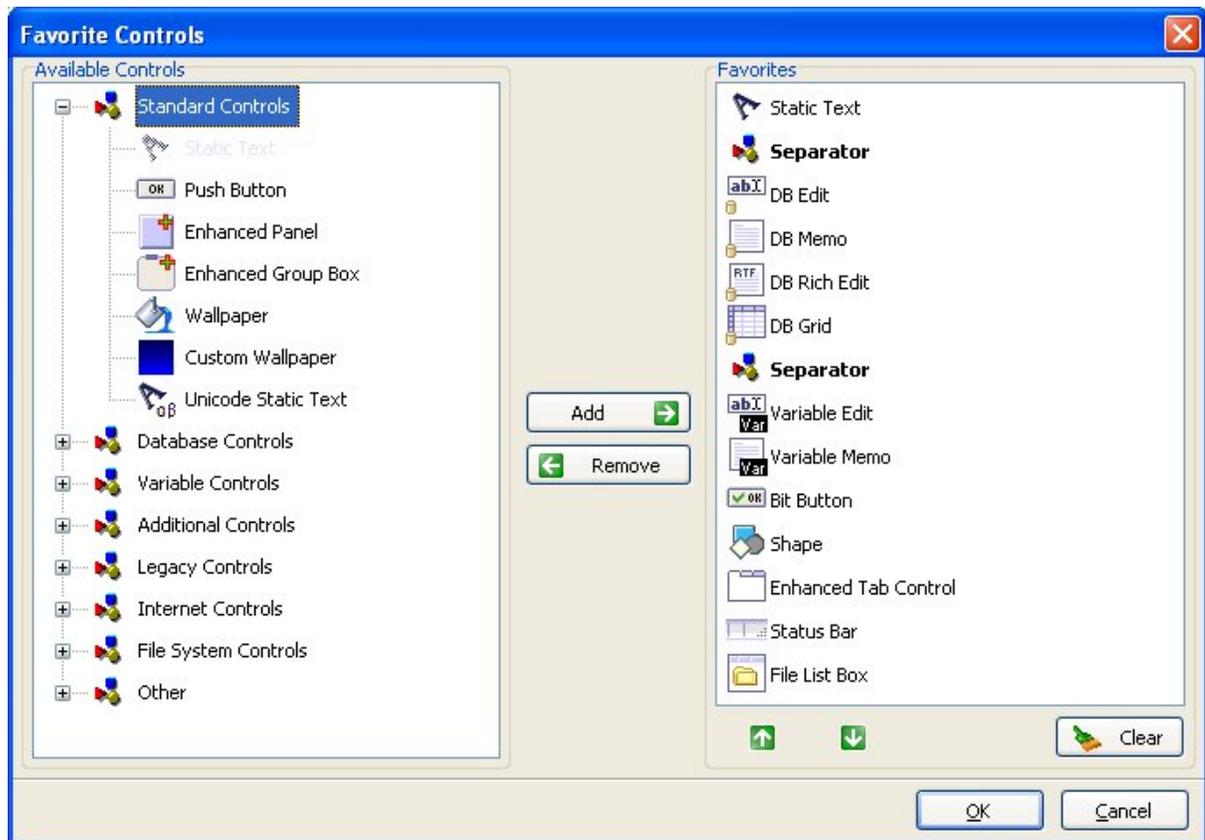
An additional "Copy Database to..." menu option is available when a right click is made on a database within the Database Explorer. This allows for easier file maintenance for database administrators in allowing the ability to copy the files to another folder and maintain the familiar names.



The database must be disconnected in order to copy the files.

26 New Favorites Toolbar for Form/Report Designers

The Favorites Toolbar allows users to customize their favorite controls onto a single toolbar that lists their commonly used items. Select "View" > "Favorites" from the main Menu Bar to open the "Favorite Controls" dialog.



For the Form Designer, Favorites can be pulled from Standard, Database, Variables, Additional, Legacy, Internet, and File System Controls. For the Report/Label Designer, Favorites can be pulled from Standard, Database, Variables, Advanced, and PDF Report Controls. The "Other" selection allows for a separator to be added to the Favorites toolbar. The controls can be sorted in a desired order as well.

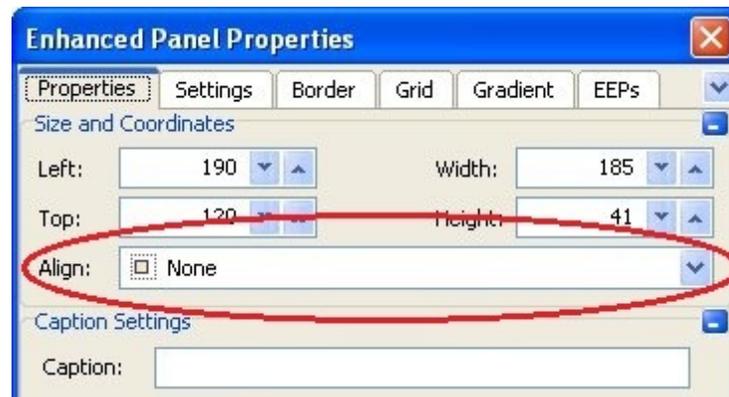
After populating a list of favorites, select "View" > "Toolbars" > "Favorites" to enable the display of the new customized toolbar.



27 New Margins Setting for Form Controls

The Margins setting for form controls allows for spacing to be added for controls which are set as "aligned". The combined implementation of alignment and margins for controls maintains the layout for a form after being resized and adds to the form aesthetics.

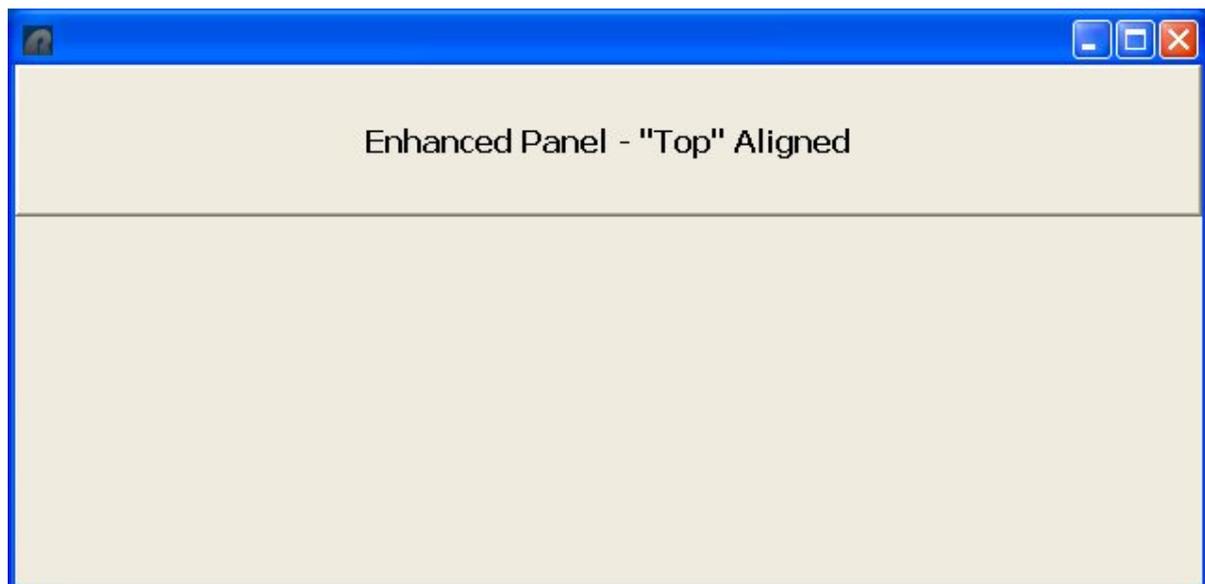
In the properties for each control, the "Align" property is available within the "Size and Coordinates" panel.



The options include:

- **None** - Object can be moved anywhere because it is not aligned to the parent object
- **Client** - Aligns itself to the available client area by expanding to fill the parent object that it is in
- **Left** - Aligns itself to the left side of the parent object growing or shrinking to match parent height
- **Right** - Aligns itself to the right side of the parent object growing or shrinking to match parent height
- **Top** - Aligns itself to the top side of the parent object growing or shrinking to match parent width
- **Bottom** - Aligns itself to the bottom side of the parent object growing or shrinking to match parent width

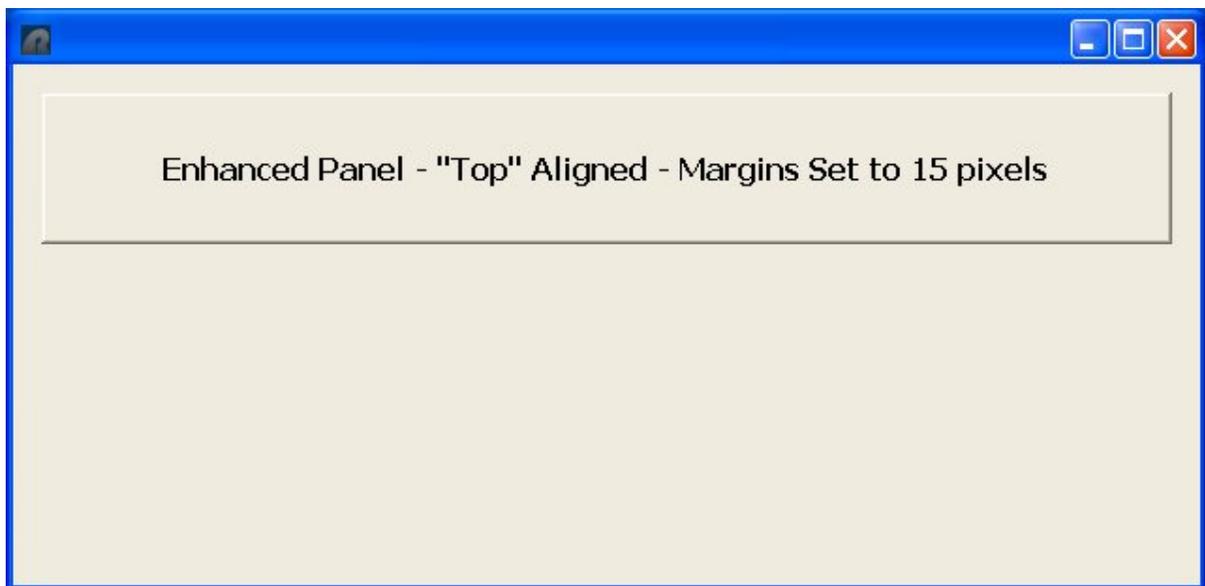
In the following form example, an Enhanced Panel is located on a form and is "top" aligned.



To set the margins for a control, select "Layout" > "Margins" from the main Menu Bar. The "Align with Margins" check box must be checked.



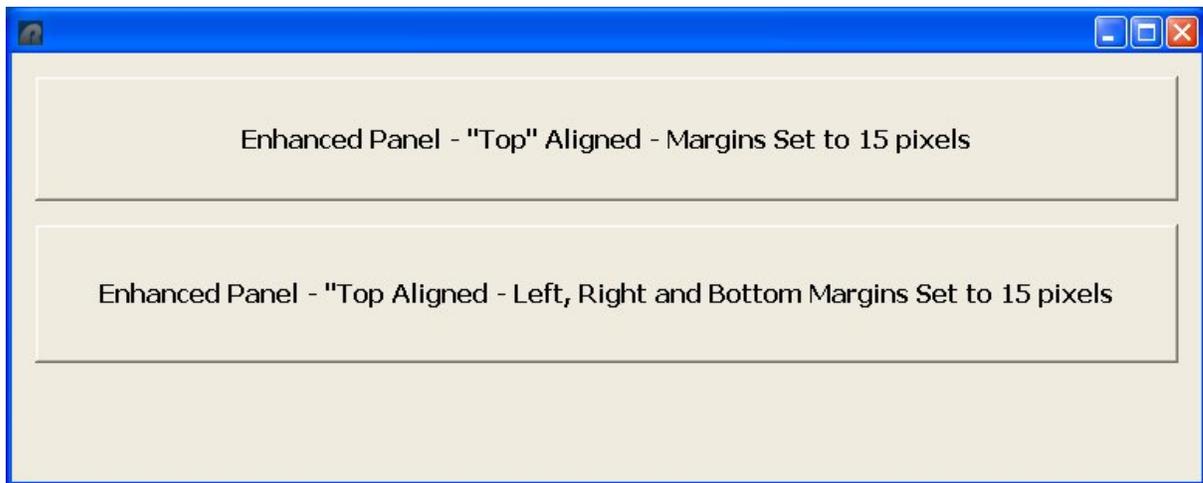
With the margins set to 15 pixels on each side, the panel will display spacing on all sides.



A second panel added to the form that is top aligned would have the left, right, and bottom margins set, and the top would be set to zero.



The second Enhanced Panel's margins maintains the same spacing to match the first panel.

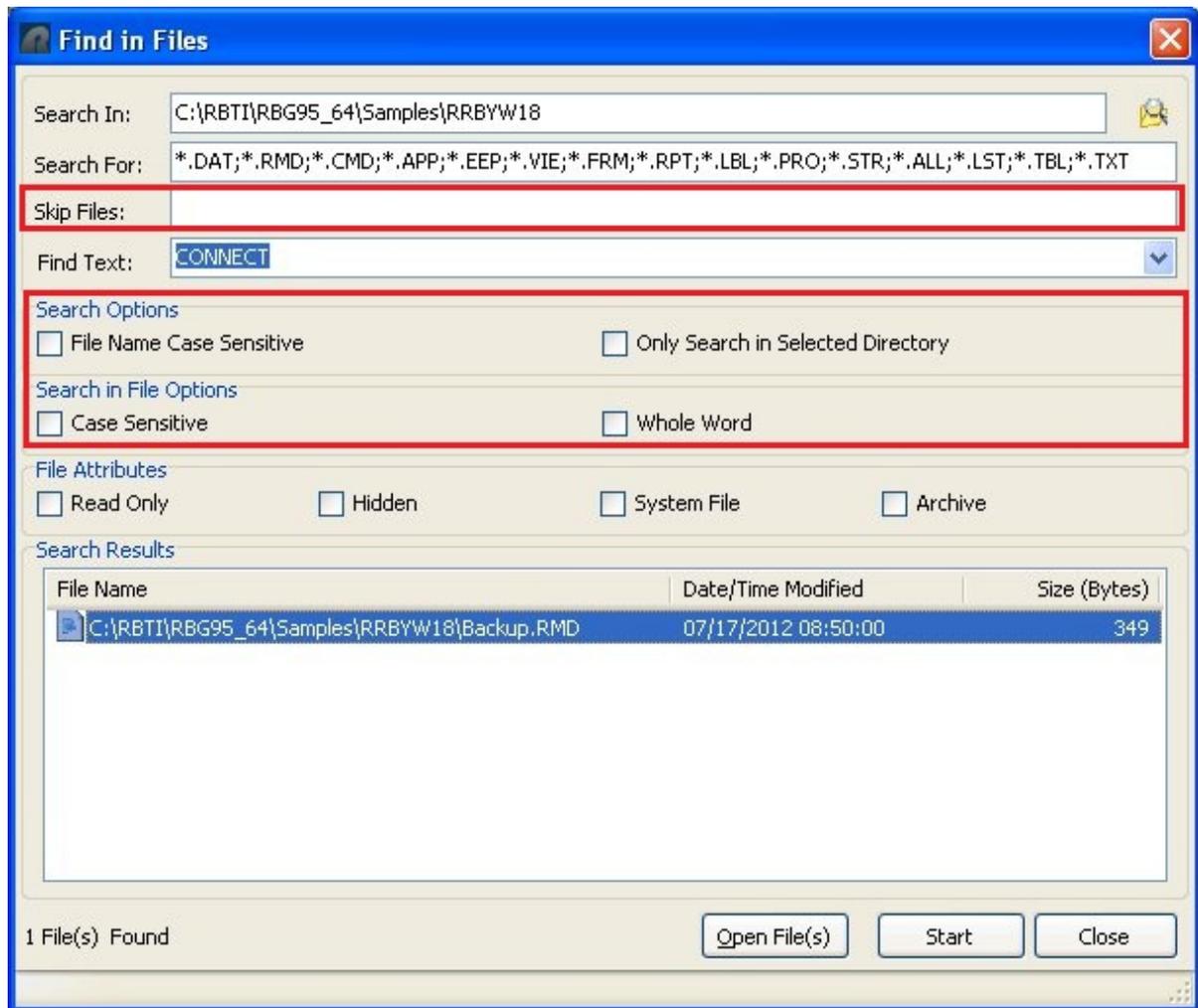


28 Additional "Find in Files" Settings

The "Find in Files" utility allows users to locate command files based upon specific text within the files. New options allow the search for text to be more precise.

Search criteria can be modified based on file extensions, case sensitivity, subdirectory searches, and file attributes. A "Skip Files" field allows the exclusion of files from the text search. The search dialog will launch with the previously used options, along with a combo box with the last ten searched items.

After the search is complete, the selected files can be opened in the R:BASE Editor.

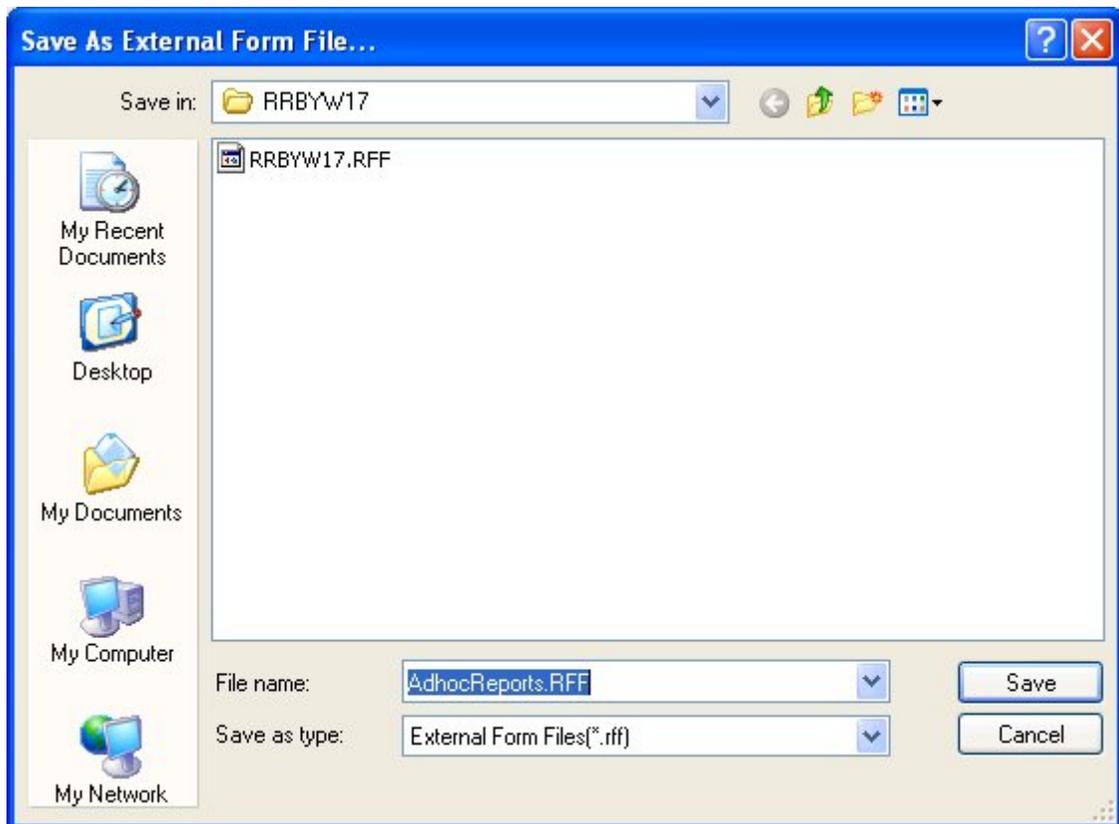


29 Variable Form to External Form Conversion

A new feature in the Database Explorer within the "Forms" options allows for a Variable Form to be saved as an External Form File. The option is only enabled when a Variable Form is selected.

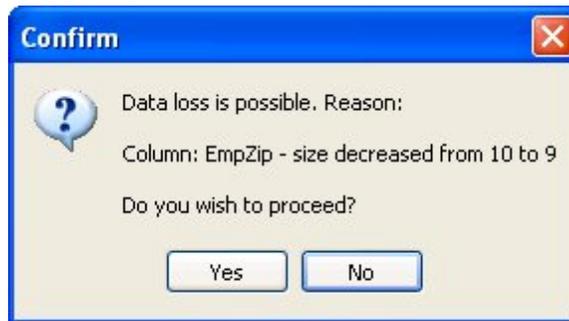


A dialog prompts for the External Form File name with the .rff file extension.

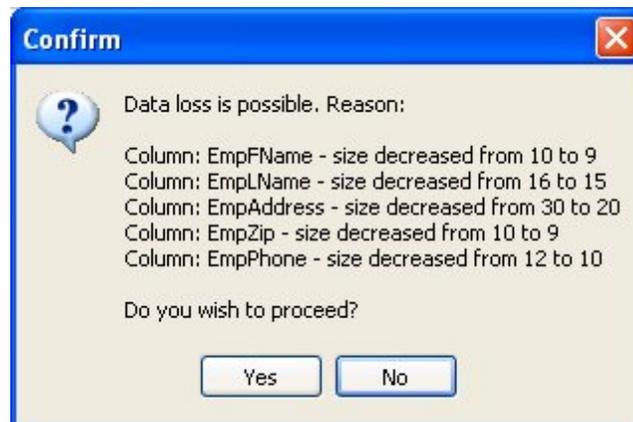


30 Truncated Data Warning for the Data Designer

When modifying definitions for TEXT data type columns, and after decreasing the length value, a warning message will be displayed describing the changes. This warning will help prevent data values for the displayed column from being truncated when saving the table.



Changes to multiple will also be displayed.



31 Autosize Buttons for the DB Navigator

The Enhanced DB Navigator control supports the ability for the buttons to be resized automatically.

The screenshot shows the 'Enhanced DB Navigator Properties' dialog box with the following settings:

- Size and Coordinates:** Left: 120, Width: 460, Top: 100, Height: 25, Align: None.
- Visible Buttons:** First, Previous, Next, Last, Record #, Record Count, Insert, Duplicate Record, Delete, Edit, Save, Cancel, Refresh, Close Window.
- Background Color and Font:** White, AaBbYyZz.
- Table:** FormTable.
- Options:** Image Style: Razzmatazz.
- Attributes:** Flat Buttons (unchecked), Show Hint (checked), Use Insert Button as Append (unchecked), **Autosize Buttons (checked and circled in red)**.
- Edit Color:** Window.
- Component ID:** EnhancedDBNavigator1.

Buttons at the bottom: ? (Help), OK, Cancel, Apply.

This feature allows users to add the Enhanced DB Navigator to forms, and maintain the same button sizes used in the original DB Navigator control.

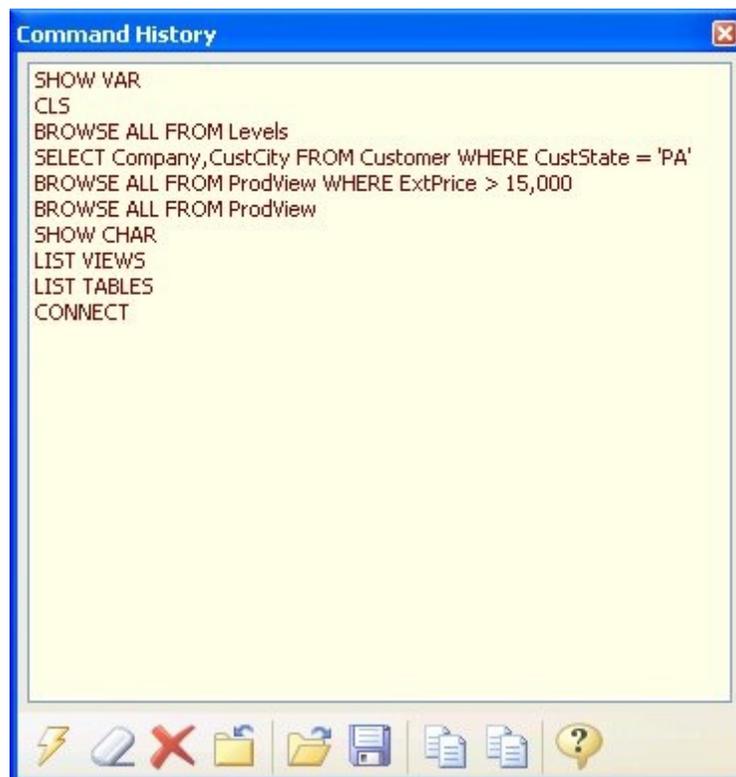
If a DB Navigator control exists on a form, be sure to convert it to an Enhanced DB Navigator, right clicking on the items and selecting "Convert to Enhanced DB Navigator". When doing so, the "Autosize Buttons" attribute will be set to true.



32 New R> Prompt Enhancements

Command History Panel

The Command History panel permanently displays the buttons that are available with a right click in the panel



Paste File Names

With a file or files added to the Windows clipboard, the file names can be pasted to R> Prompt.

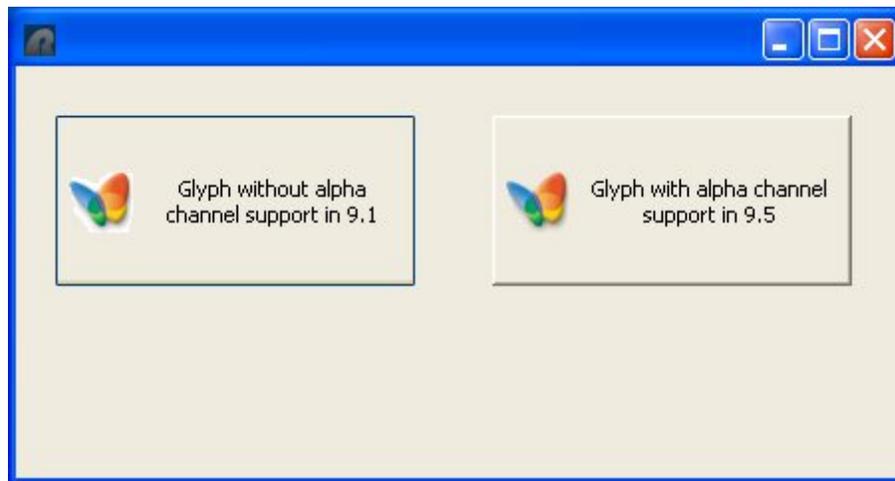
33 Enhanced Image Support for Drop Down Menu and Bit Buttons

Load from Icon File

The Drop Down Menu Button and Bit Button permit the ability to load a glyph from an executable, dynamic link library (DLL), OCX file, or icon file (.ICO). A 32x32 or 16x16 pixel glyph can be displayed.

**Alpha Channel Support**

The Drop Down Menu Button and Bit Button now provide alpha channel support to display a greater level of transparency for glyphs used on the buttons. A new attribute "Blend Image" allows this capability. The highest benefit of using alpha channel is visual appeal. Without alpha channel support, images would have a blocky jagged edge to them, like displayed below for the button on the left. This allows for the buttons to support PNG images in addition to BMP.



34 Additional LAUNCH command parameters

The LAUNCH command supports several new parameters for operating system operations and show modes for the launched program.

Operations

New operation parameters allow for parts of the operating system to be utilized within R:BASE.

- CMD_EXPLORE - displays the Windows Explorer from the specified folder
- CMD_FIND - initiates a search from the specified folder
- CMD_PRINT - prints a file to the default printer, or displays a print dialog, based upon file type

Examples:

```
LAUNCH CMD_EXPLORE | C:\RBTI

LAUNCH CMD_FIND | F:\DATA

LAUNCH CMD_PRINT | C:\ReadMe.txt
```

Show Modes

Several show modes are available for the launched program or operation.

- NORMAL - launches the program in a normal window
- MINIMIZED - launches the program in a minimized window
- MAXIMIZED - launches the program in a maximized window
- HIDE - launches the program, but it is hidden from display

Examples:

```
LAUNCH C:\MyDocs\ReadMe.txt |||NORMAL

LAUNCH 'winword | "C:\My Documents\AllFiles.docx" "/mMacroName" |W' |
MAXIMIZED
```

```
LAUNCH C:\MyDocs\ReadMe.txt |||MINIMIZED
```

```
LAUNCH CMD_PRINT|N:\Sales\OrderForm.pdf ||HIDE
```

35 New RNDDOWN Function

The RNDDOWN function returns a number rounded down to a specified number of digits.

Syntax:

```
(RNDDOWN(number,digits))
```

Where:

number is the number to round down
digits is the number of digits to round the number down to

Remarks:

- RNDDOWN behaves like ROUND, except that it always rounds a number down.
- If digits is greater than 0 (zero), then number is rounded down to the specified number of decimal places.
- If digits is 0, then number is rounded down to the nearest integer.
- If digits is less than 0, then number is rounded down to the left of the decimal point.

Examples:

--Example 01:

```
SET VAR v1 DOUBLE = (RNDDOWN(662.79,0))  
SHOW VAR v1  
662
```

--Example 02:

```
SET VAR v2 DOUBLE = (RNDDOWN(662.79, 1))  
SHOW VAR v2  
662.7
```

--Example 03:

```
SET VAR v3 DOUBLE = (RNDDOWN(54.1, -1))  
SHOW VAR v3  
50
```

--Example 04:

```
SET VAR v4 DOUBLE = (RNDDOWN(55.1, -1))  
SHOW VAR v4  
50
```

--Example 05:

```
SET VAR v5 DOUBLE = (RNDDOWN(-23.67, 1))  
SHOW VAR v5  
-23.6
```

36 Cue Banner Display in DB/Variable Edit Fields

The cue banner displays a text hint that appears in the field, which provides another form of instruction to end users. The cue banner is only available to DB Edit and Variable Edit fields.



Once the focus lands on the field, or when keystrokes are entered, the cue banner disappears. An optional setting can be used so the hint remains until keystrokes are pressed (Windows Vista, 7, and higher only).



The PROPERTY command can be used to specify the cue banner for the fields.

```
PROPERTY DBUserName CUEBANNER 'User Name'
PROPERTY DB_Password CUEBANNER 'Password'
```

37 R:BASE On-Screen Keyboard (ROSK)

The R:BASE On-Screen Keyboard is a visual keyboard displayed on the screen that allows users to type and enter data, instead of relying on a physical keyboard. With all standard keys displayed, users can select keys using the mouse or another pointing device. The PROPERTY command can be used to customize the R:BASE On-Screen Keyboard button font color, button background color, button edge, background color, screen location, and window caption. The keyboard can also be resized by dragging window sides. When altered, the size and position is preserved between sessions.



The keyboard is accessible using the following methods:

1. Selecting "Utilities" > "On Screen Keyboard" from the main Menu Bar
2. Pressing the [Ctrl]+[Alt]+K key combination
3. Using the PROPERTY command

Important Note:

- The R:BASE On-Screen Keyboard is only supported on Windows 7, 8.x, Windows 2008 Server R2, and higher operating systems.

PROPERTY Commands

```
--To show/hide the keyboard
PROPERTY ROSK SHOW TRUE/FALSE
```

```
--To alter the type of keyboard
PROPERTY ROSK TYPE ALPHA/NUMPAD
```

```
--To alter the screen location of the keyboard
PROPERTY ROSK LEFT Value
PROPERTY ROSK TOP Value
```

```
--To alter the screen size of the keyboard
```

```
PROPERTY ROSK HEIGHT Value
PROPERTY ROSK WIDTH Value
```

```
--To alter the caption of the keyboard window
PROPERTY ROSK CAPTION 'Value'
```

```
--To alter the color of the button outer edge:
PROPERTY ROSK OUTER_EDGE_COLOR_NORMAL Value
PROPERTY ROSK OUTER_EDGE_COLOR_PRESSED Value
PROPERTY ROSK OUTER_EDGE_COLOR_DISABLED Value
```

```
--To alter the color of the button inner edge:
PROPERTY ROSK INNER_EDGE_COLOR_NORMAL Value
PROPERTY ROSK INNER_EDGE_COLOR_PRESSED Value
PROPERTY ROSK INNER_EDGE_COLOR_DISABLED Value
```

```
--To alter the starting gradient color of the button background:
PROPERTY ROSK BK_START_COLOR_NORMAL Value
PROPERTY ROSK BK_START_COLOR_PRESSED Value
PROPERTY ROSK BK_START_COLOR_DISABLED Value
```

```
--To alter the ending gradient color of the button background:
PROPERTY ROSK BK_END_COLOR_NORMAL Value
PROPERTY ROSK BK_END_COLOR_PRESSED Value
PROPERTY ROSK BK_END_COLOR_DISABLED Value
```

```
--To alter the font colors of the buttons:
PROPERTY ROSK TEXT_COLOR_NORMAL Value
PROPERTY ROSK TEXT_COLOR_PRESSED Value
PROPERTY ROSK TEXT_COLOR_DISABLED Value
```

```
PROPERTY ROSK DRAWING_STYLE NORMAL / GRADIENT
PROPERTY ROSK GRADIENT_START_COLOR Value
PROPERTY ROSK GRADIENT_END_COLOR Value
```

Example:

```
PROPERTY ROSK SHOW TRUE
PROPERTY ROSK TYPE ALPHA
PROPERTY ROSK LEFT 50
PROPERTY ROSK TOP 50
PROPERTY ROSK CAPTION 'Making the impossible possible!'

PROPERTY ROSK BK_START_COLOR_NORMAL WHITE
PROPERTY ROSK BK_END_COLOR_NORMAL RED

PROPERTY ROSK BK_START_COLOR_PRESSED white
PROPERTY ROSK BK_END_COLOR_PRESSED GRAY

PROPERTY ROSK OUTER_EDGE_COLOR_NORMAL BLACK
PROPERTY ROSK OUTER_EDGE_COLOR_PRESSED RED

PROPERTY ROSK INNER_EDGE_COLOR_NORMAL WHITE
PROPERTY ROSK INNER_EDGE_COLOR_PRESSED RED
```

```

PROPERTY ROSK TEXT_COLOR_NORMAL BLACK
PROPERTY ROSK TEXT_COLOR_PRESSED BLACK

PROPERTY ROSK DRAWING_STYLE GRADIENT
PROPERTY ROSK GRADIENT_START_COLOR BLUE
PROPERTY ROSK GRADIENT_END_COLOR WHITE

```



38 Balloon Tip Hint in DB/Variable Edit Fields

The balloon tip displays a hint message that can be used in response to an end user action on the form, or even to a specific form object. The balloon tip will appear when the SHOWBALLOONTIP parameter is set to TRUE for the field's Component ID. A title, message, and icon image can be displayed in the balloon tip. The balloon tip is only available to DB Edit and Variable Edit fields.

Icon options available include:

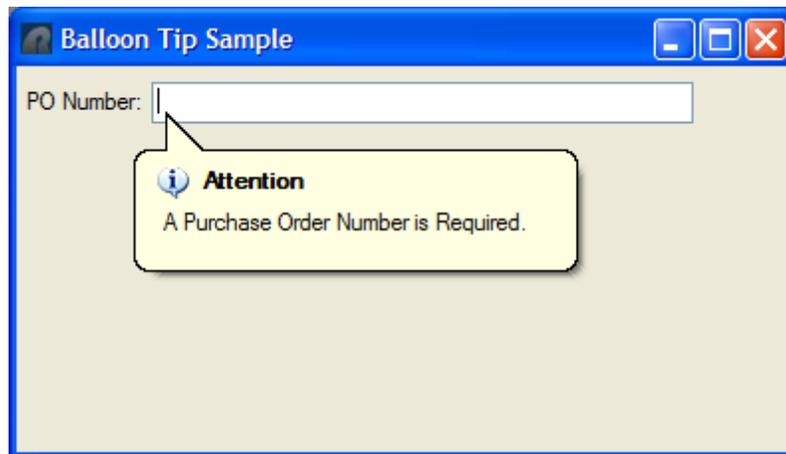
- None
- Info (bttiInfo)
- Warning
- Error
- Info Large (Windows Vista, 7, and higher only)
- Warning Large (Windows Vista, 7, and higher only)
- Error Large (Windows Vista, 7, and higher only)

Sample:

```

PROPERTY Pedit_PO BalloonTipTitle 'Attention'
PROPERTY Pedit_PO BalloonTipText 'A Purchase Order Number is
Required.'
PROPERTY Pedit_PO BalloonTipIcon Info
PROPERTY Pedit_PO ShowBalloonTip TRUE

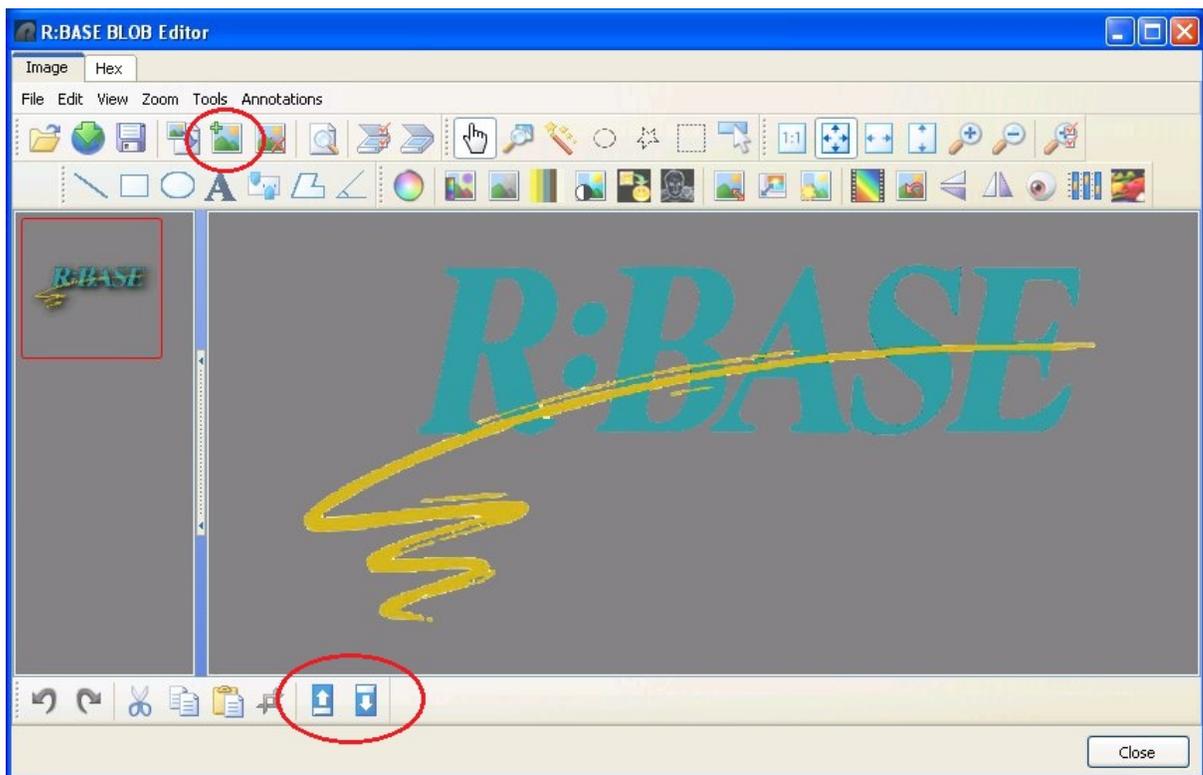
```



39 New BLOB Editor Multi-Page Image Features

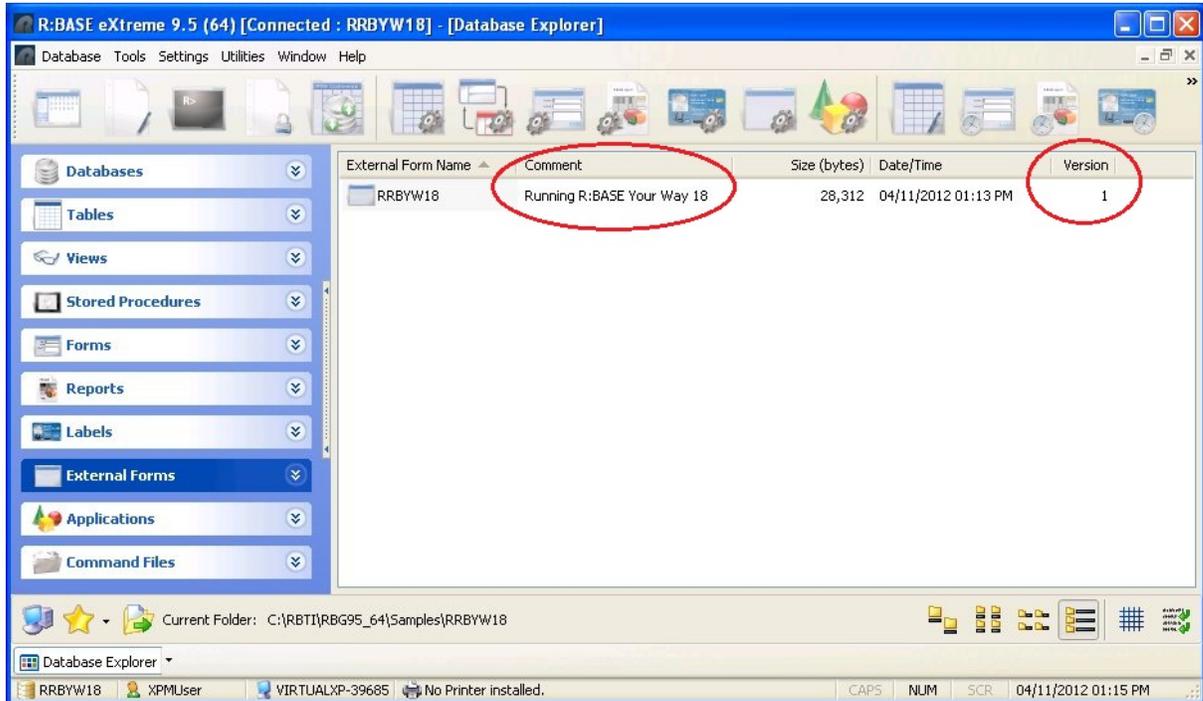
The R:BASE BLOB Editor now supports additional functionality when working with multi-page images. An new "Add Image from File" option has been added to place a image file at the end of the list. This enhances the existing ability to insert an image file within a file list.

Two new navigation options are also available to moves the selected images up and down within the file list.



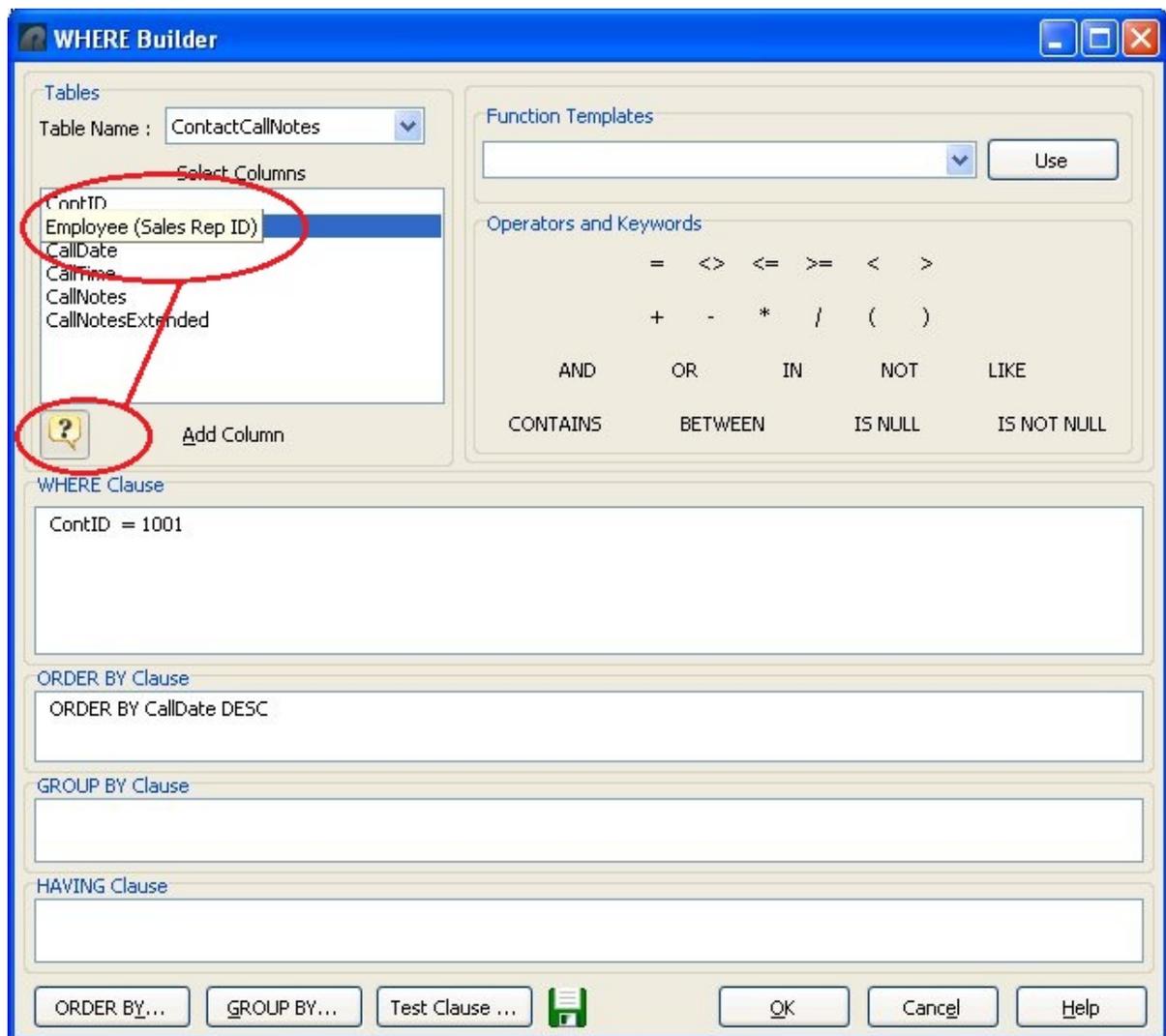
40 Comment and Version for External Form Files

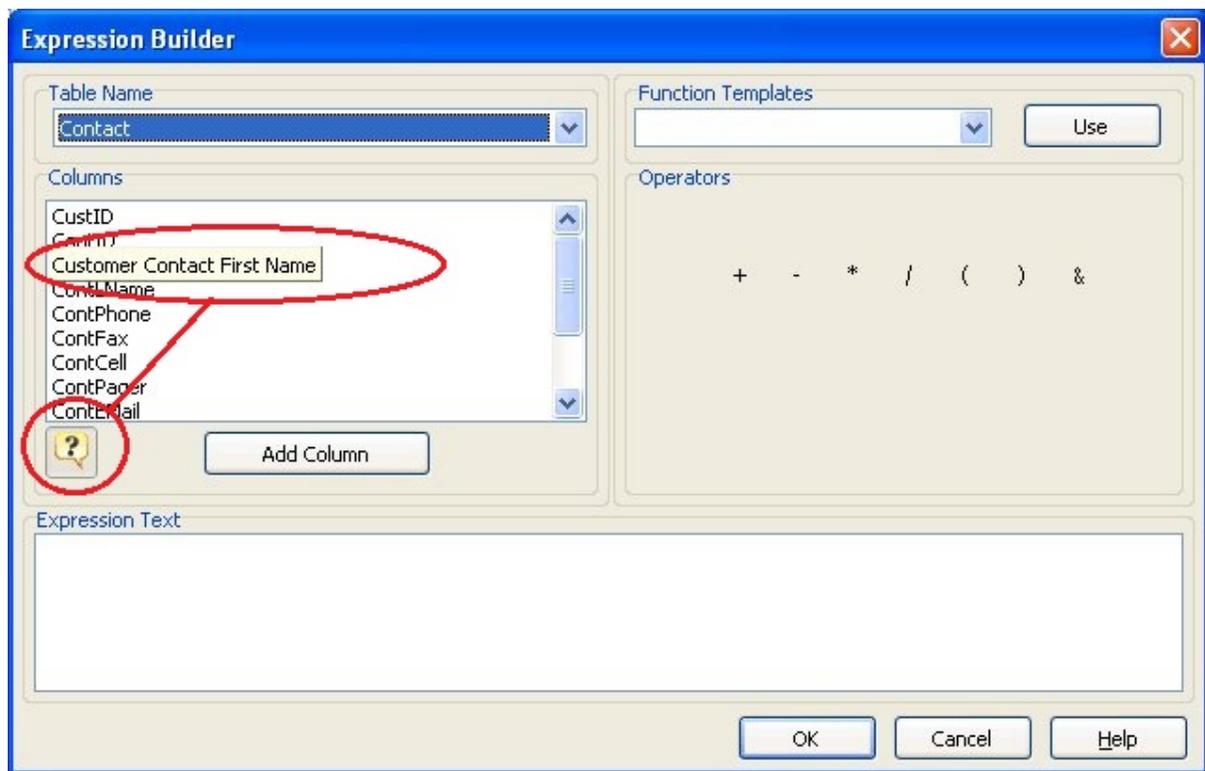
Database Explorer support to store and display "Comment" and "Version" information for External Form Files has been implemented.



41 Column Comment Hints in WHERE/Expression Builders

The WHERE Builder and Expression Builder windows now include a "Display Column Comments" button option that will display the comment as a hint. This allows for greater understanding of the column purpose if the name is not descriptive enough.

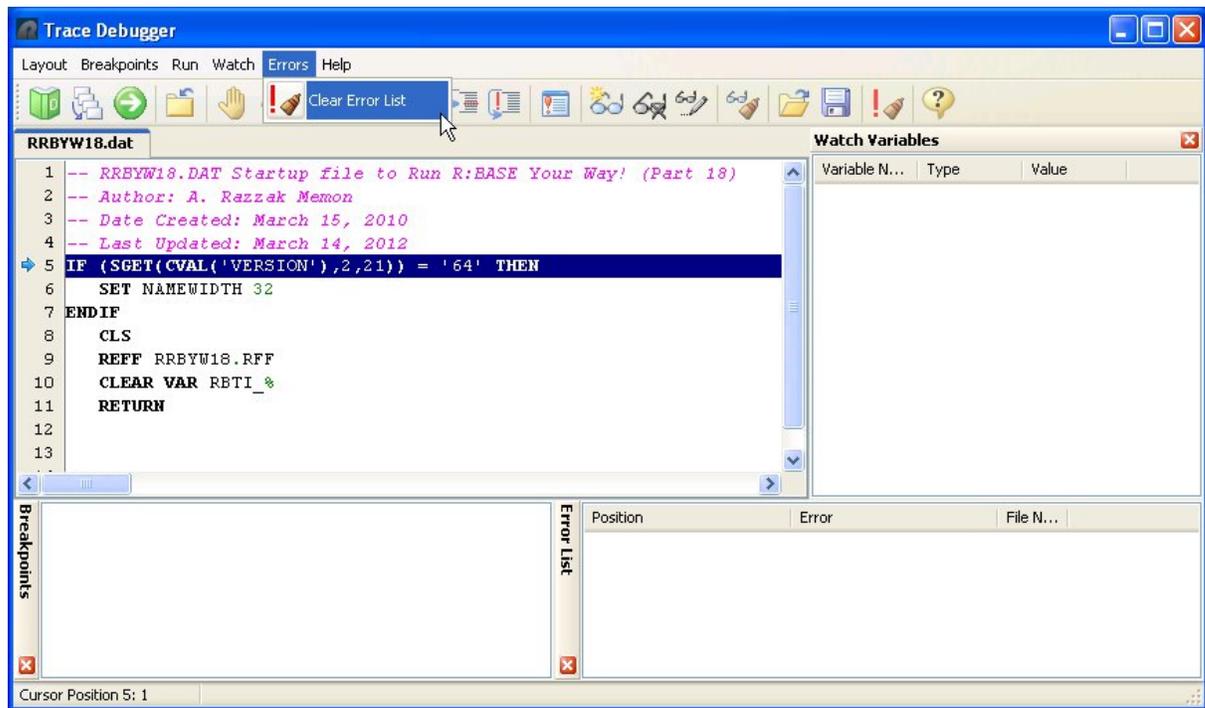




42 Clear Error List in Trace Debugger

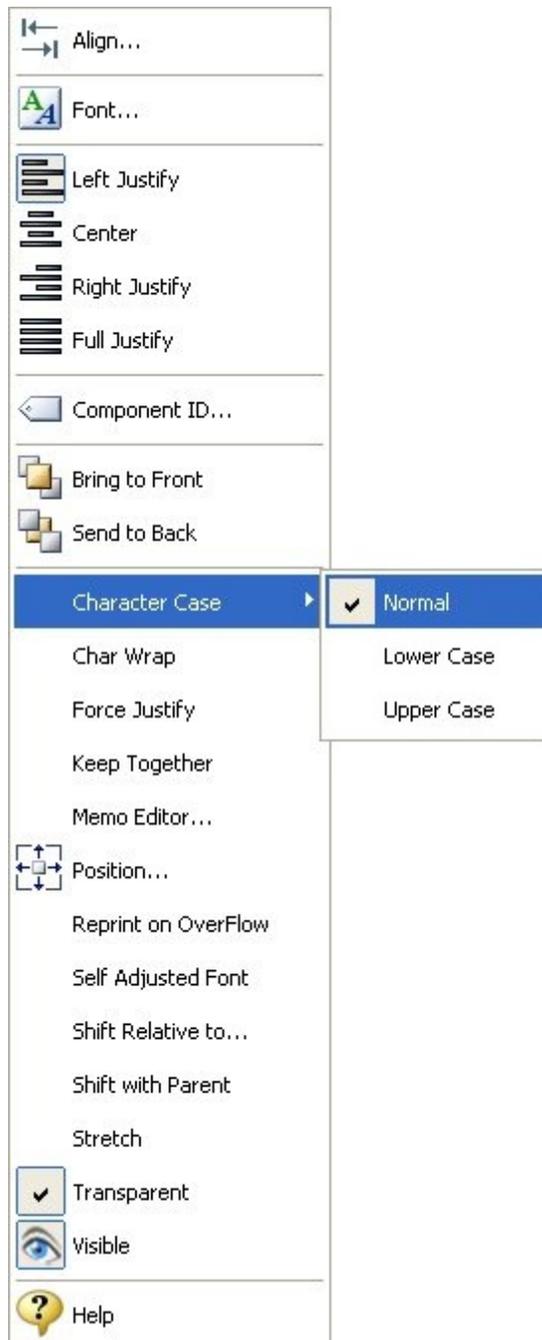
In the Trace Debugger, an Error List Toolbar is available to display programming errors that occur during code debugging. If the Error List becomes too populated, there was no method to clear the list without restarting R:BASE. Now, a new menu option is available to clear the error list.

From the Menu Bar, choose "Errors" > "Clear Error List"



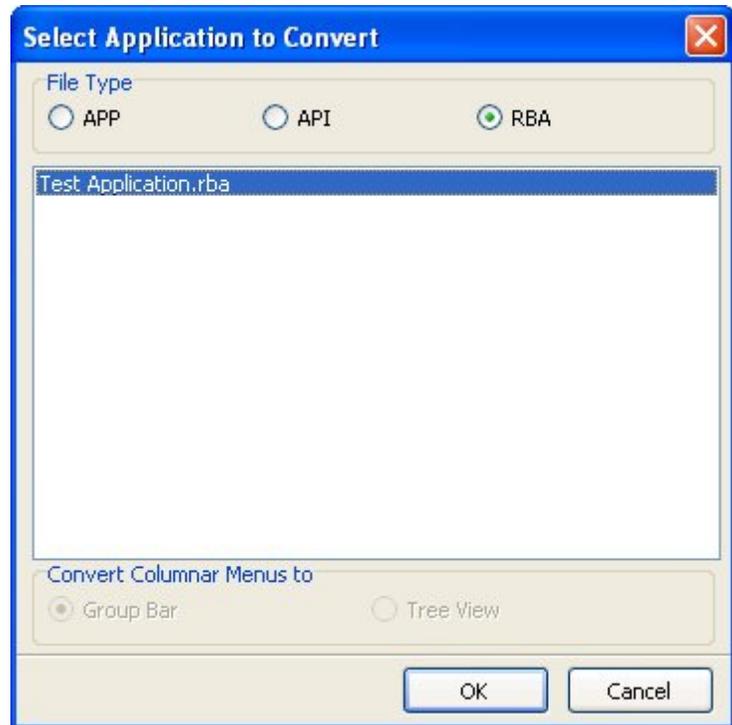
43 Character Case for Report Memo Objects

The Report Designer Memo Controls (Variable Memo, DB Memo, Memo) have been enhanced to support the "Character Case" setting, which forces the character case of the text lower case or upper case. The setting changes the appearance of the displayed text and not the actual text. The setting can be set to Normal to remove the character case.



44 RBA Application File Conversion

Within the External Form File portion of the Database Explorer, the new "**Convert Application(s)...**" option is available to convert R:BASE application files (.RBA) to an External Form File. The .RBA application files are menu systems that were created in R:BASE versions 7.0 and higher.

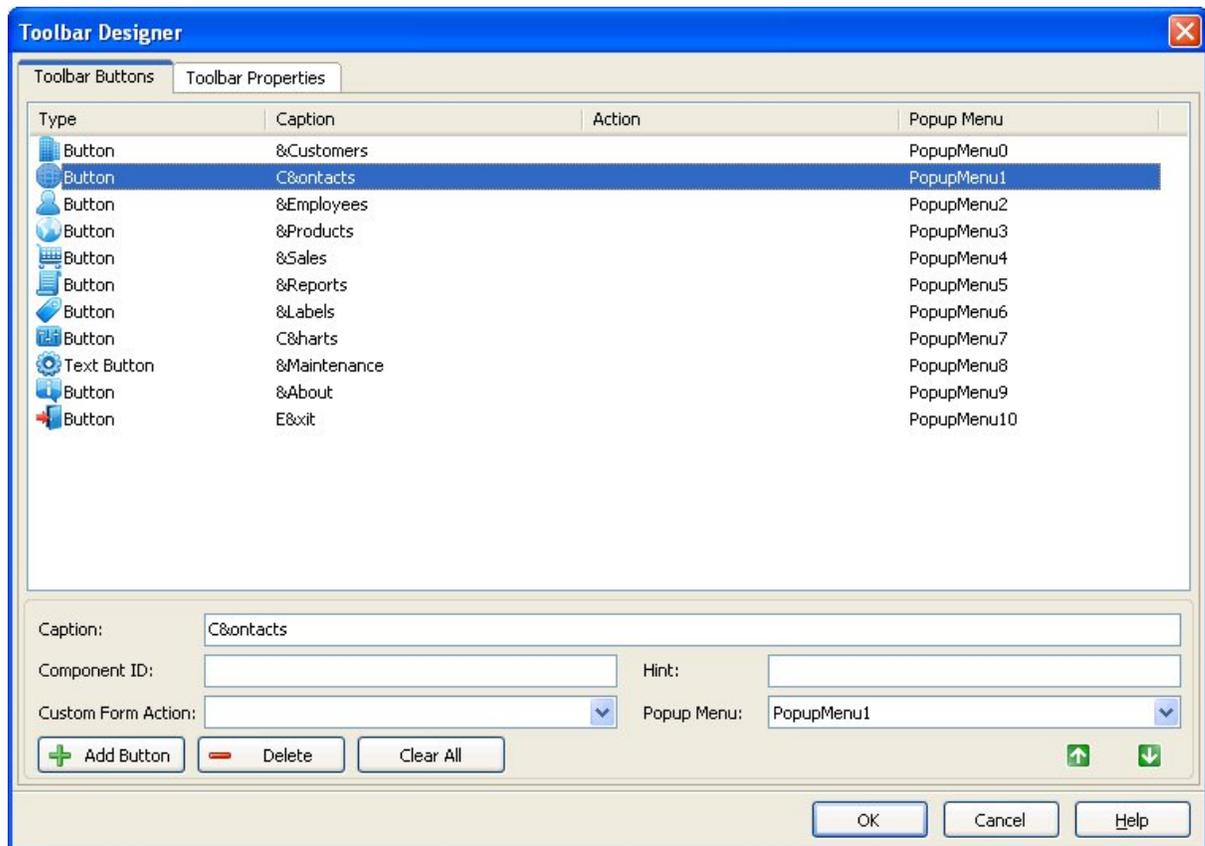


Selecting this option will create an external form that matches the same properties used within the RBA application file.

When the external form file is created, the "Main Menu" section is converted to a form "Menu Bar", the "Actions" are converted to "Custom Form Actions", and the "Toolbar" is converted to a toolbar in the new "[Toolbar Designer](#)".

45 Toolbar Designer

The Toolbar Designer the area within an R:BASE form for building a custom Toolbar, associating Popup Menus to the Toolbar buttons, and alter the display of the Toolbar on the form.

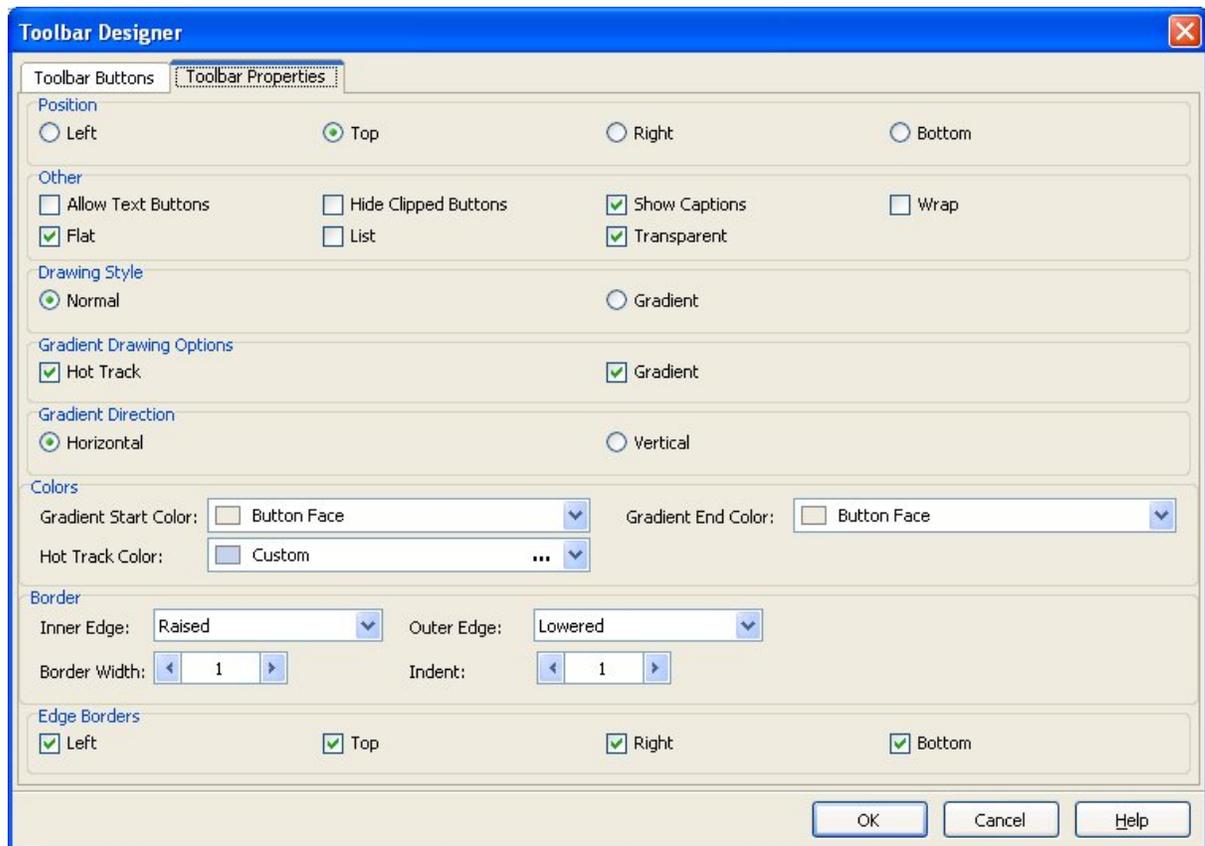


- **Caption** - specifies the Toolbar button text
- **Component ID** - specifies the unique identifier used when passing property parameters in statements
- **Hint** - specifies the Toolbar button hint
- **Custom Form Action** - specifies the Custom Form Action that runs when the Toolbar button is selected
- **Popup Menu** - specifies the [Popup Menu](#) that "drops down" when the Toolbar button is selected
- **Add Button** - adds a button to the Toolbar. Button types include:
 - Button - button that can display an image with or without a caption
 - Separator- appears as a line on the toolbar (to separate other controls)
 - Drop-Down Button - displays a downward-pointing arrow
 - Text Button - can appear with the caption only, when the "List" property is checked
- **Delete** - deletes the currently selected button
- **Clear All** - clears all buttons

Notes:

- Buttons can be assigned images stored within the [Image List Editor](#). Right click on the button to assign an image.
- To add a separator to a list of buttons, place a new button, right click on it, and set the Button Type to "Separator".

The Toolbar Properties alter the display of the Toolbar on the form.



Position - determines the position of the Toolbar on the form

Other

Allow Text Buttons - determines whether tool buttons that consist only of text can be placed on the Toolbar

Flat - makes the toolbar transparent and eliminates tool-button borders

Hide Clipped Buttons - specifies handling of buttons obscured by an adjacent toolbar

List - aligns captions on the right and images on the left in tool buttons

Show Captions - determines whether text captions are displayed on tool buttons

Transparent - specifies whether the toolbar is transparent

Wrapable - enables automatic line-wrap for components in the toolbar

Drawing Style - determines the drawing style type

Gradient Drawing Options - determines the gradient drawing option

Gradient Direction - specifies whether the direction of the gradient is horizontal or vertical

Colors

Gradient Start Color - color used as start color for the gradient

Gradient End Color - color used as end color for the gradient

Hot Track Color - color used as hot tracking color when in gradient style

Border

Inner Edge - determines the border style for the toolbar's inner edge

Outer Edge - determines the border style for the toolbar's outer edge

Border Width - specifies the width of the toolbar's border

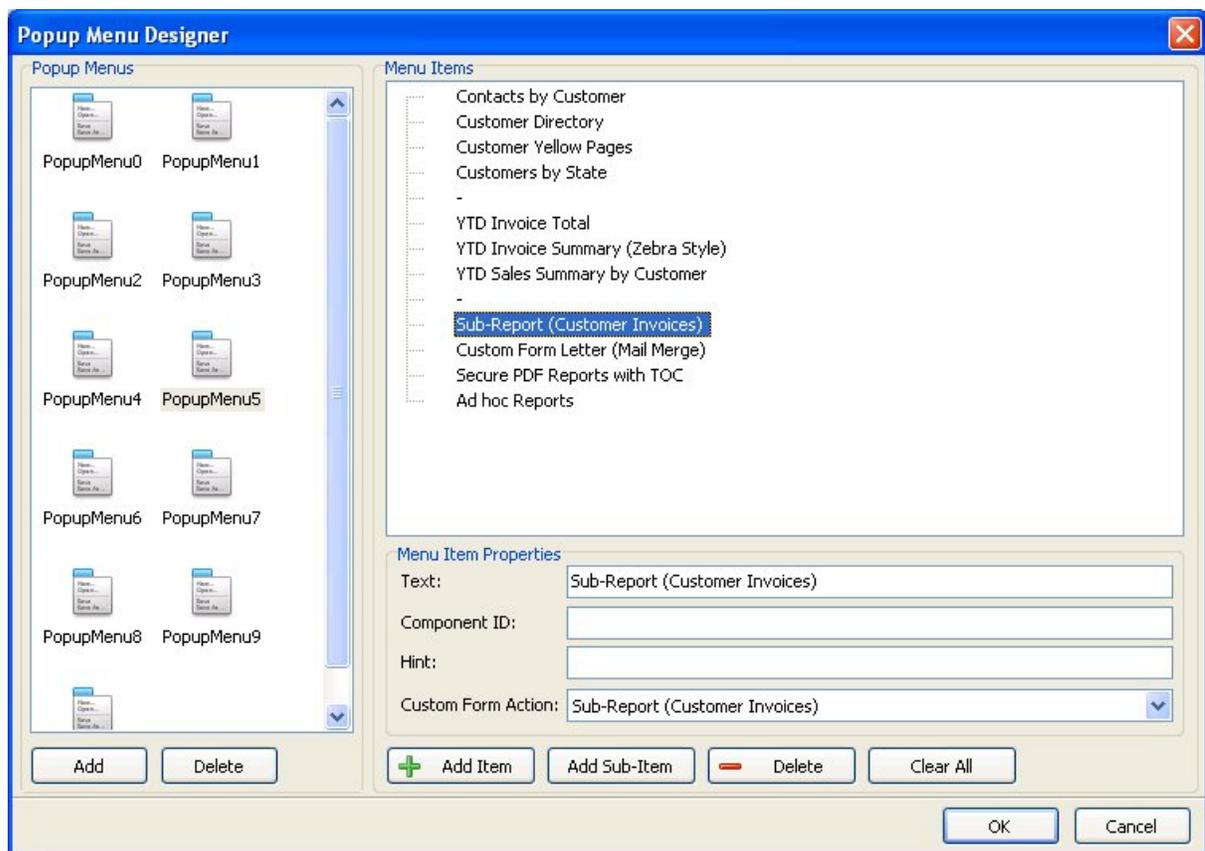
Indent - specifies the margin on the left side of the toolbar

Edge Borders - determines which sides of the toolbar have borders

46 Popup Menu Designer

The Popup Menu Designer is the interface to create popup up menus for a Toolbar on an R:BASE form. This interface is not to be confused with Pop-up Menus that are used with DB Edit and Variable Edit controls, where a table-driven pop-up "dialog" menu is displayed.

The Popup Menu is basically the portion of the Toolbar that "drops down" from the toolbar when a button is selected. The list of items contained within the Popup Menu are a group of Actions, selected from your list of available Custom Form Actions that were created in the earlier stages of the application's design, and then assembled into a single module.



- **Add** - adds a Popup Menu
- **Delete** - deletes the currently selected Popup Menu
- **Text** - specifies the Menu Item text
- **Component ID** - specifies the unique identifier used when passing property parameters in statements
- **Hint** - specifies the Menu Item hint
- **Custom Form Action** - specifies the Custom Form Action that runs when the Menu Item is selected
- **Add Item** - adds an Item to the Popup Menu

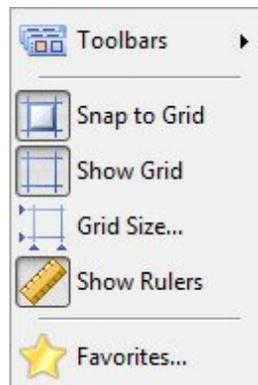
- [Add Sub-Item](#) - adds a Sub-Item to the currently selected Menu Item
- [Delete](#) - deletes the currently selected Menu Item
- [Clear All](#) - clears all Menu Items for the currently selected Popup Menu

Notes:

- Menu Items and Sub-Items can be assigned images stored within the [Image List Editor](#). Right click on the Menu Item to assign an image.
- To add a separator to a list of Menu Items or Sub-Items, place a hyphen within the "Text" field.
- A tree of Popup Menu Items and Sub-Items can be build with any number of levels deep.

Example:

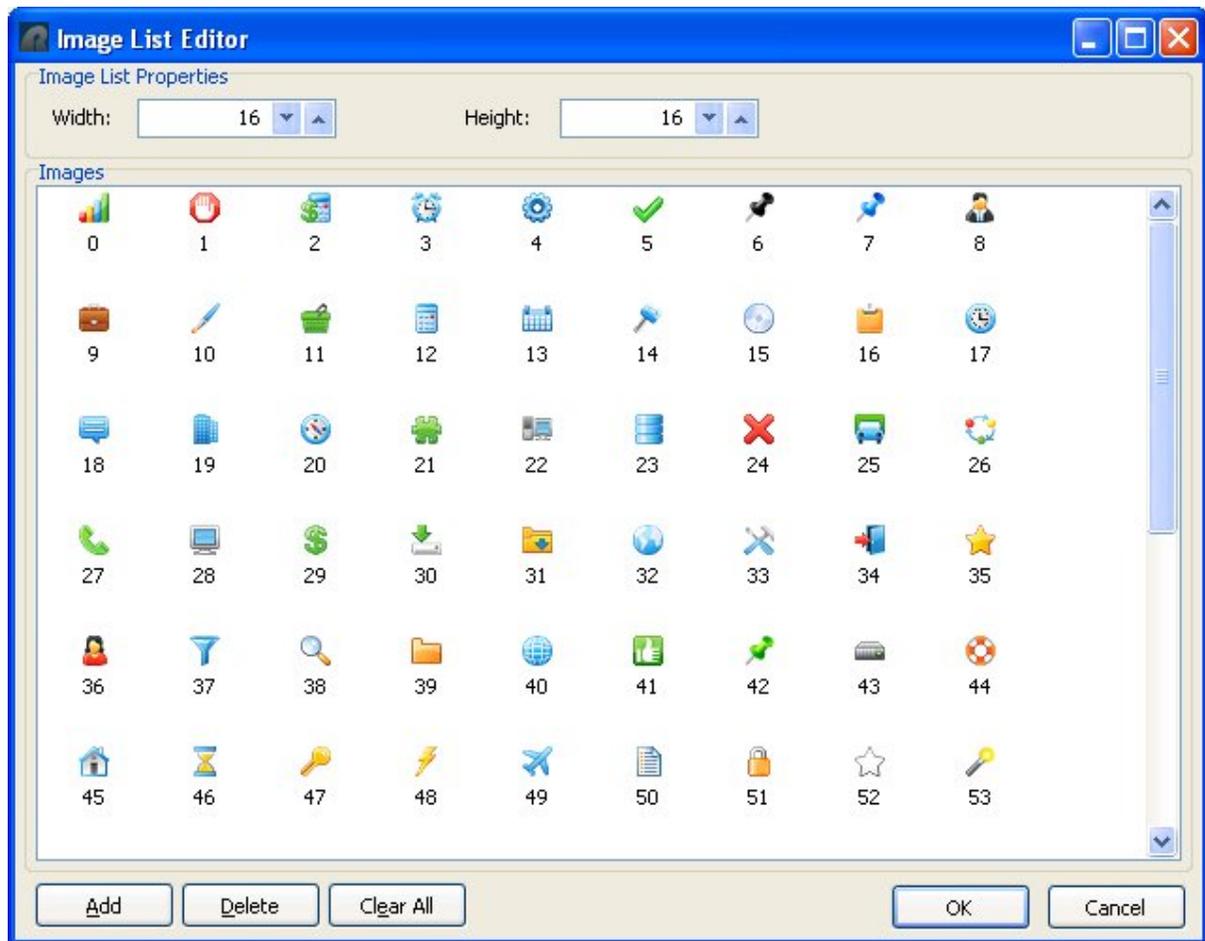
By selecting "View" from the Form Designer main Menu Bar, the following Popup Menu is provided in a menu tree format.



Any of the items can be selected to run an action, and one (Toolbars) displays a list of sub-items. The image above is an example of a single Popup Menu with 6 actions assigned to it.

47 Image List Editor

The Image List Editor is a storage location for image files to be used within the Menu Bar Designer, [Popup Menu Designer](#), [Toolbar Designer](#), and in Custom Form Actions.

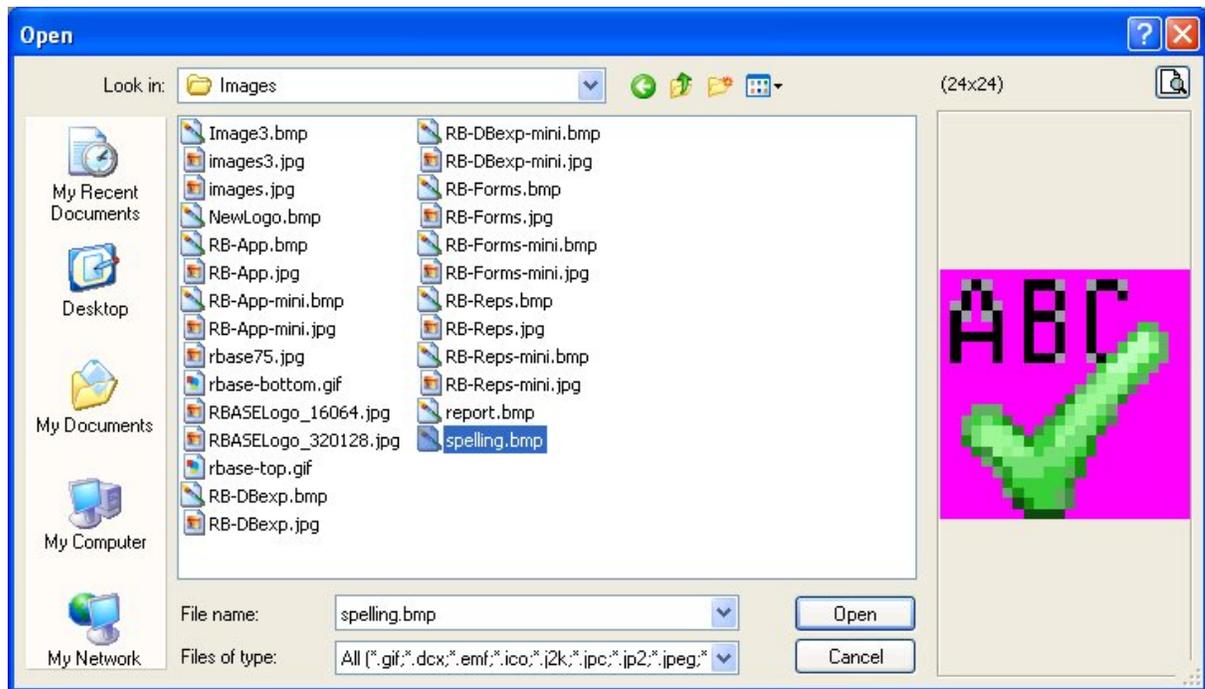


The Image List Editor can only store one image size (i.e 16x16, 32x32, etc.) at a time.

48 New Image Folder System Variable

A new RBTI System Variable, `RBTI_IMG_FOLDER`, is now supported to define a default folder path where all "Open Image" dialogs will initially start.

```
SET VAR RBTI_IMG_FOLDER TEXT = 'C:\TEMP\IMAGES\'
```

**Notes:**

- The RBTI_IMG_FOLDER System Variable must be redefined for a new session of R:BASE, so define the variable in your development startup file.
- If the RBTI_IMG_FOLDER variable does not exist or contains a non-valid folder path, all image dialogs will open in the current folder.

49 Duplicate Row in Data Browser/Editor

In the Data Browser/Editor, an additional "Duplicate Row" option [Ctrl+F2] has been added to insert a duplicate row of the current row.



The option is also available by selecting "Edit" > "Duplicate Row" from the main Menu Bar.

50 DROP Multiple Views

The **DROP** command has been enhanced to drop multiple views with the same DROP command.

```
DROP VIEW ViewName1, ViewName2, ViewName3
```

```
DROP VIEW ViewName1, ViewName2, ViewName3 NOCHECK
```

51 Capture a Report Page Number

A new GETPROPERTY command parameter is available to utilize within reports that will return the current page number.

```
GETPROPERTY REPORT PAGENO VarName
```

Example:

```
SET VAR vPageNumber TEXT = NULL
GETPROPERTY REPORT PAGENO 'vPageNumber'
PAUSE 2 USING .vPageNumber
RETURN
```

52 New Spinner Controls

The new DB Spinner and Variable Spinner Form Controls has been added to Form Designer to scroll integer values. The control is similar to the Spin Edit control, but offers different display and more control of the value stored in the control.

The DB Spinner and Variable Spinner Form Controls are available.



53 Modal External Form Designer

The DEFF command includes the MODAL option, so an external form file can be modified within an application.

```
DEFF [ filename.rff ] [ MODAL ]
```

filename.rff

Specifies the name of the external form file.

MODAL

Allows an EEP command block to launch an existing external form in the designer. Specifying a new file name will create a new external form. After making appropriate changes, the file can be saved. The designer must be closed in order to continue the next command in the EEP.

54 Enhanced LIST Command

The LIST command has been enhanced with several additional parameters to display tables and how they are in use within R:BASE, along with additional information for forms, reports, and labels.

01.

The LIST command supports a new parameter to list only dBASE tables.

```
R>LIST TABLES dBASE
```

```
Number of Tables in Database RRBYW18 is 76.
Number of Columns in Database RRBYW18 is 368.
Number of Indexes in Database RRBYW18 is 53.
Number of users connected: 1.
```

```
Dbase Tables in the database RRBYW18
```

Name	Columns	Rows	Comments
clients	25	DBF	clients.DBF
country	2	DBF	country.DBF
honey	10	DBF	honey.DBF
rectype	2	DBF	rectype.DBF

02.

The LIST command supports a new parameter to list only Server tables.

```
R>LIST TABLES SERVER
```

```
Number of Tables in Database RRBYW18 is 75.
Number of Columns in Database RRBYW18 is 346.
Number of Indexes in Database RRBYW18 is 53.
Number of users connected: 1.
```

```
Server Tables in the Database RRBYW18
```

Name	Columns	Rows	Comments
TransDetail	6	SERVER	Server table
- TransDetail ConComp			
TransMaster	8	SERVER	Server table
- TransMaster ConComp			

03.

The LIST command supports a new parameter to list only temporary tables.

```
R>LIST TABLES TEMP
```

```
Number of Tables in Database RRBYW18 is 74 permanent, 11 temporary.
Number of Columns in Database RRBYW18 is 344 permanent, 45 temporary.
Number of Indexes in Database RRBYW18 is 53 permanent, 8 temporary.
Number of users connected: 1.
```

Temporary Tables in the Database RRBYW18

Name	Columns	Rows	Comments
(T)BSTRDataType Type	2	3	BSTR Data
(T)TestImport	1	0	

04.

The LIST command supports a new parameter to list only locked tables.

```
R>LIST TABLES LOCK
```

```
Number of Tables in Database RRBYW18 is 73.
Number of Columns in Database RRBYW18 is 348.
Number of Indexes in Database RRBYW18 is 54.
Number of users connected: 1.
```

Locked Tables in the Database RRBYW18

Name	Columns	Rows	Comments
(L)Component Number and	2	12	Component Identification Description
(L)Customer	17	31	Customer Information
(L)Levels Percent	3	40	Pricing Level Per Model by Percent
(L)ProdLocation on Hand,	5	20	Product Location, Quantity and Cost

05.

The LIST command will now provide the date/time stamp and version for forms, reports, and labels. This enhancement is specific to R:BASE eXtreme 9.5 (64).

```
R>LIST FORM FOR EMPLOYEE
```

Form Form Description	Table / View Modified	Version
DBGridProperties To Demonstrate the DB Grid	Employee 05/11/2012 10:13 AM	1

DBGridWithPickList	Employee			
To Display DBGrid with Pick List	05/11/2012 10:13 AM			1
Employees	Employee			
Enter/Update Employee(s)	05/11/2012 10:13 AM			1
Employees_Test_DBEdit_Read_Only	Employee			
Enter/Update Employee(s)	05/16/2013 12:17 PM			5
Employees_Test_DBEdit_RO_	Employee			
Enter/Update Employee(s)	05/22/2013 2:21 PM			24
RBG9_CapturingIma	Employee			
Capturing Images with the DB Image	05/11/2012 10:13 AM			1

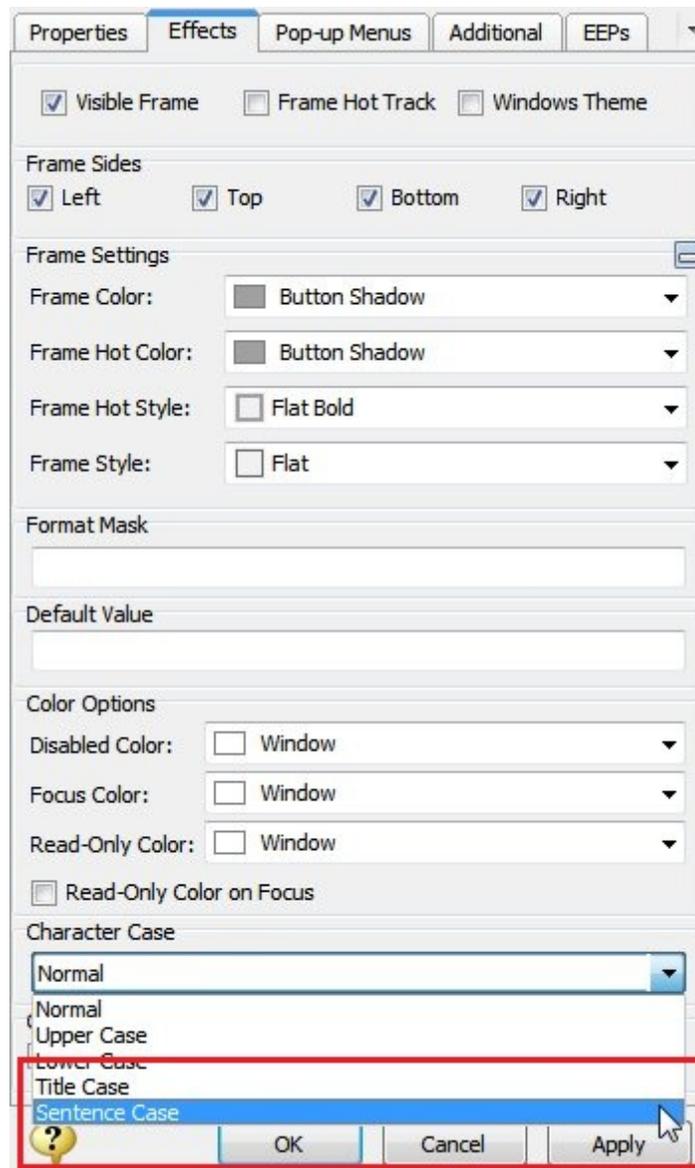
R>LIST REPORTS FOR CONTACT

Report	Table / View	Modified	Version
Report Description			
-----	-----	-----	-----
Contacts	Contact		
Customer Contact List	05/11/2012 10:13 AM		1
ContactsByCustomer	Contact		
Contact List by Customer	05/11/2012 10:13 AM		1
RBG9_AdvRichText	Contact		
Advanced Rich Text Report	05/11/2012 10:13 AM		1
RBG9_RptSysVars	Contact		
New Report System Variables	05/11/2012 10:13 AM		1

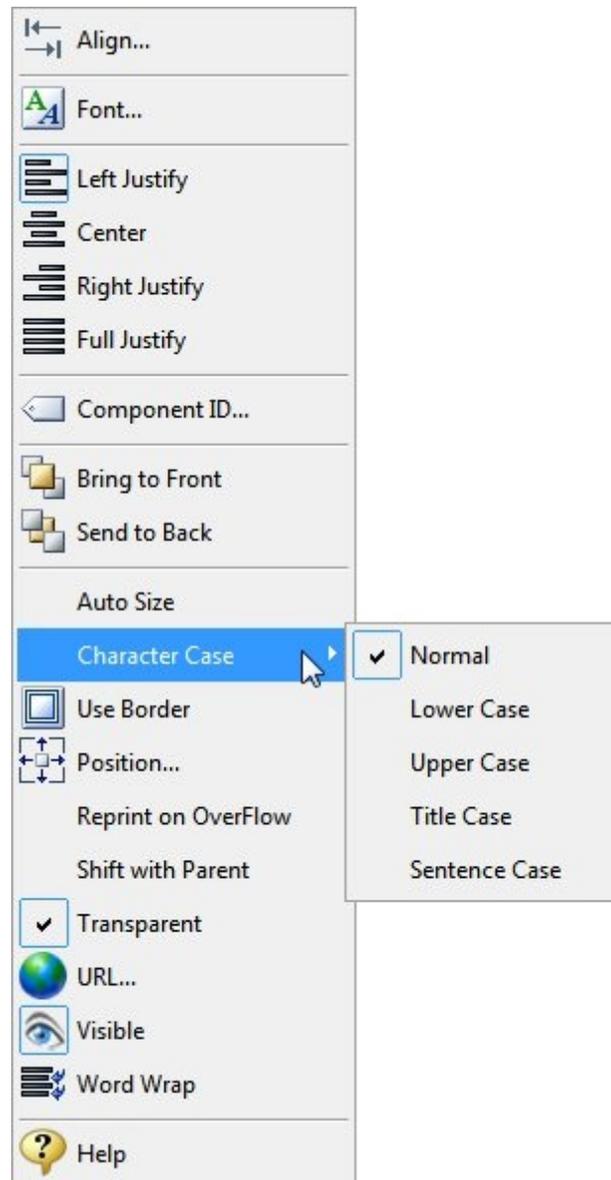
55 Additional Character Case Options

Two additional Character Case options have been added to Form Designer DB Edit and Variable Edit Controls;

- Title Case - First letter of every word is capitalized
- Sentence Case - First letter is capitalized)



The two new Character Case options have also been added to the Report Designer DB Label, Variable Label, and Label Controls, as well as the DB Memo, Variable Memo, and Memo Controls; Title Case and Sentence Case



56 Enhanced REFF Command

The REFF command, to run an external form file, has been enhanced to support the AS ALIAS and CAPTION parameters.

```
REFF filename.rff [ MDI [ AS alias ] ] [ CAPTION 'windowcaption' ]
```

filename.rff

Specifies the name of the external form file to launch.

MDI

Specifies a modeless form, allowing users to access other windows without closing the form first. This option is used in R:BASE for Windows only.

AS alias

This option is used in R:BASE for Windows only. Allows the user to specify a name for this instance of the form. This option is used in conjunction with the MDI option so that the user can programmatically specify the form with the SETFOCUS command.

CAPTION 'windowcaption'

This option is used in R:BASE for Windows only. Specifies a caption for the window title bar.

Examples

```
REFF RRBYW18.RFF CAPTION 'Running R:BASE Your Way!'
```

```
REFF AdhocReports.RFF MDI AS Adhoc CAPTION 'Adhoc Custom Reports'
```

57 Enhanced ATTACH Command

The ATTACH command has been enhanced to support an alias name for the table and columns, and to specify if the table is temporary. The ability to specify an alias name streamlines the attaching of dBASE files that contain reserved words for the file name and columns.

```
ATTACH [ TEMPORARY ] filespec [ AS tablealias ] [ USING [ ndxlist ] ] [ ALIAS aliaslist ]
```

Options**ALIAS AliasList**

To specify alias names for columns.

AS tablealias

Specifies an alias, or temporary name, for the dBASE table. A table alias is sometimes required when attaching files that do not follow the same table name restrictions as R:BASE.

filespec

A dBASE database name with a drive and path specification in the form D:\PATHNAME\FILENAME.

ndxlist

Specifies a list of index files to associate with the specified dBASE file. You do not have to include the extension for each index file. Separate index file names with a comma (or the current delimiter). Index files must be located with the specified dBASE file.

TEMPORARY

Allows you to create a temporary table with the ATTACH command. The temporary tables will disappear when the database is disconnected.

USING

Removes dBASE index files that were previously associated with the attached dBASE file when this option is used without a list of index files.

Example

```
ATTACH TEMPORARY filename.dbf AS TableName ALIAS Column1, Column2,  
Column3, Column4, Column5
```

58 Additional Logical Functions

Several additional logical functions have been added to R:BASE to assist with performing calculations.

01.

(IFLE(*arg1*,*arg2*,*arg3*,*arg4*))

If *arg1* is less than or equal to *arg2*, IFLE returns the value of *arg3*. If *arg1* is greater than *arg2*, IFLE returns the value of *arg4*. The data types of *arg1* and *arg2* must match and the data types of *arg3* and *arg4* must match.

In the following example, the value of *vifle* is 100, since *A* is less than *B*.

```
SET VAR A = 37  
SET VAR B = 48  
SET VAR vifle = (IFLE(.A,.B,100,100))
```

02.

(IFGE(*arg1*,*arg2*,*arg3*,*arg4*))

If *arg1* is greater than or equal to *arg2*, IFGE returns the value of *arg3*. If *arg1* is less than *arg2*, IFGE returns the value of *arg4*. The data types of *arg1* and *arg2* must match and the data types of *arg3* and *arg4* must match.

In the following example, the value of *vifge* is 4, because the date 01/10/2013 is greater than the date 10/15/2012.

```
SET VAR vifge = (IFGE('01/10/2013','10/15/2012',4,5))
```

03.

(IFNE(*arg1*,*arg2*,*arg3*,*arg4*))

If *arg1* and *arg2* are not equal, IFNE returns the value of *arg3*. If *arg1* and *arg2* are equal, IFNE returns the value of *arg4*. The data types of *arg1* and *arg2* must match and the data types of *arg3* and *arg4* must match.

In the following example, the value of *vifne* is 7, since *v1* is not equal to *v2*.

```
SET VAR v1 = 25  
SET VAR v2 = 30  
SET VAR vifne = (IFNE(.v1,.v2,7,8))
```

59 Enhanced RBBEDIT Command

Use the RBBEDIT command to start the R:BASE BLOB Editor, with which you can create or edit binary files.

```

RBBEDIT [ filename.ext [ ZoomMode ] [ DefaultTab ] ]

```

You can use the RBBEDIT command to launch the R:BASE BLOB Editor for managing external files at the R> Prompt, in a command file, or in an EEP. Depending on the file extension, the BLOB Editor will display the available options accordingly.

Options

filename.ext

Specifies an external ASCII text, RTF, or image file. The R:BASE BLOB Editor recognizes the following image formats:

GIF	BMP
DCX	PCC
PCX	AFI
VST	TGA
PNG	JPEG
JPG	TIFF
TIF	ICO
EMF	WMF

ZoomMode

Specifies the zoom mode for the displayed image file

Zoom Parameter	Description
ACTUAL	zooms the image to the actual size
FULL	fits the image to the full page of the BLOB Editor window
FIT_WIDTH	fits the image to the current BLOB Editor window width
FIT_HEIGHT	fits the image to the current BLOB Editor window height
FIT_PAGE	fits the image to the current BLOB Editor window

DefaultTab

Specifies the default tab for the R:BASE BLOB Editor.

Default Tab	Parameter
Image	NOTE, VARCHAR, TEXT, NOTEVARCHAR
Note/Varchar	IMAGE
Rich Text	RICHTEXT, RTF
Unicode/BSTR	UNICODEBSTR, UNICODE, BSTR
Hex	HEX

Examples:

01.
The following will display the "Image" and "Hex" tabs of the BLOB Editor.

```
RBBEDIT
```

02.
The following will display the image in the "Images" tab of the BLOB Editor in the full page zoom mode.

```
RBBEDIT myphoto.bmp FULL IMAGE
```

03.

The following will display the "Rich Text" tab of the BLOB Editor. If the file exists it will be loaded. The RICHTEXT parameter forced the "Rich Text" tab to be displayed.

```
RBBEDIT myfile.rtf RICHTEXT
```

04.

The following will display the text file in the "Note/VarChar" tab of the BLOB Editor.

```
RBBEDIT mytext.txt TEXT
```

05.

The following will display the a file in the "Unicode/BSTR" tab of the BLOB Editor.

```
RBBEDIT filename UNICODE
```

06.

The following will display the a file in the "Hex" tab of the BLOB Editor.

```
RBBEDIT filespec HEX
```

60 New RUNRBA Command

A new command, RUNRBA, is now supported to specifically run a .RBA application file which are created specifically in the Application Designer. R:BASE will run an RBA file like it is run within the Database Explorer, only from a command file or a Custom EEP.

RUNRBA filespec

filespec

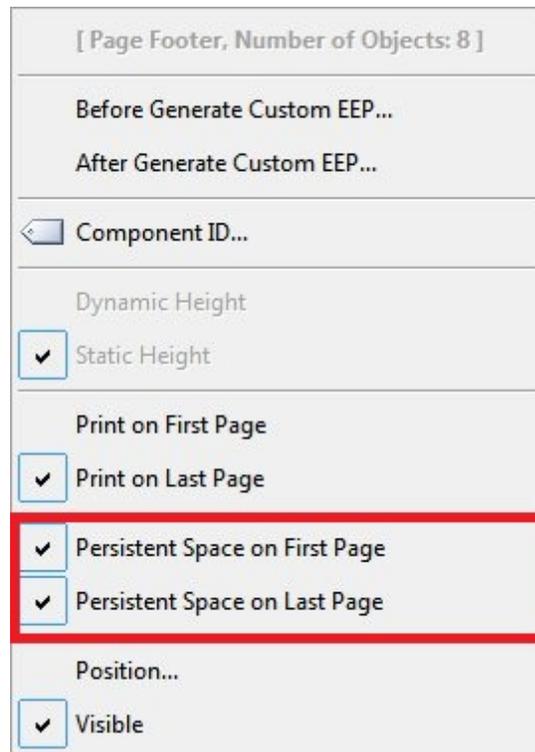
Specifies the R:BASE application file to be run.

Example:

```
RUNRBA TestApp.rba
```

61 Persistent Space for Page Footer/Header Bands

Two new properties are supported for Page Footer and Page Header bands, "Persistent Space On First Page" and "Persistent Space On Last Page", to determines whether the space reserved for the band is kept, even if the contents are not printed.



[Page Footer, Number of Objects: 8]

Before Generate Custom EEP...

After Generate Custom EEP...

Component ID...

Dynamic Height

Static Height

Print on First Page

Print on Last Page

Persistent Space on First Page

Persistent Space on Last Page

Position...

Visible

⇒ **Persistent Space On First Page**

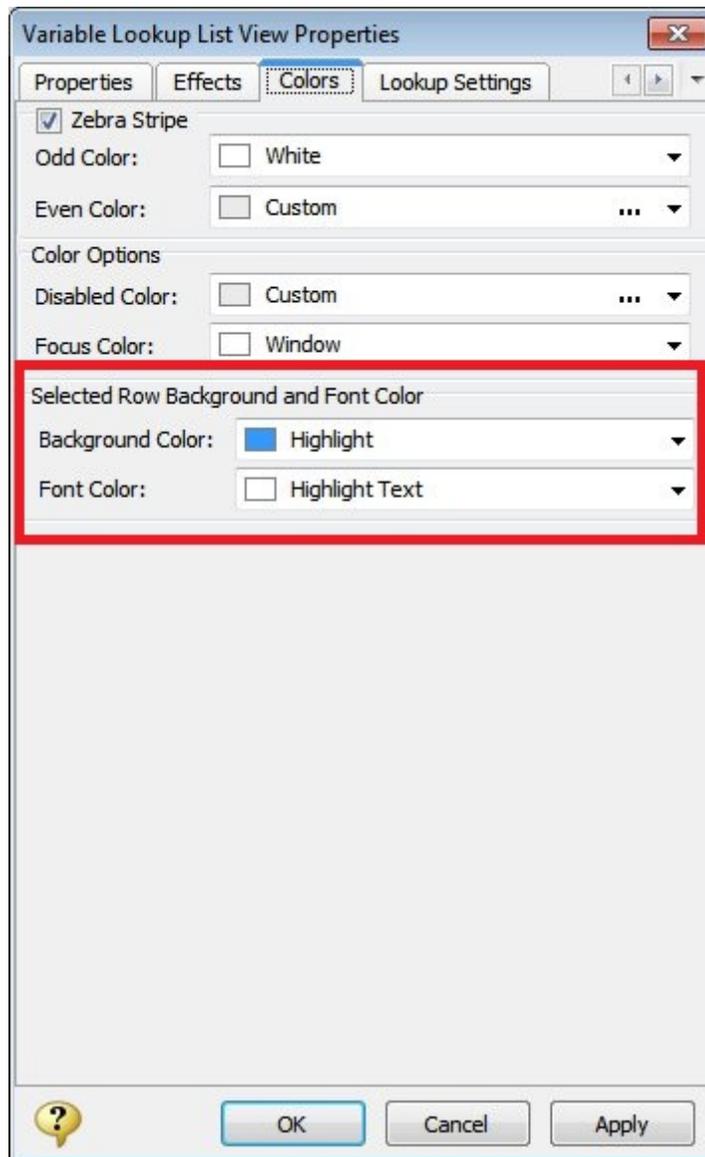
Determines whether the space reserved for header or footer band is kept, even if the contents are not printed

⇒ **Persistent Space On Last Page**

Determines whether the space reserved for header or footer band is kept, even if the contents are not printed

62 New Selected Row Color Options for List Views

New "Selected Row Background and Font Color" options are available for the DB Lookup List View and Variable Lookup List View controls. This feature provides highlighting color options for the row when selected.



The properties for the selected row can also be changed on the fly with the PROPERTY command.

Example:

```
PROPERTY DBLULV_CompID SelectedBackgroundColor 'RED'
PROPERTY DBLULV_CompID SelectedFontColor 'WHITE'
```

63 New "On After Start" Action for RBA Application Files

A new "On After Start" Action was added to the Application Designer properties that specifies a series of commands to run after the application main window is displayed.

64 New IFF Function

A new IFF logical function has been added to handle working with conditions to return a value.

IFF(*condition*), *arg1*, *arg2*)

If the condition is met, then the value of *arg1* is returned. If condition is not met, then the value of *arg2* is returned.

The condition must follow the syntax specifications as set with IF...ENDIF command structure.

The condition must list a set of conditions that combine to form a statement that is either true or false. Conditions can be combined with the connecting operators AND, OR, AND NOT, and OR NOT. It is important to note that the condition needs to be a single item, which is why quotes are used in the examples below.

The data types of *arg1* and *arg2* must match.

Examples:

-- Example 01:

--Comparison of Variables

```
SET VAR v1 INTEGER = 1
SET VAR v2 INTEGER = 2
SET VAR v3 = (IFF('.v1<.v2', 'First', 'Second'))
SHOW VAR v3
First
```

-- Example 02:

-- SELECT and Display Feedback on Data

```
CONNECT RRBYW18
R>SELECT NetAmount, (IFF('NetAmount>$100000', 'Good', 'Needs
Improvement'))=30 AS Status FROM SalesBonus
```

NetAmount	Status
\$176,000.00	Good
\$87,500.00	Needs Improvement
\$22,500.00	Needs Improvement
\$40,500.00	Needs Improvement
\$76,800.00	Needs Improvement
\$36,625.00	Needs Improvement
\$56,250.00	Needs Improvement
\$152,250.00	Good
\$108,750.00	Good
\$78,750.00	Needs Improvement
\$27,000.00	Needs Improvement
\$9,500.00	Needs Improvement
\$210,625.00	Good

65 Support to Capture Images to the Clipboard

Capturing images is a functionality that R:BASE can perform from the Database Explorer as well as using the PROPERTY command. In an R:BASE session, select "Utilities" > "Take a Snapshot" >

- R:BASE Windows
- Whole Screen

Choosing either of these options will place the captured image to the clipboard, which can then be pasted into an image editing program.

With the PROPERTY command, R:BASE provides image capture functionality using the command syntax. The two command parameters are:

- CAPTURE_FROM_SCREEN
- CAPTURE_FROM_WINDOW

The parameters perform as their name implies, one capturing an image from the screen and the other from the window.

```
PROPERTY RBASE_FORM 'CAPTURE_FROM_SCREEN|Left,Top,Right,Bottom'
filename
PROPERTY RBASE_FORM 'CAPTURE_FROM_WINDOW|Left,Top,Right,Bottom'
filename
```

The optional pixel area can be specified to grab a limited area with the Left, Top, Right, and Bottom pixel values. A file name can be specified for the image capture, using either JPEG or BMP images file formats. If the .JPG or .JPEG file extension is specified, the image format will be stored as JPEG. All other file extensions will be considered as the BMP file format.

Examples:

```
-- to capture the entire screen
PROPERTY RBASE_FORM CAPTURE_FROM_SCREEN 'c:\Entire_Screen.jpg'
```

```
-- to capture part of the screen
PROPERTY RBASE_FORM 'CAPTURE_FROM_SCREEN|23, 24, 934, 800' 'c:
\Screen_Cap.jpg'

-- to capture the entire form
PROPERTY RBASE_FORM CAPTURE_FROM_WINDOW 'c:\Entire_Form.jpg'

-- to capture part of a form
PROPERTY RBASE_FORM 'CAPTURE_FROM_WINDOW|12,12,134,300' 'c:
\Form_Cap.jpg'
```

A new enhancement to R:BASE is the ability to use the current PROPERTY command to support capturing an image of the current window or screen and place the content in the clipboard.

Examples:

```
-- to capture the full form window to the clipboard
PROPERTY RBASE_FORM CAPTURE_FROM_WINDOW CLIPBOARD

-- to capture part of screen to to the clipboard
PROPERTY RBASE_FORM 'CAPTURE_FROM_SCREEN|23, 24, 934, 800'
CLIPBOARD
```

66 Dynamic Enhanced DB Grid Column Sorting

Several new parameters allow for the columns of an Enhanced DB Grid to be sorted. The **SORTASC** property can be used to sort the column in ascending order. The **SORTDESC** property can be used to sort the column in descending order. The **CLICKHEADER** property is used to simulate that the column header was clicked, to force a sort.

The column index (0, 1, 2, etc.) or column name can be specified to sort the column.

Syntax:

```
PROPERTY <EnhancedDBGridComponentID> SortAsc '0'
PROPERTY <EnhancedDBGridComponentID> SortDesc '0'
```

-- Example (Based on RBG9_EnhancDBGrd form included with RRBYW18)

```
-- To Dynamically Sort (ASC) the first column (Company)
PROPERTY DBGrid_Customers SortAsc '0'

-- To Dynamically Sort (DESC) the first column (Company)
PROPERTY DBGrid_Customers SortDesc '0'

-- To Dynamically Sort (ASC) the second column (City)
PROPERTY DBGrid_Customers SortAsc '1'

-- To Dynamically Sort (DESC) the second column (City)
PROPERTY DBGrid_Customers SortDesc '1'
```

Alternative, you could also use the following PROPERTY syntax as well.

```

PROPERTY <EnhancedDBGridComponentID> SortAsc 'columnname'
PROPERTY <EnhancedDBGridComponentID> SortDesc 'columnname'

-- To Dynamically Sort (ASC) the first column (Company)
PROPERTY DBGrid_Customers SortAsc 'Company'

-- To Dynamically Sort (DESC) the first column (Company)
PROPERTY DBGrid_Customers SortDesc 'Company'

-- To Dynamically Sort (ASC) the second column (City)
PROPERTY DBGrid_Customers SortAsc 'City'

-- To Dynamically Sort (DESC) the second column (City)
PROPERTY DBGrid_Customers SortDesc 'City'

```

Syntax:

```

PROPERTY <EnhancedDBGridComponentID> ClickHeader '0'

-- To Dynamically Sort the first column (Company)
PROPERTY DBGrid_Customers ClickHeader '0'

-- To Dynamically Sort the second column (City)
PROPERTY DBGrid_Customers ClickHeader '1'

```

Alternative, you could also use the following PROPERTY syntax as well.

```

PROPERTY <EnhancedDBGridComponentID> ClickHeader 'columnname'

-- To Dynamically Sort the first column (Company)
PROPERTY DBGrid_Customers ClickHeader 'Company'

-- To Dynamically Sort the second column (City)
PROPERTY DBGrid_Customers ClickHeader 'City'

```

67 Capture Cell Value Within Enhanced DB Grid

A new GETPROPERTY command parameter is available to capture the value of currently focused cell in an Enhanced DB Grid. The value for the cell is stored within the specified variable.

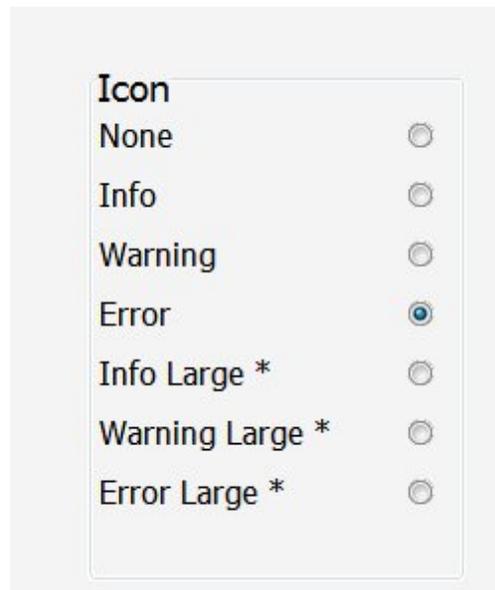
```

GETPROPERTY <EnhancedDBGridComponentID> CurrentCellValue 'varname'

```

68 Button Alignment for Radio Group Controls

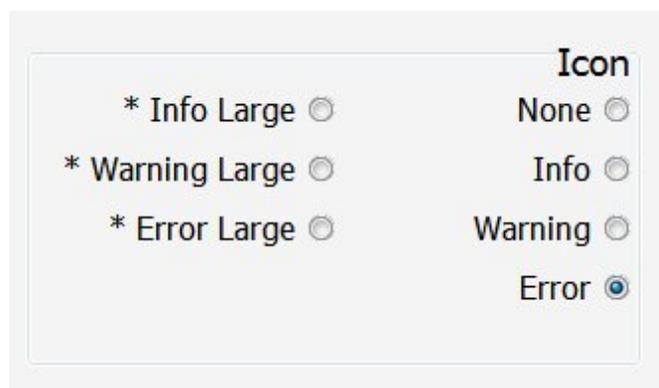
A new "Button Alignment" property for DB Radio Group and Variable Radio Group controls is available to move to radio button on either side of the item text.



69 Bidirectional Mode Support

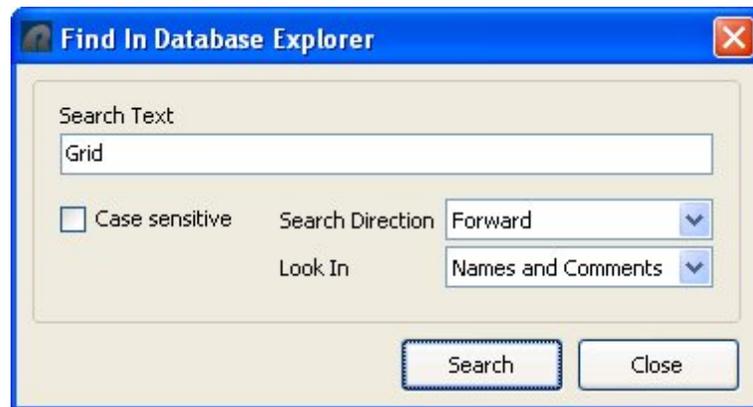
New Bidirectional Mode is supported to adjust the text appearance and behavior when an application runs in a locale that reads from right to left, instead of left to right. Bidirectional Mode has been added to the following controls:

- DB Check Box
- DB Radio Button
- DB Radio Group
- Variable Check Box
- Variable Radio Button
- Variable Radio Group



70 Find in Database Explorer Utility

The "Find in Database Explorer" search utility locates specific text in the Database Explorer for the connected database. Use the [Ctrl] + [N] key combination to open the search dialog.



Search results are based upon the displayed section of the Database Explorer. For example, if the Forms section is displayed, the utility will search all form objects for the specified text. When the search is performed all of the columns will be scanned for the specified text.

The search results can be limited based upon case sensitivity, direction, and limited columns to look in.

The Database Explorer offers the following sections and appropriate columns, when configured as "View as Details":

- Tables (Name, Comment, Columns, Rows)
- Views (Name, Comment, Columns)
- Stored Procedures (Name, Comment, Size, Date/Time, Version)
- Forms (Name, Main Table, Comment, Size, Date/Time*, Version*)
- Reports (Name, Main Table, Comment, Size, Date/Time*, Version*)
- Labels (Name, Main Table, Comment, Size, Date/Time*, Version*)
- External Forms (Name, Comment, Size, Date/Time, Version)
- Applications (Name, Date/Time, Version)
- Command Files (Name, Extension, Date/Time, Size)

* = R:BASE eXtreme 9.5 (64) only.

An example of use would be a user requiring to locate the text "MAP" in all reports. After selecting the Reports section of the Database Explorer, the search dialog can be launched using the [Ctrl] + [N] key combination. The word "MAP" is entered and "Names and Comments" is left as is for the "Look In" field. When the "Search" button is pressed all forms containing "map" in the name and comment will be highlighted, one at a time, for easy selection. To move to the next item located in the search, press the [Enter] key.

This feature is extremely helpful for those that have databases with a significant number of tables, views, stored procedures, forms, reports, labels, external forms, applications, and command files.

Notes:

- The search will not find text in the active or selected row.
- Press the [Enter] key to move to the next item located in the search.

71 Additional Form RBTI System Variables

Two additional RBTI System Variable have been implemented for when a form is open in the Form Designer.

If a form is open in the Form Designer the variable RBTI_FORM_DSGN will be defined with the value "YES".

If a form is open in the External Form Designer the variable RBTI_FORM_EXT_DSGN will be defined with the value "YES".

```
R>SHOW VAR
Variable                               = Value
      Type
-----
#DATE                                   = 01/08/2014
      DATE
#TIME                                   = 5:22:37 PM
      TIME
#PI                                     = 3.14159265358979
      DOUBLE
SQLCODE                                 = 0
      INTEGER
SQLSTATE                                = 00000
      TEXT
#NOW                                    = 01/08/2014 5:22:37 PM
      DATETIME
RBTI_FORM_FORMNAME                      = CustomerManagement
      TEXT
RBTI_FORM_DSGN                          = YES
      TEXT
RBTI_FORM_EXT_DSGN                      = YES
      TEXT
```

An example of how the added system variable intelligence can be used is how it allows for a developer to customize "On Close" EEPs within forms, to maintain global variables within active development.

When embedding code in form, it is proper programming to CLEAR all variables related to the form in the "On Close" EEP. However, if you still need those variables while in Form Designer, they must be defined again.

The new system variables permit a developer to determine which variables to CLEAR, and which to not.

72 Reset Form, Report, Label Version Number

When copying a form, report, or label, a check box is now available to reset the version number.

Copy Form

Form Name: Contacts

Table/View Name: Contact

Form Comment: Enter/Update Contact(s)

Reset Version Number

OK Cancel

Copy Report

Report Name: InventoryList

Table/View Name: ProdLocation

Report Comment: Inventory List

Reset Version Number

OK Cancel

The version number can also be reset by right clicking on the object and selecting "Reset Version Number ..." from the speed menu.

This enhancement is specific to R:BASE eXtreme 9.5 (64).

73 Default Settings for the BLOB Editor

R:BASE supports many additional default settings for the BLOB Editor.

The settings specify the default values for the Image, Note/VarChar, Rich Text, Unicode/BSTR, and Hex tabs of the R:BASE BLOB Editor.

73.1 Image

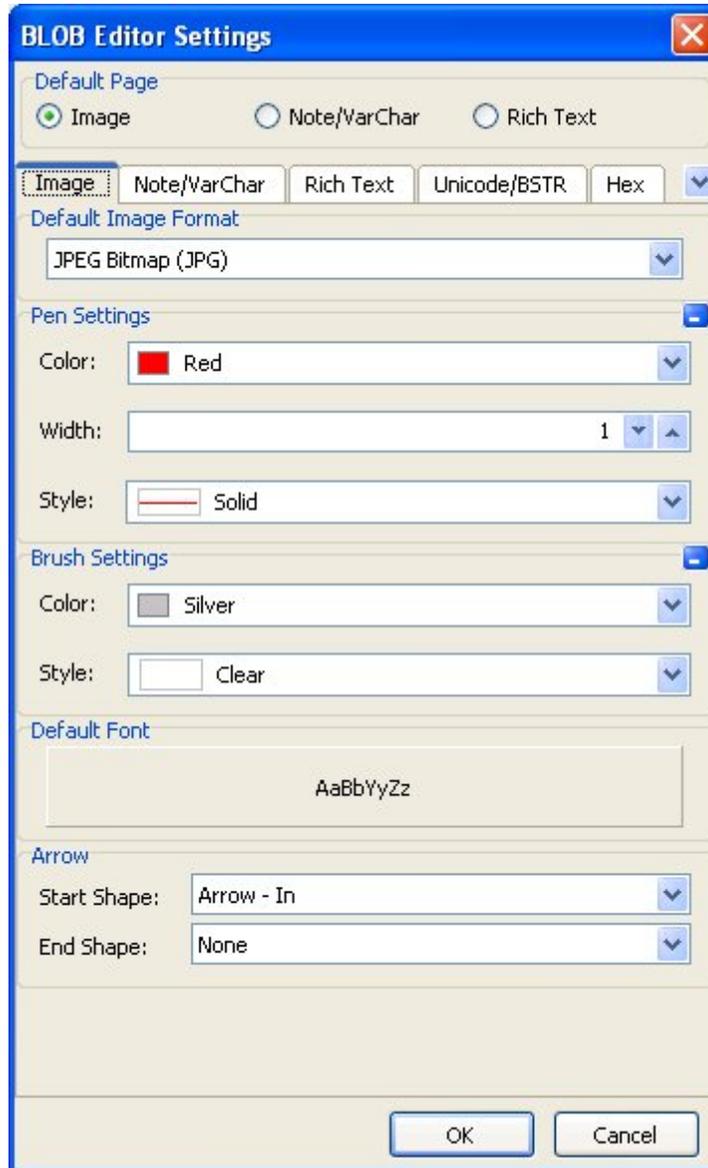
- ⇒ **Default Page**
specifies the default page displayed when the BLOB Editor is launched for an empty data set. If data exists, the BLOB Editor will default to the appropriate page based on the type of data stored.
- ⇒ **Default Image Format**
specifies the default format when saving images
- ⇒ **Pen Settings**
 - Color* - specifies the line color
 - Width* - specifies the line width
 - Style* - specifies the line style
- ⇒ **Brush Settings**
 - Color* - specifies the fill color for the arrow start and end shapes, if defined
 - Style* - specifies the fill style for the arrow start and end shapes, if defined
- ⇒ **Default Font**

specifies the default text font type, size, and style

⇒ **Arrow**

Start Shape - specifies the arrow start shape for the line

End Shape - specifies the arrow end shape for the line



73.2 Note/VarChar

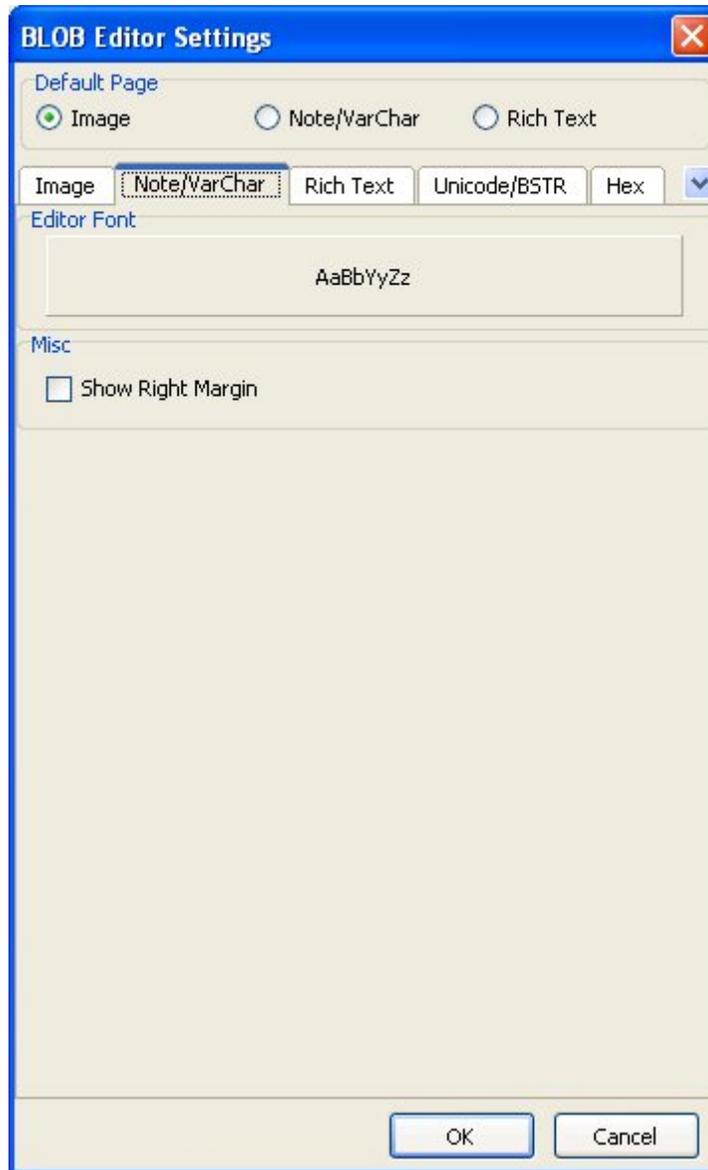
⇒ **Default Page**

specifies the default page displayed when the BLOB Editor is launched for an empty data set. If data exists for the column, the BLOB Editor will default to the appropriate page based on the type of data stored.

⇒ **Editor Font**

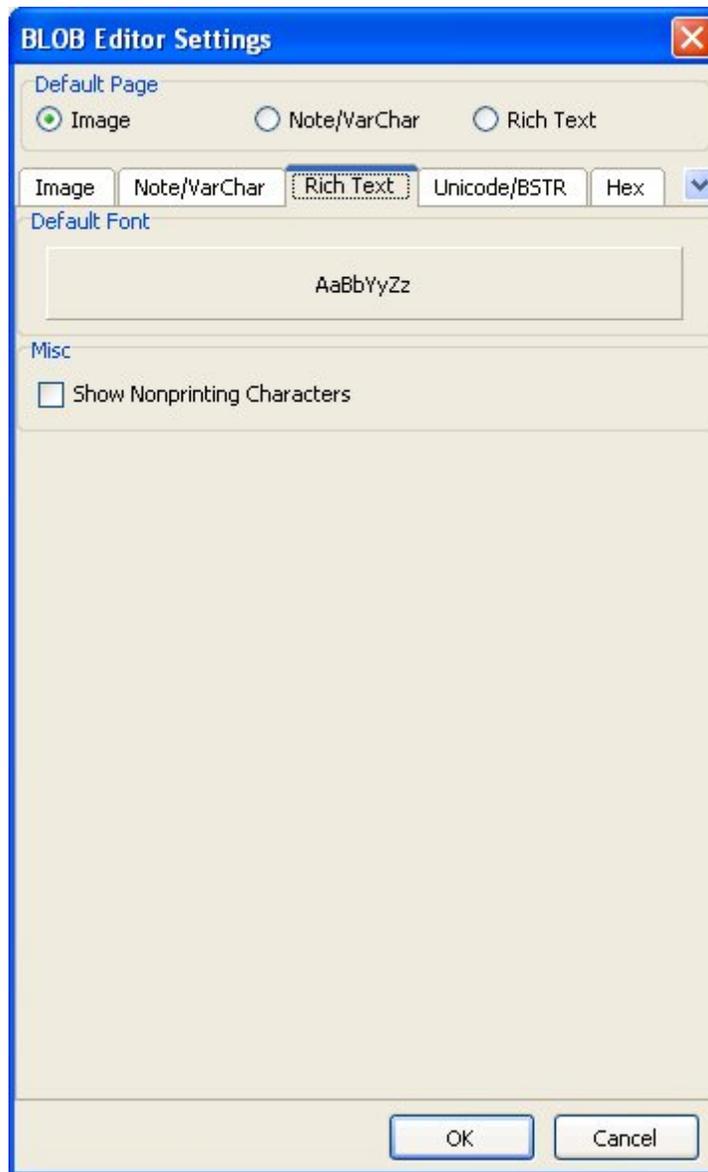
specifies the editor text font type, size, and style

- ⇒ **Misc**
specifies if the right margin is displayed



73.3 Rich Text

- ⇒ **Default Page**
specifies the default page displayed when the BLOB Editor is launched for an empty data set. If data exists for the column, the BLOB Editor will default to the appropriate page based on the type of data stored.
- ⇒ **Default Font**
specifies the default text font type, size, and style
- ⇒ **Misc**
specifies if nonprinting characters are displayed



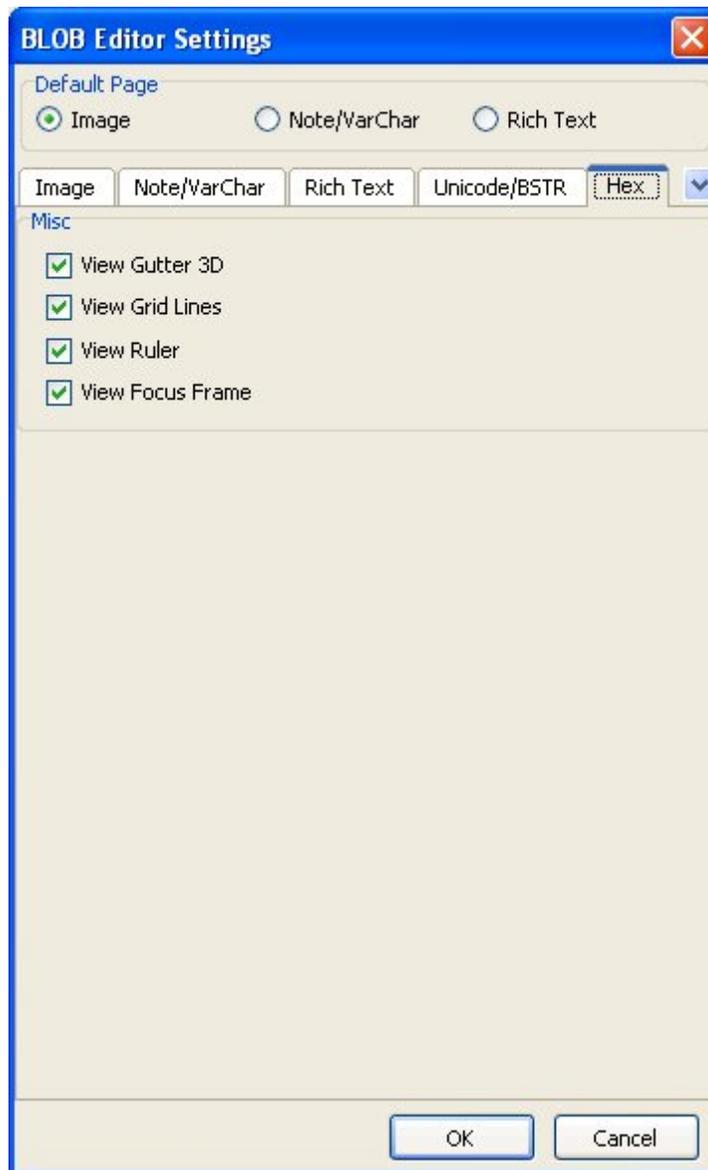
73.4 Unicode/BSTR

- ⇒ **Default Page**
specifies the default page displayed when the BLOB Editor is launched for an empty data set. If data exists for the column, the BLOB Editor will default to the appropriate page based on the type of data stored.
- ⇒ **Editor Font**
specifies the editor font type, size, and style



73.5 Hex

- ⇒ **Default Page**
specifies the default page displayed when the BLOB Editor is launched for an empty data set. If data exists for the column, the BLOB Editor will default to the appropriate page based on the type of data stored.
- ⇒ **Misc**
 - [View Gutter 3D](#) - specifies if the gutter lines are displayed
 - [View Grid Lines](#) - specifies if the grid lines are displayed
 - [View Ruler](#) - specifies if the ruler is displayed
 - [View Focus Frame](#) - specifies if a selection displays a solid frame or the dotted focus frame



74 New Temporary Option for JOIN, INTERSECT, SUBTRACT, and UNION

A TEMPORARY option has been enhanced for the JOIN, INTERSECT, SUBTRACT, and UNION commands, to support the creation of a temporary table.

JOIN

Use the JOIN command to form a new table by combining rows from two existing tables based on a comparison of the columns you specify.

```
JOIN tblname1 USING colname1 WITH tblname2 USING colname2 ...
... FORMING [ TEMPORARY ] tblname3 [ WHERE compare_op ]
```

FORMING tblname3

Specifies the name of the new table.

TEMPORARY

Creates a temporary table that disappears when the database is disconnected.

tblname1

Specifies the name of the first table to join.

USING colname1

Specifies the columns to be compared; *colname1* is a column in *tblname1*.

USING colname2

Specifies the columns to be compared; *colname2* is a column in *tblname2*.

WHERE compare_op

States the condition used to compare columns. If omitted, the condition is = or EQ (equal). Use only the following comparison operators in a JOIN WHERE clause:

Comparison Operator		Rows are included if...
=	EQ	<i>colname1</i> is equal to <i>colname2</i> (the default)
<>	NE	<i>colname1</i> is not equal to <i>colname2</i>
>	GT	<i>colname1</i> is greater than <i>colname2</i>
>=	GE	<i>colname1</i> is greater than or equal to <i>colname2</i>
<	LT	<i>colname1</i> is less than <i>colname2</i>
<=	LE	<i>colname1</i> is less than or equal to <i>colname2</i>

WITH tblname2

Specifies the name of the second table to join.

Example:

```
JOIN ProdLocation USING Model WITH Product USING Model FORMING
TEMPORARY ProdDetail
```

INTERSECT

Use the INTERSECT command to form a new table by combining two tables that have one or more common columns.

```
INTERSECT tblname1 WITH tblname2 FORMING [ TEMPORARY ] tblname3 [ USING collist ]
```

FORMING tblname3

Specifies the name of the new table.

TEMPORARY

Creates a temporary table that disappears when the database is disconnected.

tblname1

Specifies the name of the first table to intersect.

USING collist

Specifies which columns to include in the new table. The clause must include at least one common column. You can use the clause to order the columns in the new table and to determine which columns from the original tables will be in the new table. If you do not include the clause, R:BASE uses all columns from both tables. Columns from *tblname1* provide the order for rows and columns in the new table. R:BASE adds columns from *tblname2* that are not in *tblname1* to the right of the columns from *tblname1*. The USING clause also determines which common columns are used for comparison. For example, if *firstname* and *lastname* are in both tables but only *lastname* is included in the USING clause, INTERSECT will compare the tables based only on *lastname*.

WITH tblname2

Specifies the name of the second table to intersect.

Example:

```
INTERSECT Employee WITH SalesBonus FORMING TEMPORARY RepSales +
USING EmpLname, EmpID, HireDate, NetAmount, TransDate, Bonus,
BonusPct
```

SUBTRACT

Use the SUBTRACT command to form a new table by subtracting rows in one table from a second table based on common columns.

```
SUBTRACT tblname1 FROM tblname2 FORMING tblname3 [ USING collist ]
```

FORMING tblname3

Specifies the name of the table that is produced when you subtract one table from another.

FROM tblname2

Specifies the name of the table from which you want to subtract another table.

TEMPORARY

Creates a temporary table that disappears when the database is disconnected.

tblname1

Specifies the name of the table you want to subtract from a second table.

USING collist

Specifies the columns and order of columns that you want to include in the new table. At least one column in the USING clause must exist in both tables. If you do not include the clause, R:BASE makes a new table that includes all columns from both tables.

Example:

```
SUBTRACT SalesBonus FROM Employee FORMING TEMPORARY NoBonus
```

UNION

Use the UNION command to combine the columns and rows of two tables into a new table.

```
UNION tblname1 WITH tblname2 FORMING [ TEMPORARY ] tblname3 [ USING collist ]
```

FORMING tblname3

Specifies the name of the new table that is produced.

TEMPORARY

Creates a temporary table that disappears when the database is disconnected.

tblname1

Specifies the name of one of two tables you will combine.

USING collist

Specifies the columns and order of columns that you want to include in the new table. At least one column in the USING clause must exist in both tables. If you do not include the clause, R:BASE makes a new table that includes all columns from both tables.

WITH tblname2

Specifies the name of the second of two tables you will combine.

Example:

UNION Employee WITH SalesBonus FORMING TEMPORARY SalesRepHistory

75 Enhanced DIALOG Command to Resize a Custom Image

The DIALOG command has been enhanced with the RESIZE_ICON parameter, to resize a specified image to 32x32 pixels.

Any of the below image file formats can be used. There is no size limitation, though 32x32 is recommended.

wmf	Windows Metafiles
emf	Enhanced Metafiles
ico	Icon Files
bmp	Windows Bitmap Files
png	Portable Network Graphics
jpeg, jpg	JPEG Image File
tif, tiff	TIFF Image File
gif	Compuserve GIF Image
jp2, j2k, jpc	JPEG 2000 Image
tga, afi	Truevision Targa File
vst	Truevision Vista File
pcx, pcc	ZSoft PC Paintbrush
dcx	DCX Image File

Example:

```
DIALOG 'Do you wish to continue?' vResponse vEndKey YES +
CAPTION 'Confirm' OPTION ICON_FILE Logo128x128.jpg|RESIZE_ICON ON +
|MESSAGE_FONT_COLOR NAVY|MESSAGE_FONT_NAME Tahoma +
|MESSAGE_FONT_SIZE 10|MESSAGE_BOLD ON
```

76 Password Protection for Reports/Labels

The ability to enforce password protection in reports and labels for both design and print capabilities has been increased. The security options are separate from the User Privileges features that may be defined for a database.

Design

The ability to set a design password is available to protect access to a report/label in the designer. Once the design password is set, R:BASE will prompt for a password the next time the report/label is opened in the designer. From the main menu bar, select Report (or Label) | Passwords | Set Design Password

**Print**

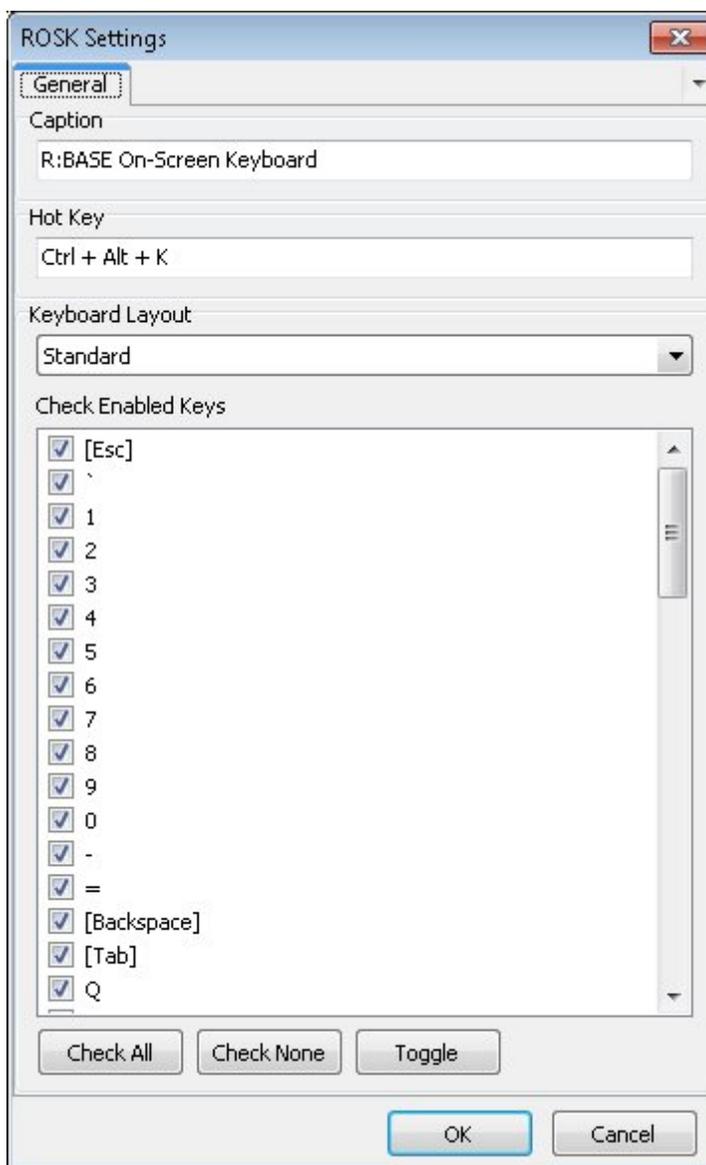
The ability to set a print password is available to protect the display of a report/label. Before the report/label is printed, R:BASE will prompt for a password. From the main menu bar, select Report (or Label) | Passwords | Set Print Password



77 R:BASE On-Screen Keyboard Settings

Additional settings are available to provide a numeric-only keyboard, disable any number of keys, change the caption, and specify a custom hot key to display/hide the keyboard.

Main Menu | Settings | ROSK Settings...



The PROPERTY command support the ability to change the keyboard type.

To display a numeric-only R:BASE On-Screen Keyboard with the PROPERTY command:

```
PROPERTY ROSK SHOW TRUE
PROPERTY ROSK TYPE NUMPAD
```

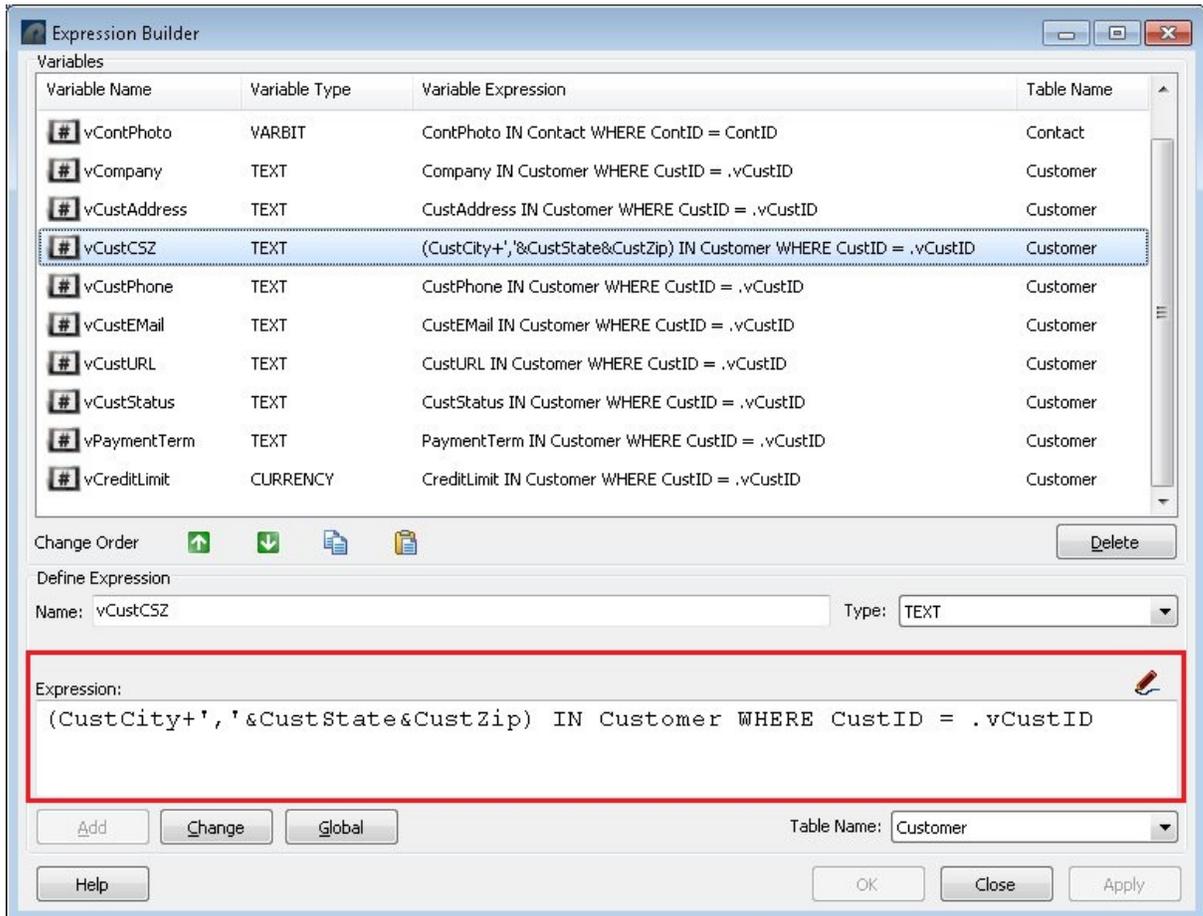
To display the alpha-numeric R:BASE On-Screen Keyboard with the PROPERTY command:

```
PROPERTY ROSK SHOW TRUE
PROPERTY ROSK TYPE ALPHA
```

78 Custom Expression Memo Field Font

A new Expression Builder option is available within the Form/Report/Label Designer to edit the "Expression:" memo field font.

The enhancement is helpful to clearly view all characters like commas, parenthesis, etc.



79 Enhanced Print Form Options

Additional output options are available when printing a form as it is displayed on the screen. R:BASE eXtreme has offered the following for some time:

```
PROPERTY RBASE_FORM PRINT 'PRINTER'
```

The following new syntax option will print the currently displayed form to the current printer using the same screen proportions, but in a size that just fits the printed page.

```
PROPERTY RBASE_FORM PRINT 'FITTOPAGE'
```

With the following, the form is printed to the current printer so that the printed image is approximately the same visible size as on the screen (WYSIWYG).

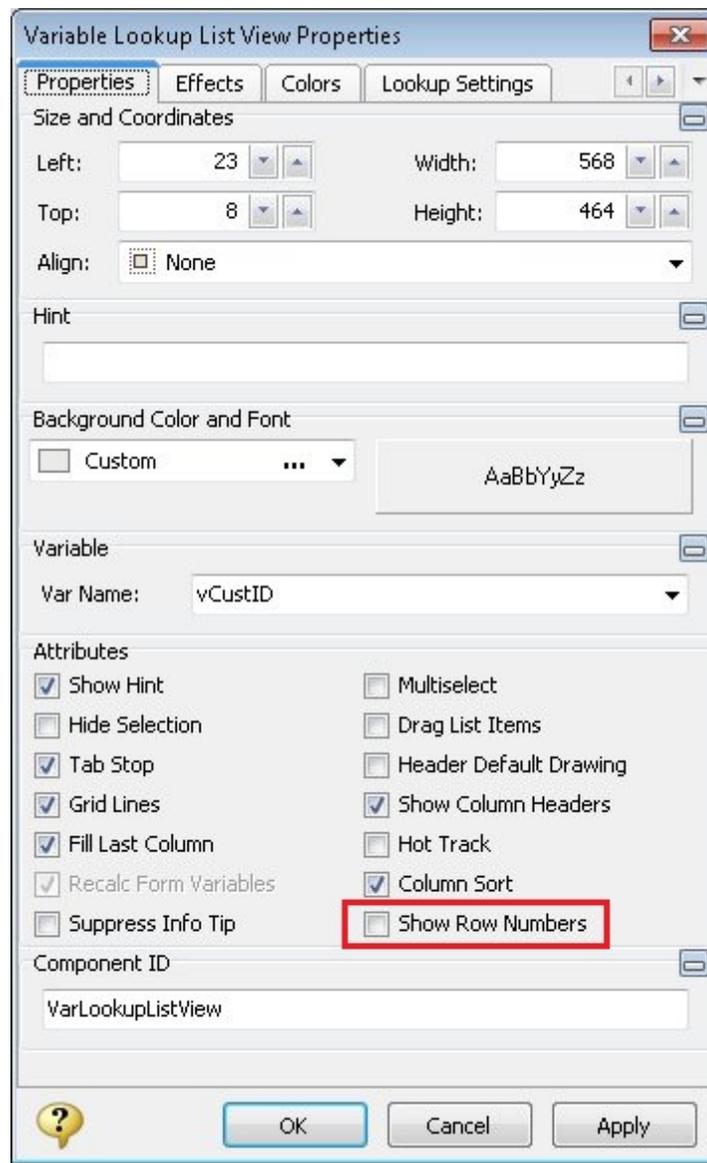
```
PROPERTY RBASE_FORM PRINT 'PROPORTIONAL'
```

The following will print the currently displayed form to the current printer, with no special scaling; therefore, the printed form and how the form appears onscreen may appear squished or stretched.

```
PROPERTY RBASE_FORM PRINT 'FIXEDDPI'
```

80 Show Row Numbers in List Views

Variable Lookup List View and DB Lookup List View controls have been enhanced with the new "Show Row Numbers" attribute.



The setting will add a separate row number column at the far left within the list.

Variable Lookup List View

	Cust ID	Company Name	City	State
1	Barton and Associates	Stony Brook	NY	11794
2	Blue Ridge Technologies, Inc.	Asheville	NC	28801
3	Bytes & Words	Ogden	UT	84403
4	Compdat Computer Consulting	Miami	FL	33128
5	Compumasters Computer Supply	Concord	CA	94521
6	Computer Medical Ctr.	Ft Lauderdale	FL	33309
7	Computer Mountain Inc.,	Denver	CO	80214
8	Computer Warehouse - I	Bloomington	IN	47401
9	Computer Warehouse - II	Boston	CA	02178
10	Data Solutions	Olympia	WA	98504
11	Datacrafters Infosystems	Lynnwood	WA	98037
12	Industrial Computers Inc.	Denver	CO	80214
13	Industrial Concepts Inc.	Livermore	CA	94550
14	Johnson Technologies	Sunnyvale	CA	94089
15	Lanufacturers Discount Computers	Englewood	CO	80112
16	Microcomputer Distribution	Plantation	FL	33317
17	Microtech University - I	Boston	MA	02162
18	Microtech University - II	Appleton	WI	54911
19	Midtown Computer Co.	Chicago	IL	60637
20	MIS by Design	Snoqualmie	WA	99026
21	Modular Software, Inc.	Las Vegas	NV	89104
22	Murrysville Technology Center	Murrysville	PA	15668-18...
23	Nordan Distributors, Inc.	Two Dot	IL	47401
24	Olympic Sales	Newton	MA	02160
25	Open Systems I/O	Laguna Beach	CA	92652
26	PC Consultation And Design	Palm <n	CA	94321

Close

The following PROPERTY command also controls the "Show Row Numbers" attribute:

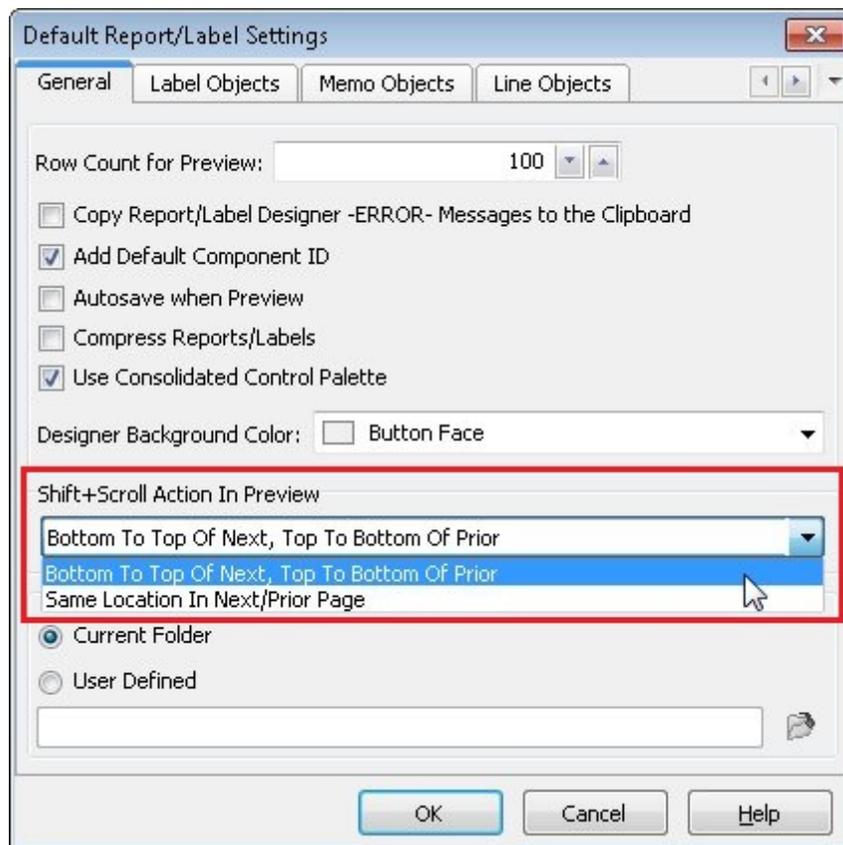
```
PROPERTY CompID ShowRowNumbers 'TRUE'
```

81 Enhanced Print Preview Page Scrolling

The Report/Label Print Preview screen has been enhanced to allow users to move from page to page using the [Shift]+Scroll action.



In the Reports/Labels Settings, users can switch between the options to scroll from the bottom to the top of the next page, or focusing on the same page location when scrolling.



82 Capture Enhanced DB Grid Sorting

New PROPERTY command support for Enhanced DB Grids has been implemented to capture the column name when the header has been clicked upon and to capture the sort order of the displayed records.

The CLICKHEADER parameter used with the PROPERTY command emulates a user clicking on the column.

```
PROPERTY <EnhancedDBGridComponentID> CLICKHEADER 'FIELDNAME'
```

The CLICKHEADER parameter used with the GETPROPERTY command captures the last column header clicked.

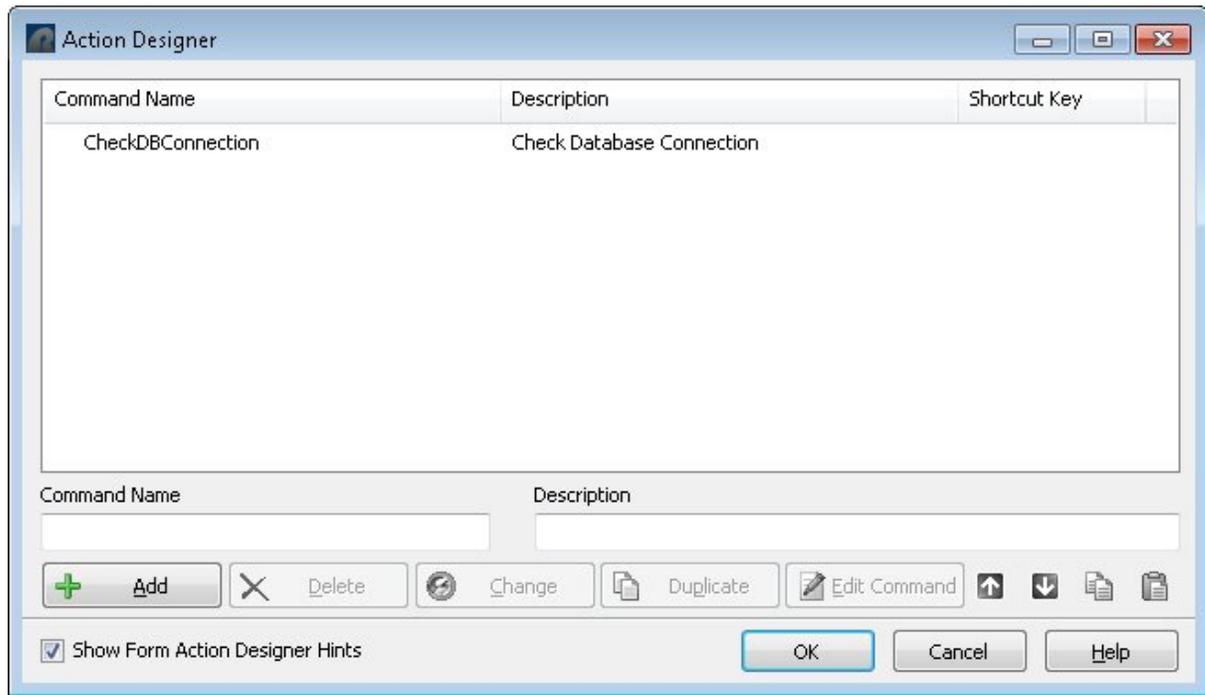
```
GETPROPERTY <EnhancedDBGridComponentID> CLICKHEADER 'varname'
```

The SORTORDER parameter used with the GETPROPERTY command captures the sort order of sorted column. The possible return values are ASC and DESC. If there's no sorted column, property returns DESC.

```
GETPROPERTY GRID1 SORTORDER 'varname'
```

83 Shortcut Key support for Custom Form Actions

Custom Form Actions have been enhanced with keyboard shortcut support, to launch the action when a key or a key combination is pressed.

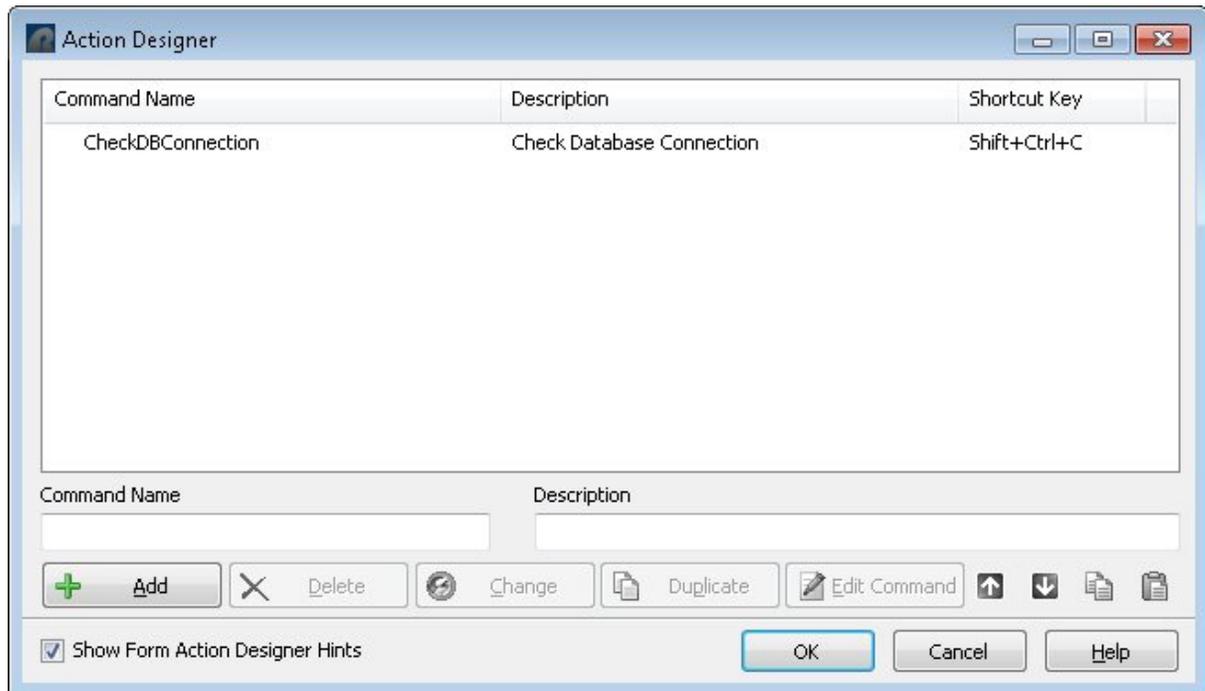


To assign a shortcut, right click on the specific Command Name and select "Shortcut Key" from

the menu.



Within the dialog, press the desired key or key combination that will be used to run the Custom Form Action.



84 Capture Keyboard Events With New Form EEPs

To capture keyboard events, the following EEPs have been introduced within forms and external forms:

- On Key Down EEP
- On Key Press EEP
- On Key Up EEP

On Key Down EEP

The On Key Down EEP will execute when the user presses a key. Within the On Key Down EEP, the GETPROPERTY **LastKeyDown** parameter is accepted to recognize what key is pressed.

Syntax:

```
GETPROPERTY RBASE_FORM LastKeyDown 'vKeyCode'
```

Where:

- The returned integer value for *vKeyCode* is the virtual-key code of the of physical key on the keyboard.

Notes:

- The virtual-key code is not to be confused with the actual keyboard characters.
- The key code value returned by the `LastKeyDown` syntax is only recognized within the On Key Down EEP.
- It is highly recommended to create a catch mechanism within the On Key Down EEP in order to prevent a condition where the EEP will continually fire if a key is held down for a long time period. See the example below where the *IsKeyDown* variable is used.

On Key Press EEP

The On Key Press EEP will execute when the user presses an alphanumeric or character-generating key. Within the On Key Press EEP, the GETPROPERTY **LastKeyPressed** parameter is accepted to recognize what key is pressed.

Syntax:

```
GETPROPERTY RBASE_FORM LastKeyPressed 'vKey'
```

Where:

- The returned text value for *vKey* is the last alphanumeric/printable key that was pressed.

Notes:

- The key value returned by the `LastKeyPressed` syntax is only recognized within the On Key Press EEP.
- The syntax cannot capture key combinations or special keys like function (Fn), arrow, Home, Page Up, etc. However, some special key combinations can be captured such as Ctrl+A, Ctrl+Z, and Ctrl+Enter which result to ASCII character #1 up to character #26. Ctrl+Enter is equal to Ctrl+J.
- It is highly recommended to create a catch mechanism within the On Key Press EEP in order to prevent a condition where the EEP will continually fire if a key is held down for a long time period. See the example below where the *IsKeyDown* variable is used.

On Key Up EEP

The On Key Up EEP will execute when the user releases a key. Within the On Key Up EEP, the GETPROPERTY **LastKeyUp** parameter is accepted to recognize what key is released.

Syntax:

```
GETPROPERTY RBASE_FORM LastKeyUp 'vKeyCode'
```

Where:

- The returned integer value for *vKeyCode* is the virtual-key code of the of physical key on the keyboard.

Notes:

- The virtual-key code is not to be confused with the actual keyboard characters.
- The key code value returned by the `LastKeyUp` syntax is only recognized within the On Key Up EEP.

Capturing Shift, Ctrl, and Alt

The GETPROPERTY command also supports the recognition if the Shift, Ctrl, and Alt keys when pressed.

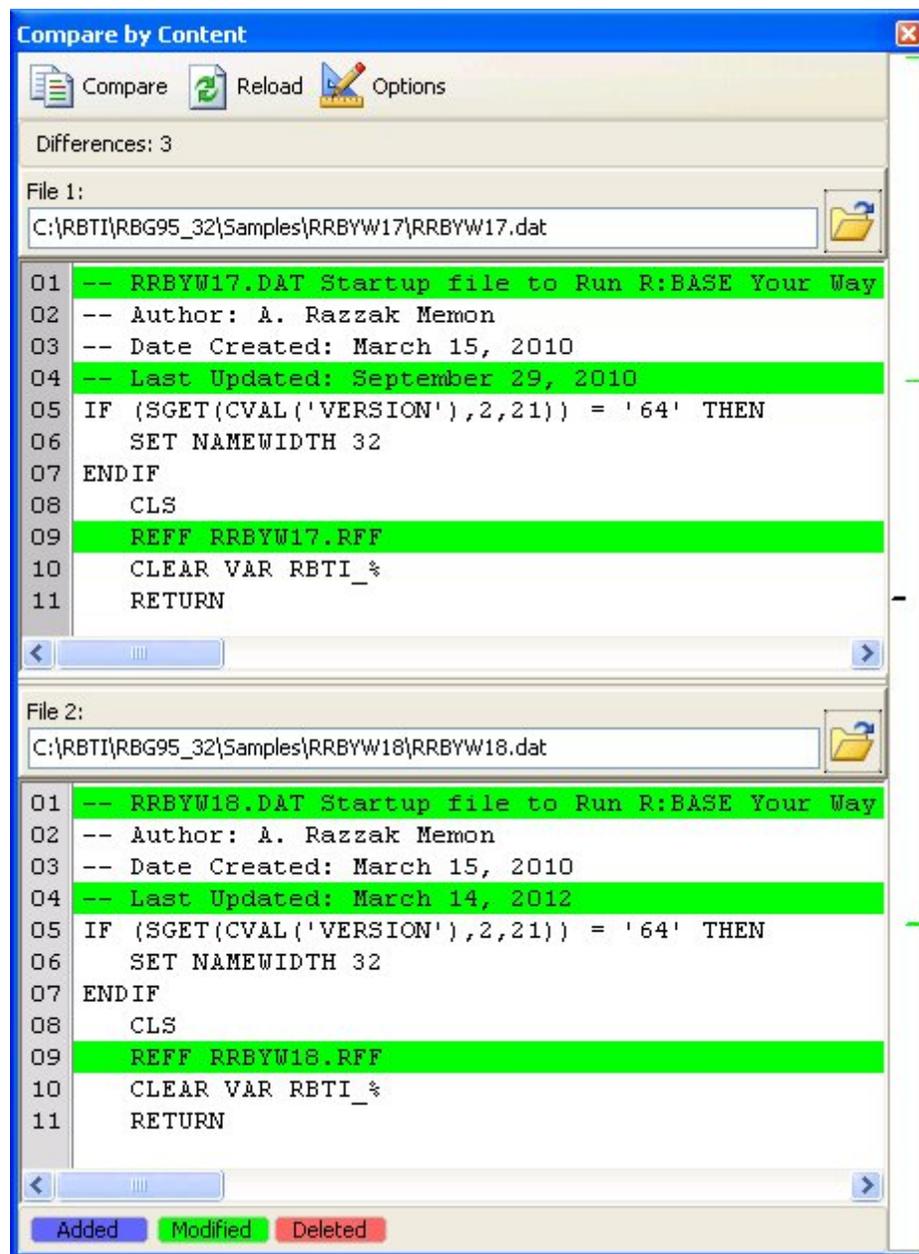
```
GETPROPERTY RBASE_FORM ShiftIsPressed 'vShiftIsPressed'  
GETPROPERTY RBASE_FORM CtrlIsPressed 'vCtrlIsPressed'  
GETPROPERTY RBASE_FORM AltIsPressed 'vAltIsPressed'
```

The returned integer value for vShiftIsPressed, vCtrlIsPressed, and vAltIsPressed and is 1, if the appropriate key is pressed. The returned value of 1 by the syntax is recognized within the "On Key Down", "On Key Press", and "On Key Up" EEPs.

85 Enhanced Compare by Content Utility

The Compare by Content Toolbar within the R:BASE Editor is used to compare two files and to review the command line changes within the files. The following enhancements were added for the utility:

- Added "Reload" button, to easily refresh the files displayed after changes to the command files were made
- Within the "Options" menu, a setting is available to split the file comparison vertically or horizontally
- With each new instance of R:BASE, the "Open file" dialog will remember the extension selected in the past
- When performing a comparison on two identical files, a pop-up message will appear stating: "The selected files are identical"
- When performing a comparison after loading the same file, a pop-up message will appear stating: "The same file is opened in both panels"



86 SATTACH With Limited Columns

The SATTACH command has been enhanced with a new **ONLY** keyword to limit the columns attached from an SQL data source. When adding the ONLY after the word USING, only the columns listed will be "sattached". The syntax is supported with temporary SATTACH tables and with column alias names.

Syntax:

```
SATTACH [ TEMPORARY ] tblname [ AS tablealias ] [ USING [ ONLY | ALL ] collist ] [ ALIAS aliaslist ]
```

Example:

```
SATTACH SongList USING ONLY Song_ID, SongTitle
```

87 Default Printer Selection in Print Preview

The PRINT and LBLPRINT commands have been enhanced so a printer name can be specified even if the target is SCREEN. If a printer name is provided, that printer becomes the default selection in the printers drop-down of the print dialog.

```
--Print dialog, initial printer is OS default printer
PRINT ColumnarReport OPTION SCREEN
```

```
--Print dialog, initial printer is Samsung SCX-3400 Series
PRINT ColumnarReport OPTION SCREEN|PRINTER_NAME 'Samsung SCX-3400
Series'
```

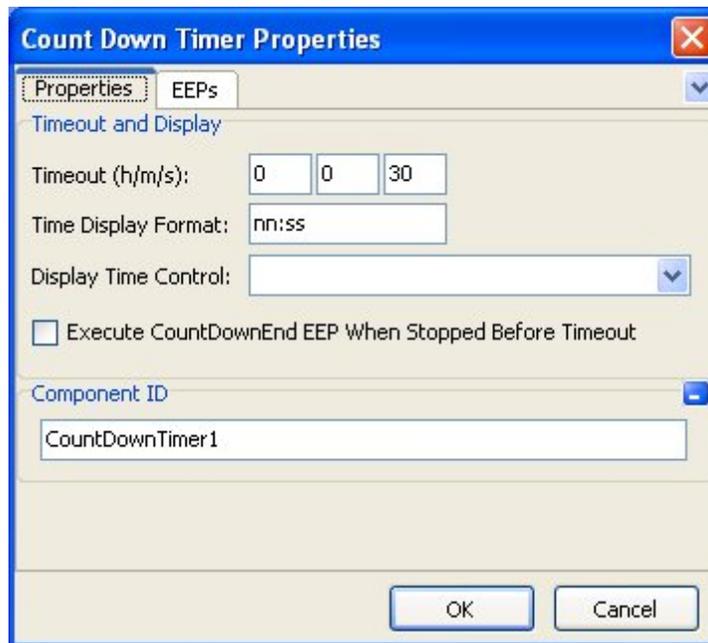
```
--Print dialog, initial printer is HP LaserJet 1018
LBLPRINT CustShpLabl OPTION SCREEN|PRINTER_NAME 'HP LaserJet 1018'
```

88 New Count Down Timer Control

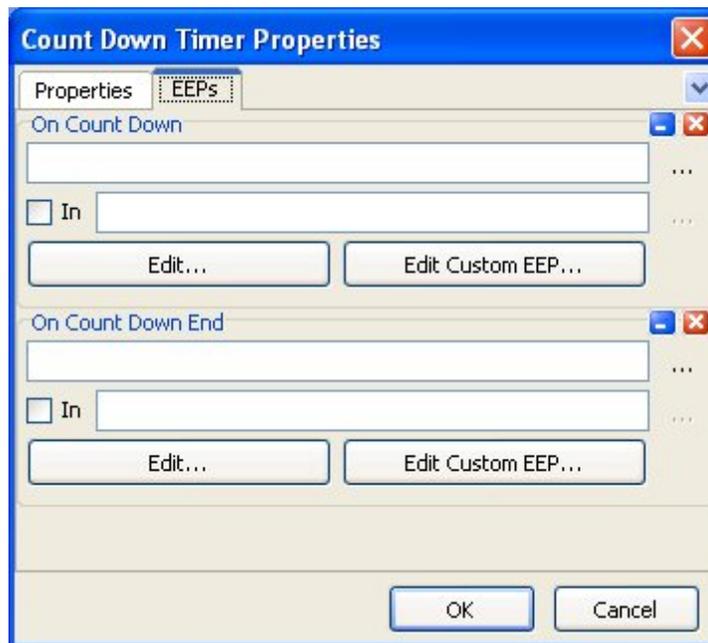
A new Count Down Timer control has been implemented for forms. The functionality places a non-visual object that performs a count down process.

The object is only visible at design-time and works by attaching to an existing control. Examples of controls to assign the timer to include Static Text, Panel, Enhanced Panel, LED Text Label, Digital Clock, Meter, or any control that has "Text" or "Caption" properties.

Settings are available to specify the timer start time, display format, and the control that will display the time counter.



EEPs are available to run for each second the timer decrements and for when the count down ends.



PROPERTY command parameters are available to start and stop the timer.

```
PROPERTY CountDownTimer1 STARTTIMER 'TRUE'
```

```
PROPERTY CountDownTimer1 STOPTIMER 'TRUE'
```

89 Additional Form RBTI System Variables

Three new form-based RBTI System Variables have been created for internal and external forms:

RBTI_FORM_CLICKED - if a control is CLICKED this variable is set to the clicked control's Component ID property (if property exists). The value can then be used by the PROPERTY/GETPROPERTY commands to manipulate the control.

RBTI_FORM_DBLCLKED - if a control is DOUBLE CLICKED this variable is set to the double clicked control's Component ID property (if property exists). The value can then be used by the PROPERTY/GETPROPERTY commands to manipulate the control.

RBTI_FORM_CTRLTEXT - if a control is CLICKED this variable is set to the clicked control's "Caption" or "Text" property. Display-only controls like a Label and Panel use the "Caption" property to hold text. For entry controls like DB/Variable Edit or Combo Boxes, the property to hold text is "Text". When setting the value of RBTI_FORM_CTRLTEXT, the control is first checked if it has the "Caption" property. If "Caption" was not found "Text" is used. If both "Caption" and "Text" were not found, the variable is set to null.

90 New Advanced Variable Rich Edit Control

The Advanced Variable Rich Edit control has been added to forms. The Advanced Variable Rich Edit offers many additional attributes over the existing Variable Rich Edit control.

Disabled Double Click

Restricts display of the R:BASE BLOB Editor when the user double clicks on the field

Want Shift+Returns

When checked, the [SHIFT]+[ENTER] keys will start a new paragraph or start a new line inside the paragraph

Hide Read Only Caret

When checked the editor hides the caret in "read only" mode

No Image Resize

When checked, resizing of images with the mouse is prevented

Allow Selection

If enabled (default), user can select contents using the mouse or keyboard

Single Click

If enabled, a double click is generated with a single mouse click

Client Text Width

If enabled, text always wraps to fit client width

Show Checkpoints

If enabled, all checkpoints are shown

Show Page Breaks

If enabled (default), page breaks are shown as horizontal lines

Show Special Characters

If enabled, non-printing characters are displayed with special marks: spaces, non breaking spaces, paragraph breaks, line breaks, tabs, soft hyphens in Unicode text.

Double Click Selects Word

If enabled (default), double click on a word selects it (and double click on non-text item selects the item)

Right Clicking Deselects

If enabled (default), right click outside the selected area deselects

Disable Drag

If enabled, dragging from the control is not allowed

Show Item Hints

If enabled, hints for the items can be displayed. Show Hint must also be enabled.

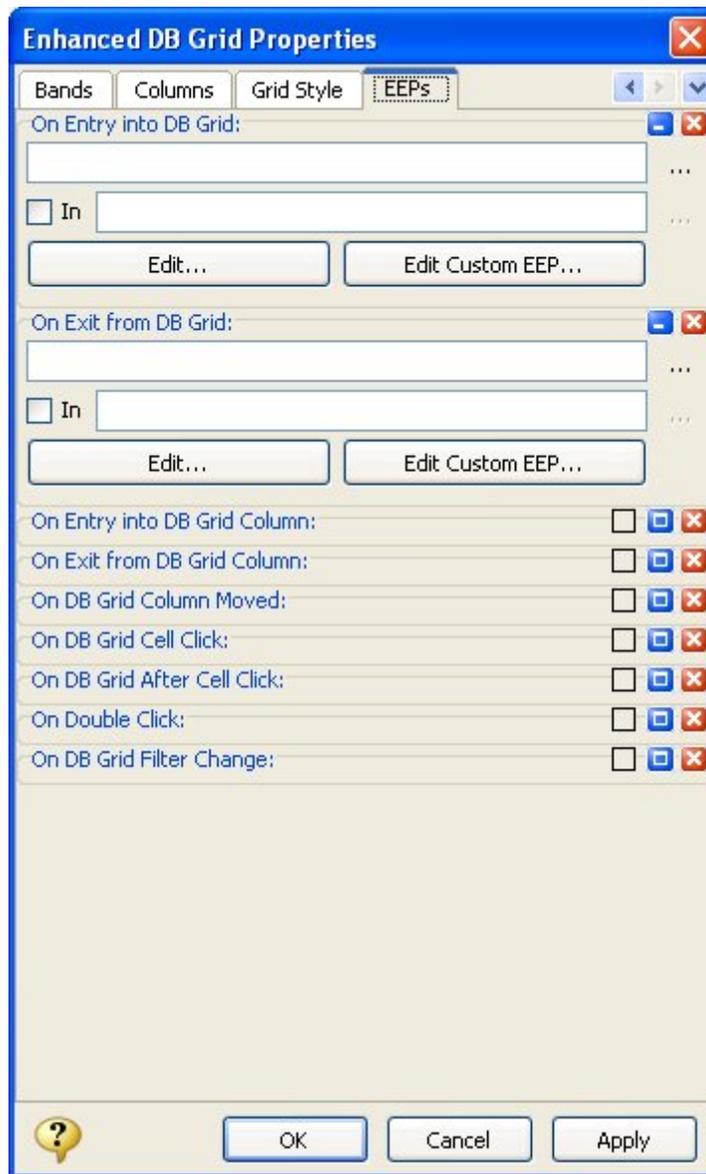
Fast Formatting

Increases performance, but at the cost of some resources

Tip! - A Variable Rich Edit control can be automatically converted to an Advanced Variable Rich Edit control. Within the Form Designer, right click on the Variable Rich Edit and select the "Convert to Advanced Variable Rich Edit" option.

91 New Filter Features for Enhanced DB Grids

The Enhanced DB Grid has been updated with an additional "On DB Grid Filter Change" EEP, to run when the filter is changed.



Also, a new PROPERTY command parameter is now supported to change the filter type for an Enhanced DB Grid.

```
PROPERTY <component_id> FILTERTYPE 'Value'
```

Examples:

```
PROPERTY EDBGrid_Customers FILTERTYPE 'EQUAL'
PROPERTY EDBGrid_Customers FILTERTYPE 'LIKE'
PROPERTY EDBGrid_Customers FILTERTYPE 'CONTAINS'
```

92 Preselected Values Within CHOOSE

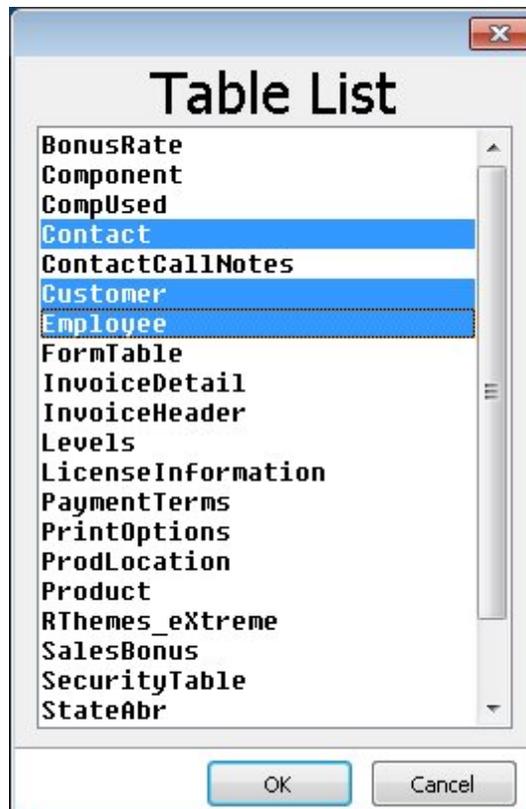
The CHOOSE command includes two new OPTION parameters to preselect a choices in the displayed list.

- **INITPOS** specifies the preselected initial position(s) for the items in the list. The first value in the list is assigned zero, and increments for the number of values in the list.
- **INITVAL** specifies the preselected initial value(s) for the items in the list.

INITPOS will be processed first, then INITVAL. If multiple selection is allowed both will be applied. Otherwise, it is possible that the initial selection specified in INITPOS will be overwritten by value in INITVAL.

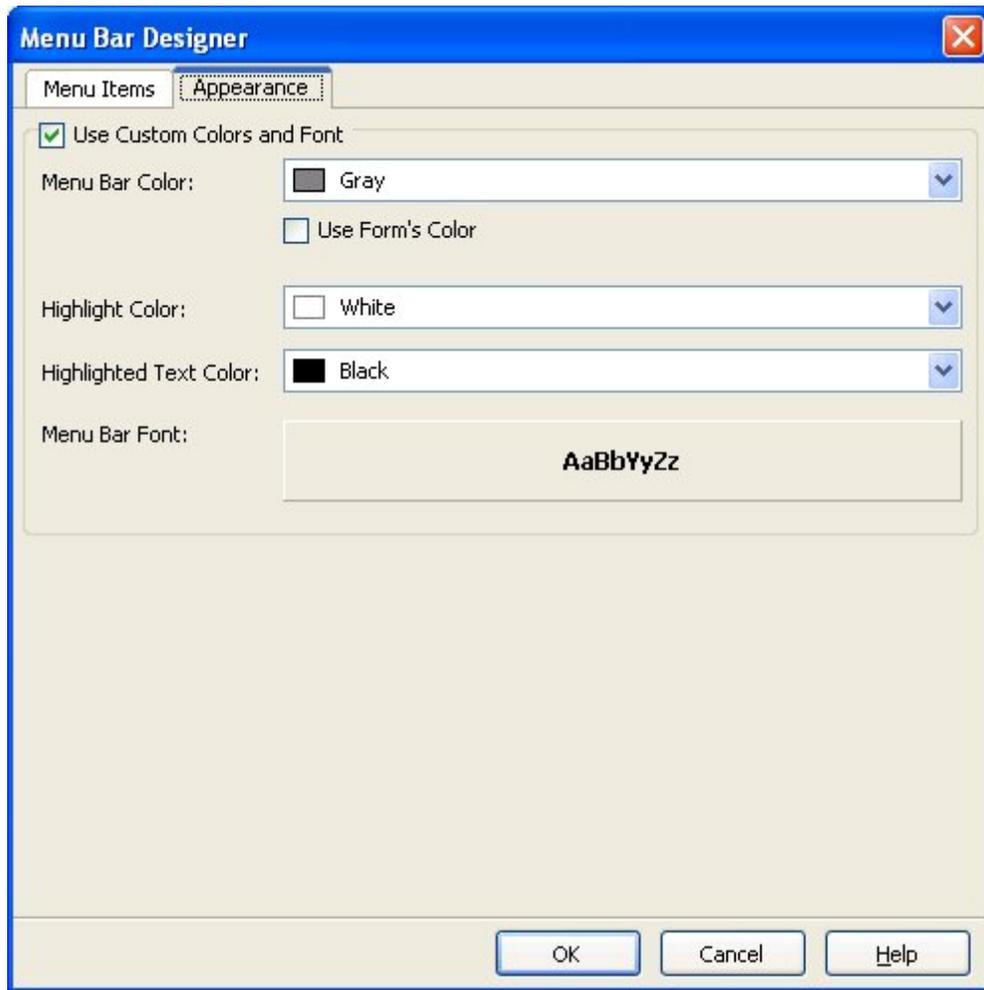
Example:

```
CHOOSE vChoose FROM #TABLES CHKBOX 3 +
TITLE 'Table List' LINES 20 FORMATTED +
OPTION TITLE_FONT_SIZE 22 +
|TITLE_FONT_NAME TAHOMA +
|INITVAL CONTACT,CUSTOMER,EMPLOYEE
```



93 Custom Menu Bar Colors

The form Menu Bar Designer has been enhanced with an "Appearance" tab to customize the menu bar item fonts and colors.



The following PROPERTY command parameters are available for customizing the form menu bar:

- USE_CUSTOM_MENUBAR - ON/OFF
- MENUBAR_USE_FORM_COLOR - ON/OFF
- MENUBAR_HIGHLIGHT_COLOR- Color Value
- MENUBAR_HIGHLIGHT_TEXT_COLOR- Color Value
- MENUBAR_FONT_NAME- Font Value
- MENUBAR_FONT_SIZE- Integer Value
- MENUBAR_FONT_COLOR- Color Value
- MENUBAR_BACK_COLOR- Color Value
- MENUBAR_FONT_BOLD - ON/OFF
- MENUBAR_FONT_ITALIC - ON/OFF
- MENUBAR_FONT_UNDERLINE - ON/OFF
- MENUBAR_FONT_STRIKEOUT - ON/OFF

Example 01:

```
PROPERTY RBASE_FORM USE_CUSTOM_MENUBAR ON/OFF
PROPERTY RBASE_FORM MENUBAR_USE_FORM_COLOR 'ON'
```

Example 02:

```
PROPERTY RBASE_FORM USE_CUSTOM_MENUBAR 'ON'
PROPERTY RBASE_FORM MENUBAR_HIGHLIGHT_COLOR 'RED'
PROPERTY RBASE_FORM MENUBAR_HIGHLIGHT_TEXT_COLOR 'GRAY'
PROPERTY RBASE_FORM MENUBAR_FONT_NAME Tahoma
PROPERTY RBASE_FORM MENUBAR_FONT_SIZE 8
PROPERTY RBASE_FORM MENUBAR_FONT_COLOR 'BLACK'
PROPERTY RBASE_FORM MENUBAR_BACK_COLOR 'WHITE'
PROPERTY RBASE_FORM MENUBAR_FONT_BOLD 'ON'
PROPERTY RBASE_FORM MENUBAR_FONT_ITALIC 'OFF'
PROPERTY RBASE_FORM MENUBAR_FONT_UNDERLINE 'OFF'
PROPERTY RBASE_FORM MENUBAR_FONT_STRIKEOUT 'OFF'
```

94 New CHECKPROP Setting

PROPERTY and GETPROPERTY command errors can now be displayed if a "property" value is invalid. The enhancement applies to both forms and reports. The errors are only displayed if a new operating condition CHECKPROP is set ON. The default value is set to OFF.

```
SET CHECKPROP ON/OFF
```



95 Check Box Support in List View Controls

Check boxes are now supported in DB Lookup List View, Variable Lookup List View, and List View controls. The new "Show Check Boxes" attribute is available within the properties. When displayed, the check box will always appear within the first column.

Within EEPs, users can get/set the check status of an item using

```
PROPERTY CompID 'ITEMS[1]->CHECKED' 'TRUE'
GETPROPERTY CompID 'ITEMS[1]->CHECKED' 'VarName'
```

The following specifies if a check box column is displayed at the far left of the list

```
PROPERTY CompID 'CHECKBOXES' 'TRUE'
```

The following returns a string of comma-separated "key field" values for checked items

```
GETPROPERTY CompID 'CHECKEDROWS' 'VarName'
```

The following returns the number of checked items

```
GETPROPERTY CompID 'CHECKEDROWCOUNT' 'VarName'
```

Example:

```
SET VAR vItem TEXT = NULL
GETPROPERTY ListView_Customers 'ItemIndex' 'vItem'
SET VAR vItemProp TEXT = ('ITEMS[' + .vItem + ']->CHECKED')
GETPROPERTY ListView_Customers .vItemProp 'vItemsChecked'
GETPROPERTY ListView_Customers 'ITEMS->COUNT' 'vItemsCount'
RECALC VARIABLES
RETURN
```

Understanding Variable Lookup ListView with Row Numbers and Check Boxes

	Cust ID	Company Name	City	State	Zip Code
<input checked="" type="checkbox"/>	1	124	Barton and Associates	Stony Brook	NY 11794
<input type="checkbox"/>	2	129	Blue Ridge Technologies, Inc.	Asheville	NC 28801
<input checked="" type="checkbox"/>	3	121	Bytes & Words	Ogden	UT 84403
<input type="checkbox"/>	4	109	Compdat Computer Consulting	Miami	FL 33128
<input type="checkbox"/>	5	116	Compumasters Computer Supply	Concord	CA 94521
<input checked="" type="checkbox"/>	6	112	Computer Medical Ctr.	Ft Lauderdale	FL 33309
<input checked="" type="checkbox"/>	7	103	Computer Mountain Inc.,	Denver	CO 80214
<input type="checkbox"/>	8	106	Computer Warehouse - I	Bloomington	IN 47401
<input checked="" type="checkbox"/>	9	100	Computer Warehouse - II	Boston	CA 02178
<input type="checkbox"/>	10	117	Data Solutions	Olympia	WA 98504
<input checked="" type="checkbox"/>	11	115	Datacrafters Infosystems	Lynnwood	WA 98037
<input type="checkbox"/>	12	102	Industrial Computers Inc.	Denver	CO 80214
<input type="checkbox"/>	13	104	Industrial Concepts Inc.	Livermore	CA 94550
<input type="checkbox"/>	14	126	Johnson Technologies	Sunnyvale	CA 94089
<input checked="" type="checkbox"/>	15	120	Lanufacturers Discount Computers	Englewood	CO 80112
<input type="checkbox"/>	16	122	Microcomputer Distribution	Plantation	FL 33317
<input checked="" type="checkbox"/>	17	101	Microtech University - I	Boston	MA 02162
<input type="checkbox"/>	18	111	Microtech University - II	Appleton	WI 54911
<input type="checkbox"/>	19	107	Midtown Computer Co.	Chicago	IL 60637
<input checked="" type="checkbox"/>	20	125	MIS by Design	Snoqualmie	WA 99026
<input type="checkbox"/>	21	119	Modular Software, Inc.	Las Vegas	NV 89104
<input type="checkbox"/>	22	130	Murrysville Technology Center	Murrysville	PA 15668-1854
<input type="checkbox"/>	23	108	Nordan Distributors, Inc.	Two Dot	IL 47401
<input checked="" type="checkbox"/>	24	114	Olympic Sales	Newton	MA 02160
<input type="checkbox"/>	25	118	Open Systems I/O	Laguna Beach	CA 92652
<input type="checkbox"/>	26	105	PC Consultation And Design	Palo Alto	CA 94321
<input checked="" type="checkbox"/>	27	127	RAM Data Systems, Inc.	Murrysville	PA 15668-1854
<input type="checkbox"/>	28	128	Renaissance Computer Company	Asheville	NC 28801
<input type="checkbox"/>	29	110	Softech Database Design	Mercer Island	WA 98040
<input checked="" type="checkbox"/>	30	113	State University	Bedford	MA 01730
<input type="checkbox"/>	31	123	The Data Shop	Austin	TX 78701

Selected Items Using Multi-Select Option Total Count

121,112,100,125,114,127,113	7	Done
-----------------------------	---	------

Selected Items Using CheckBox Option Total Count

124,103,115,120,101	5	Done
---------------------	---	------

Selected Items Using Check Boxes (GETPROPERTY LV_Customers 'ITEMS[0]->CHECKED' 'vItemsChecked') TRUE

Items Count (GETPROPERTY LV_Customers ITEMCOUNT 'vItemsCount' 31

96 New NOCALC Setting

A new setting, NOCALC, has been implemented to suppresses or processes computed column expressions with the UNLOAD and LOAD commands.

If NOCALC is set to ON, then the UNLOAD command, as it creates LOAD statements, will generate new "load only" commands as it starts each table. These "load only" commands would be CALC and NOCALC, which operate in a fashion similar to CHECK/NOCHECK and FILL/NOFILL and NUM/NONUM commands. The UNLOAD command will output the current values for the computed columns as it unloads the data.

NOCALC allow users to preserve original computed values when using UNLOAD/LOAD to move data, or when rebuilding a database with UNLOAD ALL.

```
SET NOCALC ON/OFF
```

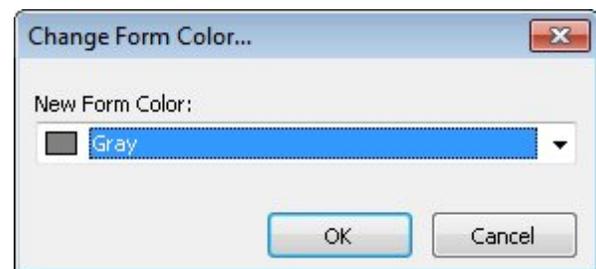
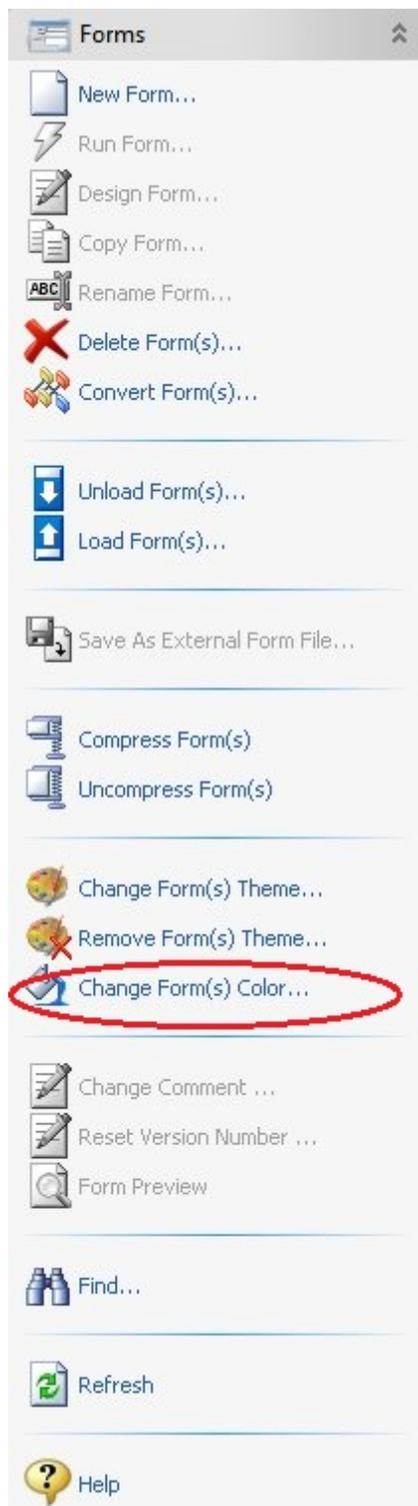
In processing a LOAD command for a table, if it encounters a NOCALC command, then regardless of the current setting for NOCALC, the LOAD command will expect values for every column, whether computed or not. The values from the input would then be stored in those columns that are computed, rather than doing the actual computation.

Other methods for adding rows to a table, such as APPEND , the Data Browser, or a form, would all still calculate each computed column. Only the LOAD command with its special CALC/NOCALC commands could input a value into a computed column without doing the computation.

R:BASE stores the NOCALC setting with the database.

97 Set Background Color for Multiple Forms

A new option has been implemented to change the background color for multiple forms at once, similar to changing themes for multiple forms. The option is available within the Forms section of the Group Bar and also within the right click pop-up menu.



98 R:BASE Optimizations

1. Optimized form load process. In previous releases the entire form is always instantiated to detect/execute On Before Start EEP and On Before Design code. In the updated release the form is no longer instantiated resulting to faster load times -- both design-time and run-time.
2. Removed unused columns when fetching forms and reports metadata. Unnecessary memory allocations were also removed.
3. Improved detection of compressed database objects (forms, reports, labels). Duplicate loading of resources were cleaned up.
4. Improved detection of active form. Previous code relied on exception handling. Updated method properly sets the internal form reference to NULL when form is destroyed.
5. Objects that are created on startup but are used at a later time, or no used at all, were created on-demand resulting to faster application startup.
6. Removed unnecessary validations in handling variables and database object. This also resulted to significant reduction in number of function calls between frontend and the database engine to accomplish the same task.
7. Removed duplicate processing of grid footers when form datasets are navigated.
8. The process that is only applicable when form has scroll bars is executed every time the mouse wheel is scrolled even if form has no scroll-bars. This was corrected. This resulted to faster scrolling of form contents.
9. Single character search in strings was replaced with faster code. This resulted to faster text parsing.
10. Reworked embedded plugin detection in compiled applications. Also removed duplicate loading of embedded resources. Startup times should see significant improvement in loading time.
11. Removed unnecessary variable recalculation on report data traversal.
12. Report to PDF: Reworked the text encoding function to minimize memory allocation/deallocation.
13. Report to PDF: Replaced font/typeface checking whether it is a symbol or not. Replaced with a lookup method instead of checking with the OS every time.

99 Reset Property for List View Controls

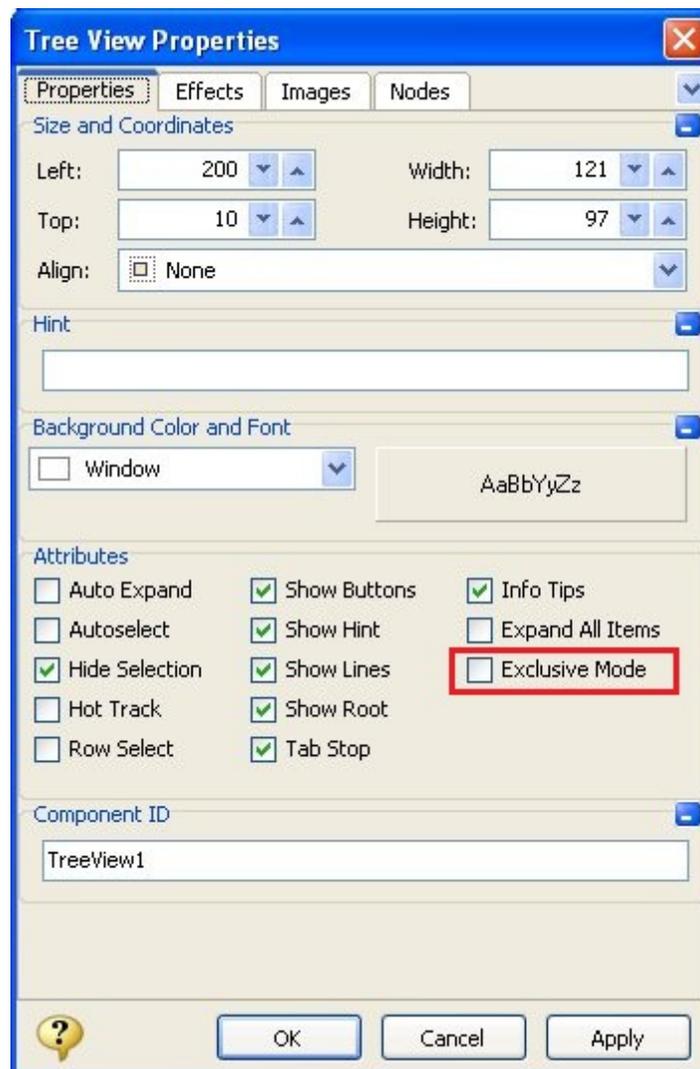
A new RESET property has been implemented for List View controls. The following command clears the current sort settings and refreshes the list view.

```
PROPERTY ListViewCompID RESET 'TRUE'
```

100 Exclusive Mode in Tree Views

A new EXCLUSIVEMODE property is supported for the Tree View controls to only open one node at time. The setting is available when the "Auto Expand" property is also set to false.

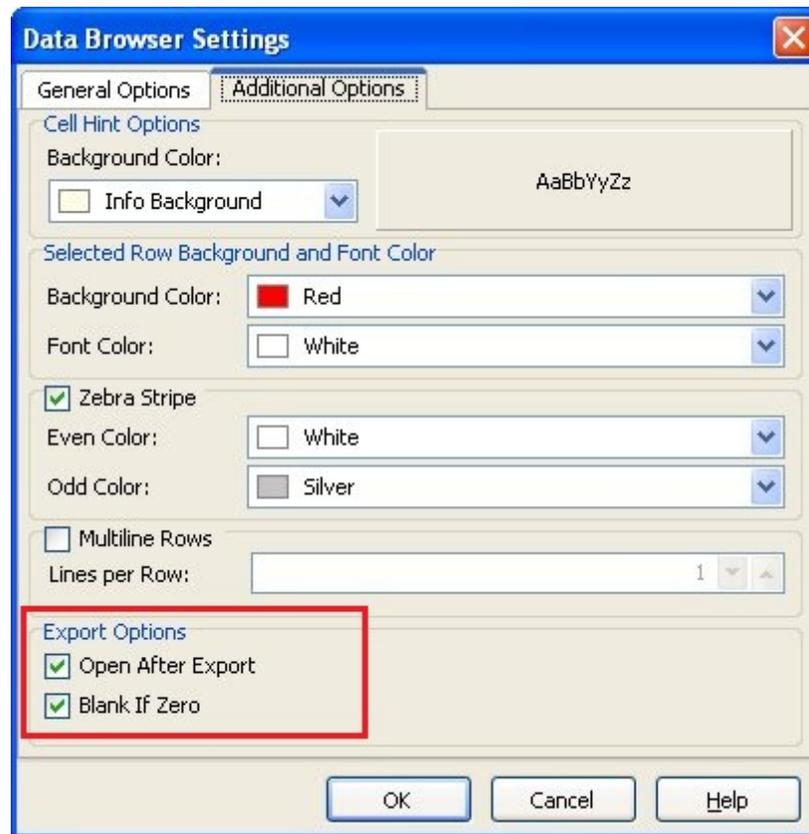
```
PROPERTY TreeViewCompID EXCLUSIVEMODE 'TRUE'
```



101 Data Browser Export Options

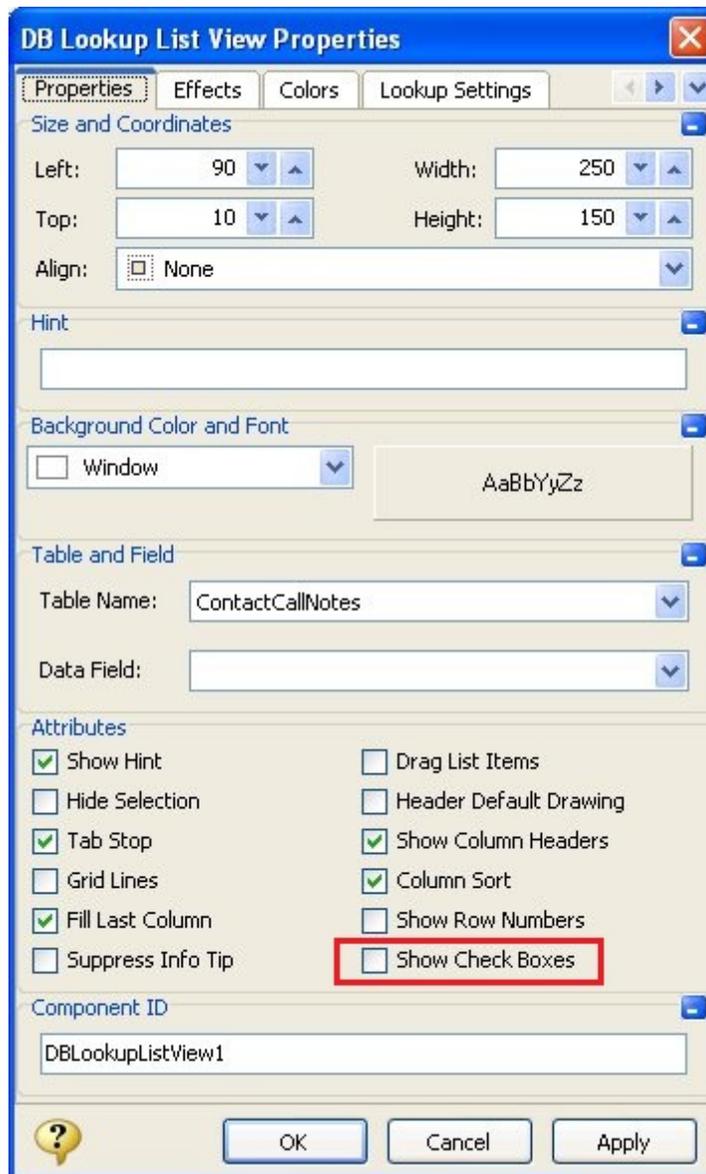
The Data Browser settings have been enhanced with the additional Export Options:

- **Open After Export** - launches the file created based on the current file associated program, when the export is complete
- **Blank If Zero** - exports all zero values as blank fields



102 Check Box Support in List Box Controls

Check boxes are now supported in all List Box controls. PROPERTY/GETPROPERTY parameters are available to manipulate and capture check box data. The new "Show Check Boxes" attribute is available within the properties. When displayed, the check box will always appear within the first column.



Within EEPs, users can get/set the check status of an item. When using the GETPROPERTY command for multi-select list boxes, this is the topmost item.

```
PROPERTY CompID 'ITEMS[1]->CHECKED' 'TRUE'
GETPROPERTY CompID 'ITEMS[1]->CHECKED' 'VarName'
```

The following specifies if a check box column is displayed at the far left of the list

```
PROPERTY CompID 'CHECKBOX' 'TRUE'
```

The following returns a string of comma-separated "key field" values for checked items

```
GETPROPERTY CompID 'CHECKEDITEMS' 'VarName'
```

The following returns the number of checked items

```
GETPROPERTY CompID 'CHECKEDITEMCOUNT' 'VarName'
```

Example:

```
SET VAR vItem TEXT = NULL
GETPROPERTY ListBox_Customers 'ItemIndex' 'vItem'
SET VAR vItemProp TEXT = ('ITEMS[' + .vItem + ']->CHECKED')
GETPROPERTY ListBox_Customers .vItemProp 'vItemsChecked'
GETPROPERTY ListBox_Customers 'ITEMS->COUNT' 'vItemsCount'
RECALC VARIABLES
RETURN
```

103 Relational Operators in Enhanced DB Grid Background Color Mapping

The Background Color Mapping feature within Enhanced DB Grids now supports all data types (rather than just TEXT), as well as relational operators, making custom color highlighting in grids a much more powerful feature.

Within the "Text Value/Expression" field of the Colors dialog, several formats are available to specify relational operators with variables:

- =(...)
- <(...)
- >(...)
- <>(...)
- >=(...)
- <=(...)

The value(s) inside the parenthesis can be a variable in ".vCompName" format or a combination of variable and literals, for example: ".vCompName Corporation".

Notes:

- It is important to avoid placing a leading or trailing space within the Text Value/Expression field.
- It is possible that rules will overlap. It is important to note that rules are evaluated from top to bottom within the list of color mappings. The first rule to be satisfied is implemented.

Examples:

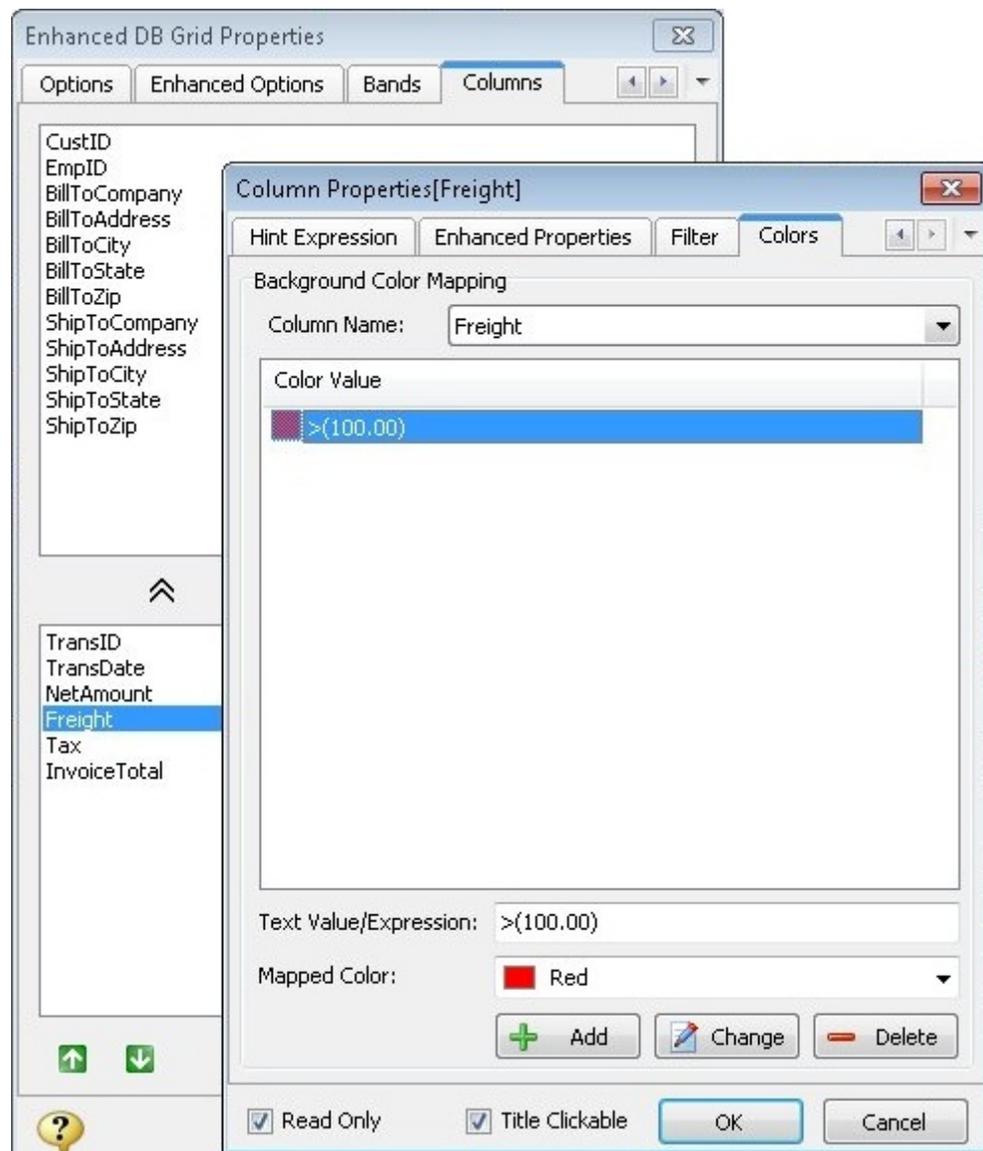
Example 1: Highlight all negative values: <(0)

Example 2: Highlight dates that are later than today: >(.#DATE)

Example 3: Highlight all dollar amount greater than \$100: >(\$100.00)

Example 4: Highlight all values that match a defined variable: =(VarName)

Example 5: Highlight all values that match a defined variable and text: =(vCompName Corporation)



104 Expand Nodes in LoadDirectoryName Plugin

Two additional options are supported for the LoadDirectoryName Plugin, for expanding the initial node and for expanding nodes with a single click.

- EXPAND_INITIAL_FOLDER - Determines if; the initial folder node is expanded (ON), the initial folder and the sub-folders are expanded (CASCADE), the initial folder is not expanded (OFF, default).
- AUTO_EXPAND - Determines if single click will expand/close a node when clicked. Otherwise double click is used. This option is for clicking on nodes, not the tree structure.

Example:

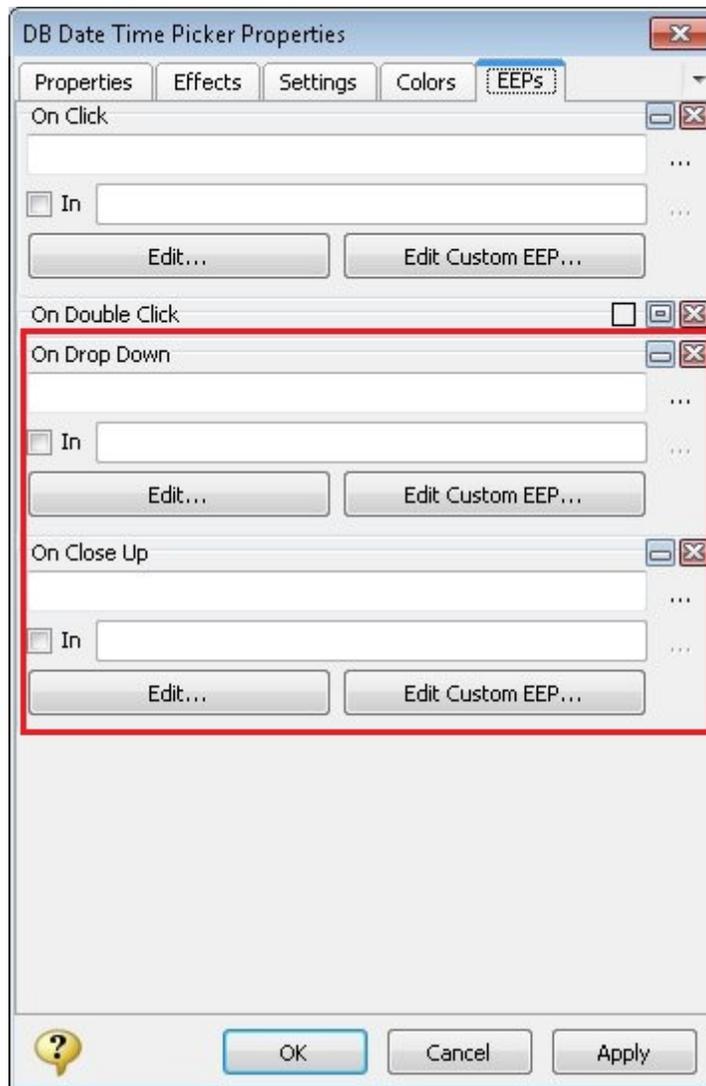
```
PLUGIN LoadDirectoryName vDirName+
|PATH_NAME C:\RBTI\ +
```

```
|SHOW_BUTTONS ON+  
|CREATE_FOLDER_ICON OFF+  
|DELETE_FOLDER_ICON OFF+  
|WIDTH 500+  
|HEIGHT 400+  
|READ_ONLY ON+  
|INCLUDE_NON_FOLDERS OFF+  
|SHOW_HIDDEN OFF+  
|OK_BUTTON_CAPTION 'Load Folder'+  
|EXPAND_INITIAL_FOLDER CASCADE+  
|AUTO_EXPAND ON
```

105 New Date/Time Picker EEPs

Two new EEPs have been added to the DB and Variable Date/Time Picker controls, which execute when the drop-down calendar is displayed or hidden, allowing for improved date/time verification.

- On Drop Down EEP - triggered when the drop-down calendar is displayed
- On Close Up EEP - triggered when the drop-down calendar is hidden



106 Find and Expand Tree View Nodes

New Tree View control properties are available to expand nodes and to find a node based upon the node path. The properties are specifically used with the PROPERTY command.

- EXPAND - controls whether a node is expanded or collapsed; valid options are ON/CASCADE/OFF
- FINDPATHNODE - places focus and selects a node using the full path

The EXPAND property works as if the user manually expanded/collapsed the node.

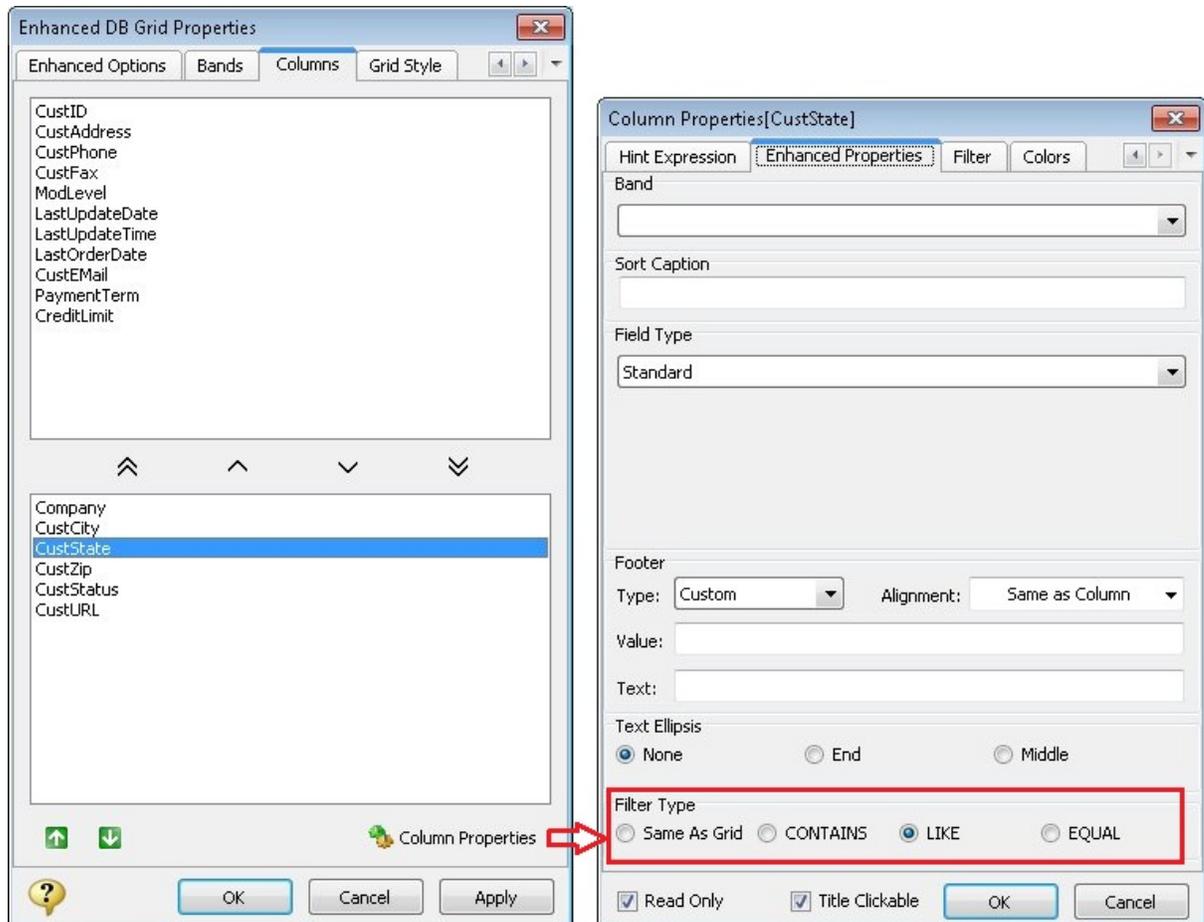
Example:

```
PROPERTY TreeView1 FINDPATHNODE 'Orders\Region 6\Estimates'
PROPERTY TreeView1 EXPAND 'ON'
PROPERTY TreeView1 SET_FOCUS 'TRUE'
```

107 Column-Level Filter Types for Enhanced DB Grids

Enhanced DB Grids now support column-level filter types, allowing different filter types to be applied to different columns. Available filter include:

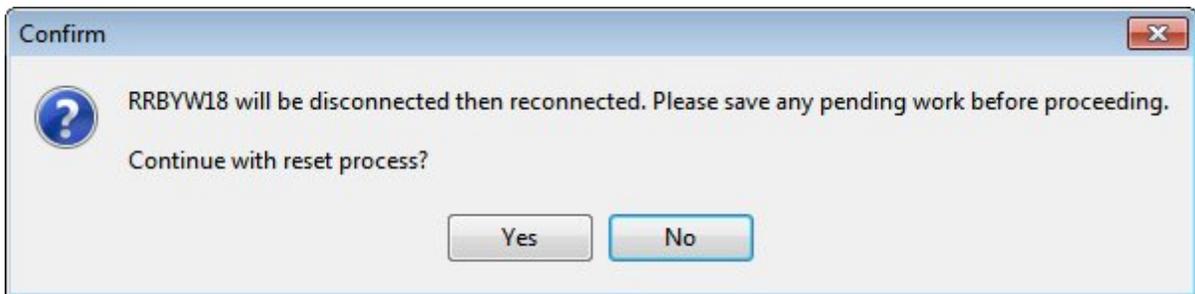
- Same As Grid (default)
- CONTAINS
- LIKE
- EQUAL



108 Added "Reset User Count" Option

A new "Reset User Count" option has been added to R:BASE to reset the database connection user count, only if there are no other valid connections to the database. If valid connections exist, the count will not reset.

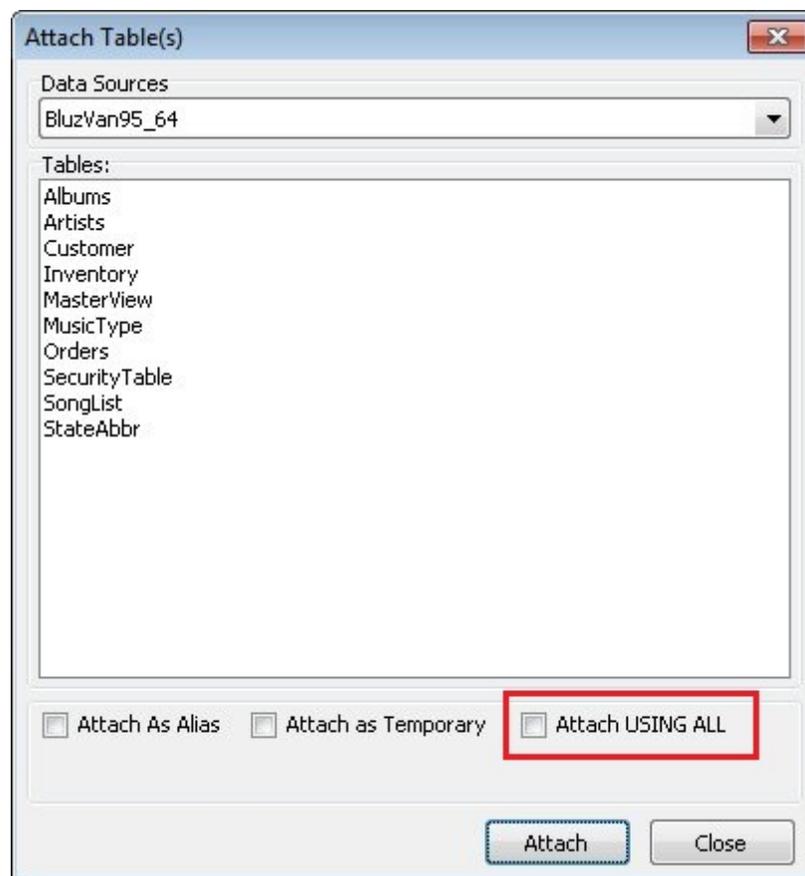
The menu option is available by selecting "Tools" > "Database Connections" > "Reset User Count" from the main menu bar. A confirmation dialog will be displayed.



109 Enhanced ODBC Table Attaching

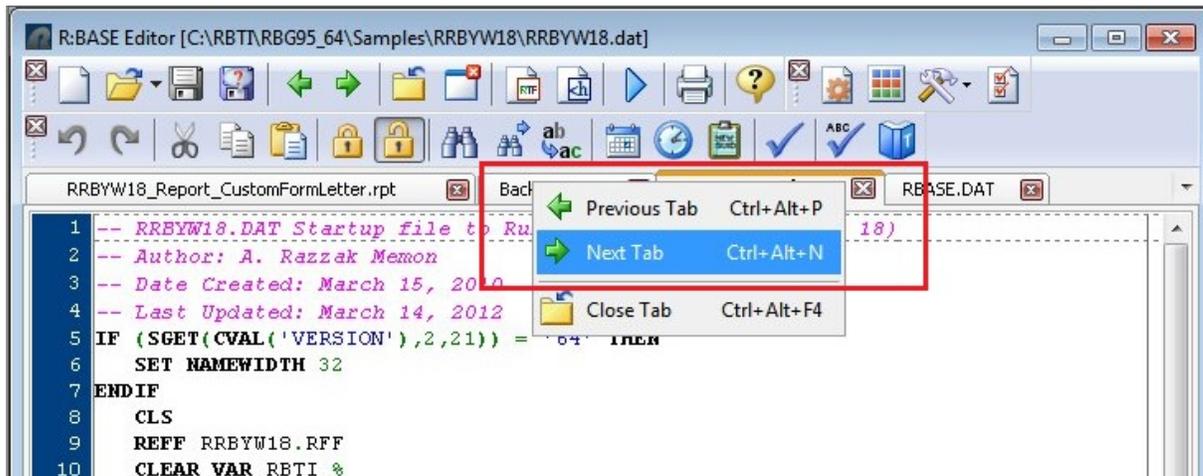
The process to attach ODBC tables to a database has been enhanced to allow R:BASE to query the external source and assign keys appropriately. Previously, R:BASE would attach the source table without attempting to assign accurate qualkeys.

When attaching ODBC tables by selecting "Utilities" > "Attach SQL Database Tables" from the menu bar, the dialog has been enhanced with the "Attach USING ALL" check box, rather than automatically adding USING ALL to the underlying SATTACH command.



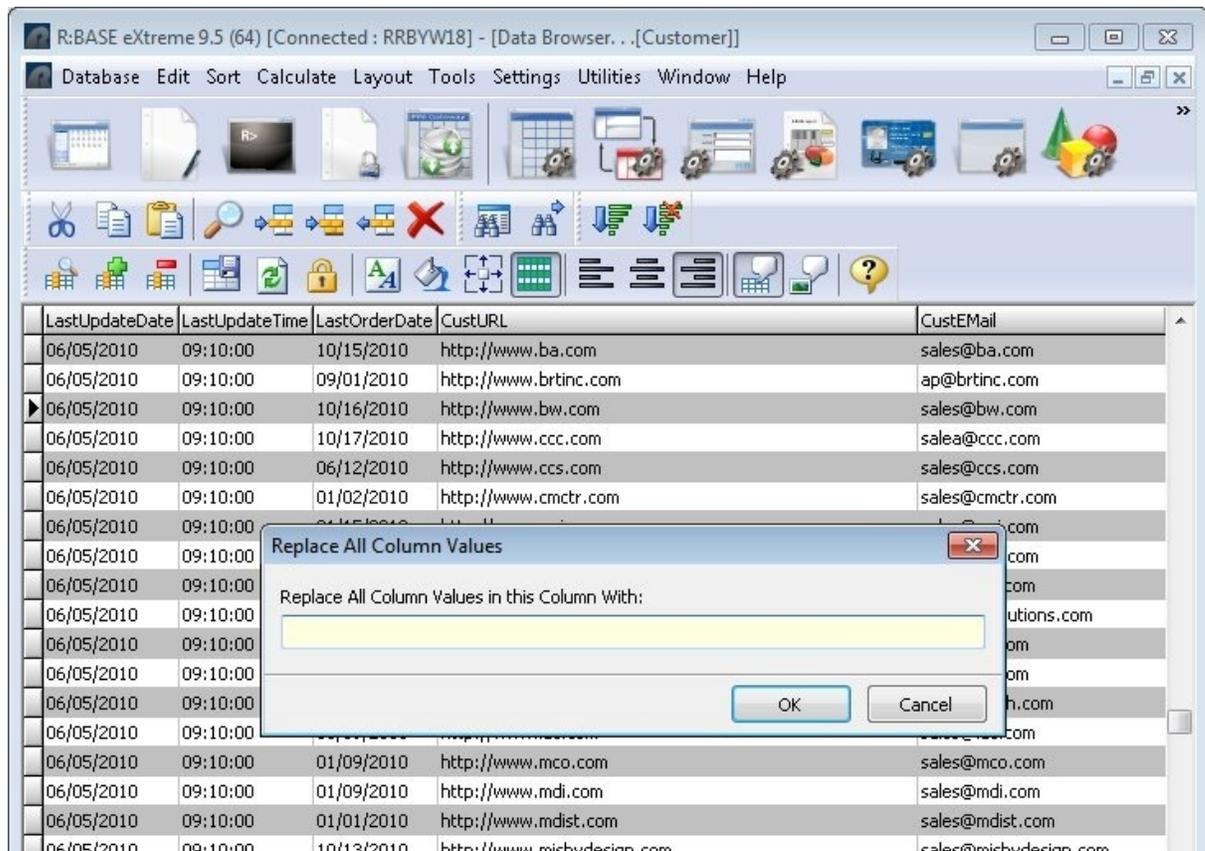
110 R:BASE Editor "Hot Key" Tab Navigation

When using the built-in R:BASE Editor, the hot keys [Ctrl+Alt+N] to move to the next tab and [Ctrl+Alt+P] to move to the previous tab have been implemented. [Ctrl+Alt+,] for the previous tab and [Ctrl+Alt+.] for the next tab were also implemented.



111 Enhanced Replacing Values in the Data Browser

When using the "Replace All Column Values" menu option within the Data Browser, the dialog box has been enhanced to eliminate the limit of 51 characters. A limit is not required as the replacement value could be an expression that comprises of many columns combined. The field was also updated to allow the use of the Data Dictionary.



112 Enhanced Button Options for PAUSE Command

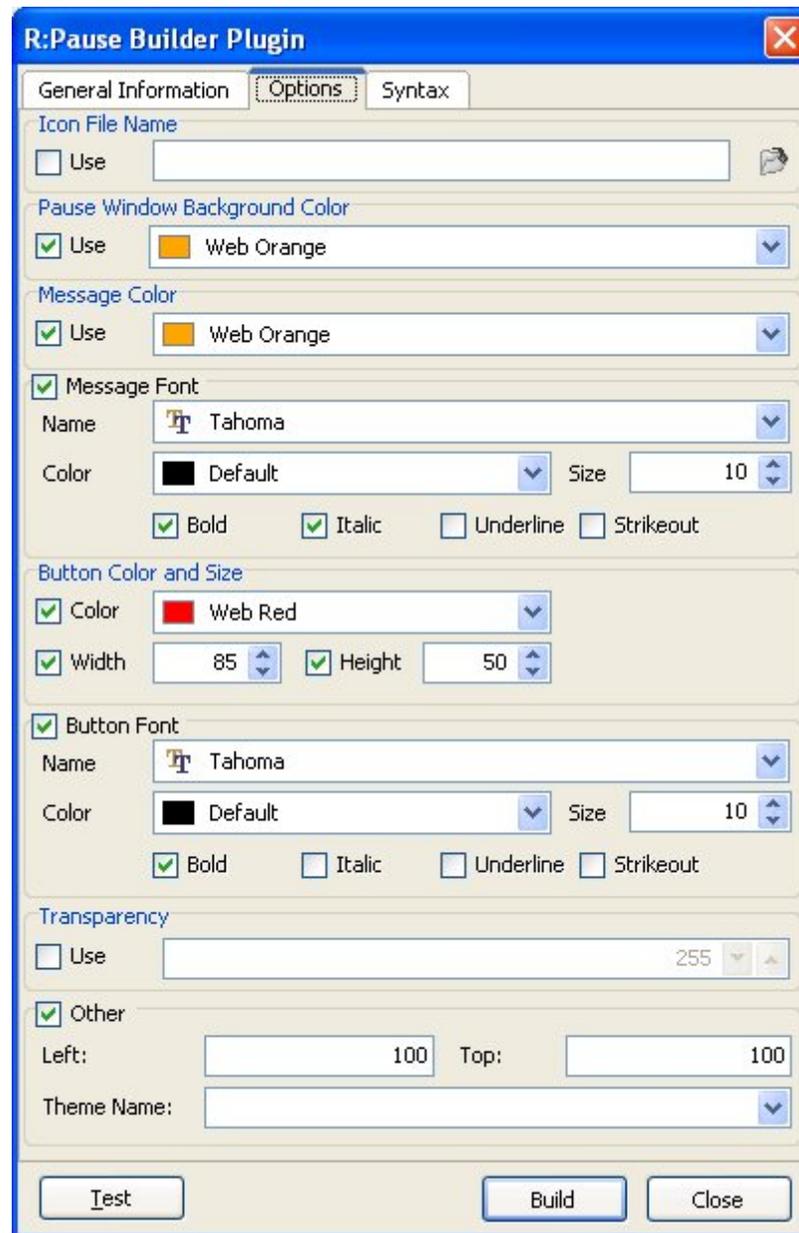
The PAUSE command has been enhanced to support a font size with bold, italic, underline, and strikethrough types for the button text. The button width and height can also be modified.

```

PAUSE 2 USING 'Message Text' CAPTION 'Caption Text' +
ICON INFO BUTTON 'Button Text' +
OPTION BUTTON_COLOR -16777216 +
|BUTTON_FONT_NAME Tahoma +
|BUTTON_FONT_COLOR -16777208 +
|BUTTON_FONT_SIZE 10 +
|BUTTON_FONT_BOLD ON +
|BUTTON_WIDTH 100 +
|BUTTON_HEIGHT 35

```

The PAUSE command syntax builder plugin (Utilities > Plugins") has been enhanced to allow easier creation of custom PAUSE messages.



113 Enhanced YES/NO Button Options for DIALOG Command

The YES/NO button parameters for the DIALOG command have been enhanced to support a font name, with bold, italic, underline, and strikethrough font types for the button text. The button widths can also be modified.

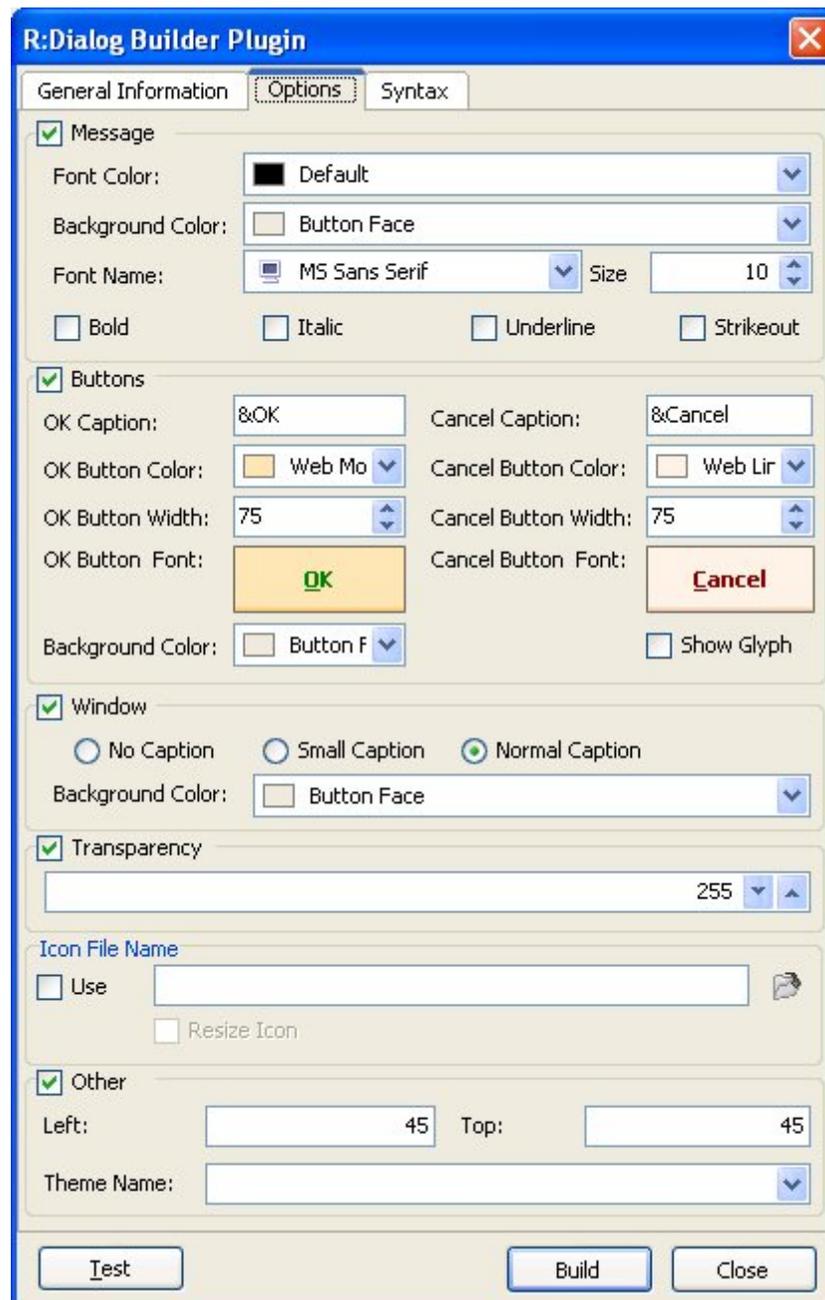
```
DIALOG 'Type Message Here ...' vResponse vEndKey YES +
CAPTION 'Type Caption Here ...' ICON INFO +
OPTION BUTTON_YES_COLOR 32768 +
|BUTTON_NO_COLOR 255 +
|BUTTON_YES_FONT_BOLD ON +
|BUTTON_YES_FONT_COLOR -16777208 +
```

```

|BUTTON_YES_FONT_NAME Tahoma +
|BUTTON_YES_FONT_SIZE 10 +
|BUTTON_YES_WIDTH 85 +
|BUTTON_NO_FONT_BOLD ON +
|BUTTON_NO_FONT_COLOR -16777208 +
|BUTTON_NO_FONT_NAME Tahoma +
|BUTTON_NO_FONT_SIZE 10 +
|BUTTON_NO_WIDTH 85

```

The DIALOG command syntax builder plugins (Utilities > Plugins") have been enhanced to allow easier creation of custom DIALOG messages.

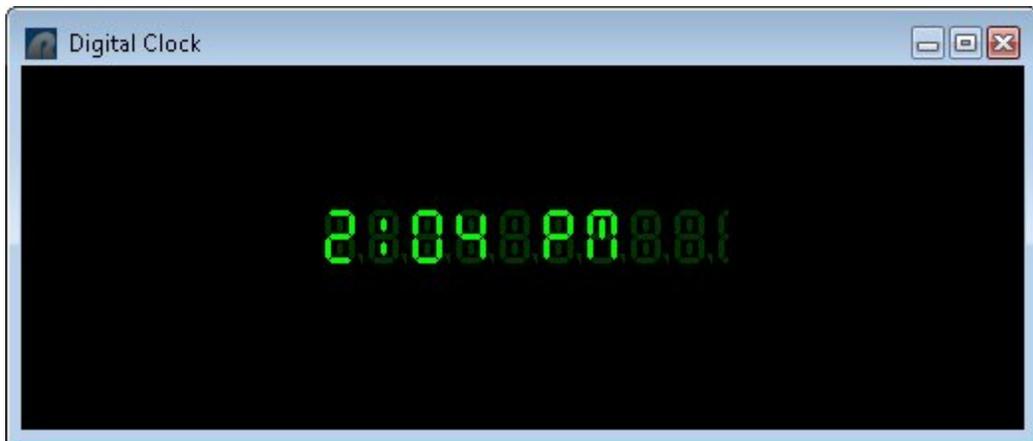


114 New Support for Native Form Display

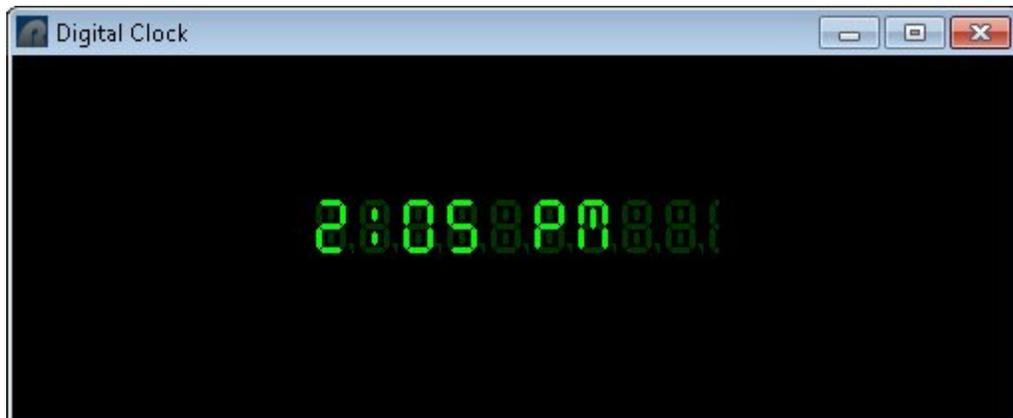
A new application property has been implemented allowing forms to be displayed as "native", which eliminates the use of themes (R:BASE and operating system) on R:BASE form properties. With the setting OFF (default), the feature is disabled.

```
PROPERTY APPLICATION NATIVE_FORMS 'ON'  
PROPERTY APPLICATION NATIVE_FORMS 'OFF'
```

The following is an R:BASE form example with the NATIVE_FORMS property set to OFF, as the default value.



The following is an R:BASE form example with the NATIVE_FORMS property set to ON. Note the different button sizes in the title bar, and the thin form border.



Pros and Cons

The NATIVE_FORMS property is offered as an optimization option to eliminate the theme-based drawing, painting, refreshing, etc., and to improve performance. There is however a functionality trade-off. It is important to note that in native mode some items would be disabled, such as the drop-down menu on the form title bar, or the ability to have only the minimize and X buttons on the title bar. Users may be required to rethink a form's design and

presentation when the NATIVE_FORMS property is set to ON.

Native Form Use

The NATIVE_FORMS property is a global value. When the PROPERTY is ON, "any" launched form will be displayed as native. It's up to the user to decide how to manipulate the property. To enable native forms on a per-form basis, the property should be set ON before a form is launched with the REFF, BROWSE, EDIT, and ENTER commands, and then OFF within the form's "On After Start" EEP.

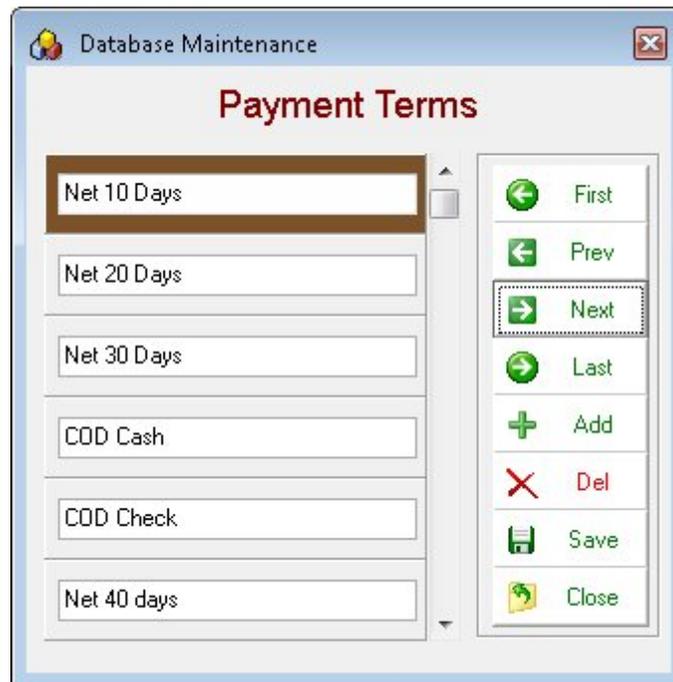
If a majority of the forms are to be native, then the property can be set to ON within the application on startup. For example, if there are hundreds of forms that should be native and just a dozen or so to be theme-based, then NATIVE_FORMS can be set to ON within the startup process, and then for each of the forms to be theme-based, the property can be turned OFF before a form is launched and set ON again within the "On After Start" EEP. Thus, setting the property to limit the effect to the forms be launched.

115 New Support for Native Control Display

A new application property has been implemented allowing form controls to be displayed as "native", which eliminates the use of themes (R:BASE and operating system) on the R:BASE control properties. With the setting OFF (default), the feature is disabled.

```
PROPERTY APPLICATION NATIVE_CONTROLS 'ON'
PROPERTY APPLICATION NATIVE_CONTROLS 'OFF'
```

The following is an R:BASE form example with the NATIVE_CONTROLS property set to OFF, as the default value.



The following is an R:BASE form example with the NATIVE_CONTROLS property set to ON. Note the different style for the buttons and panel the buttons are enclosed within.



Pros and Cons

The `NATIVE_CONTROLS` property is offered as an optimization option to eliminate the theme-based drawing, painting, refreshing, etc., and to improve performance. There is however a functionality trade-off. It is important to note that in native mode some items will appear different. Users may be required to review and alter the style of a form's design and presentation when the `NATIVE_CONTROLS` property is set to ON.

Native Form Use

The `NATIVE_CONTROLS` property is a global value. The setting is dependent on the `NATIVE_FORMS` property, and will only take effect when `NATIVE_FORMS` is set ON. When the `PROPERTY` is ON, some controls within a launched form will be displayed as native. It's up to the user to decide how to manipulate the property. To enable native forms on a per-form basis, the property should be set ON before a form is launched with the `REFF`, `BROWSE`, `EDIT`, and `ENTER` commands, and then OFF within the form's "On After Start" EEP.

116 Display Format for Form Database and Variable Controls

A Display Format property is now supported for database and variable controls. The Display Format is only available for non-text type data values. When the control has focus, the value will be formatted in its native format. Upon exit, the Display Format value is applied.

Examples:

```
PROPERTY CI_LastUpdate DISPLAYFORMAT 'dddd, mmmm dd, yyyy'
```

```
PROPERTY CI_UpdateTime DISPLAYFORMAT 'h:nn:ss AM/PM'
```

```
PROPERTY CI_TotalAmount DISPLAYFORMAT '#,0.00;-#,0.00'
```

```
PROPERTY CI_FinalCalib DISPLAYFORMAT '#.#,E+00'
```

Only the Variable Label and Variable Edit controls will include an extra property field within the Form Designer.

The image shows a screenshot of the 'Variable Edit Properties' dialog box, specifically the 'Effects' tab. The dialog has a blue title bar and a close button in the top right corner. It contains several sections of settings:

- Properties:** Includes checkboxes for 'Visible Frame' (checked), 'Frame Hot Track', and 'Windows Theme'.
- Frame Sides:** Includes checkboxes for 'Left', 'Top', 'Bottom', and 'Right', all of which are checked.
- Frame Settings:** Includes dropdown menus for 'Frame Color' (set to 'Button Shadow'), 'Frame Hot Color' (set to 'Window'), 'Frame Hot Style' (set to 'Lowered'), and 'Frame Style' (set to 'Status').
- Format Mask:** An empty text input field.
- Display Format For Non-Text Variables:** This section is highlighted with a red rectangular box and contains an empty text input field.
- Color Options:** Includes dropdown menus for 'Disabled Color', 'Focus Color', and 'Read-Only Color', all set to 'Window'. There is also a checkbox for 'Read-Only Color on Focus' which is unchecked.
- Character Case:** A dropdown menu set to 'Normal'.
- Maximum Length:** A text input field with the value '0' and up/down arrow buttons.
- Cut, Copy and Paste Settings:** Includes checkboxes for 'Prevent Cut', 'Prevent Copy', and 'Prevent Paste', all of which are unchecked.

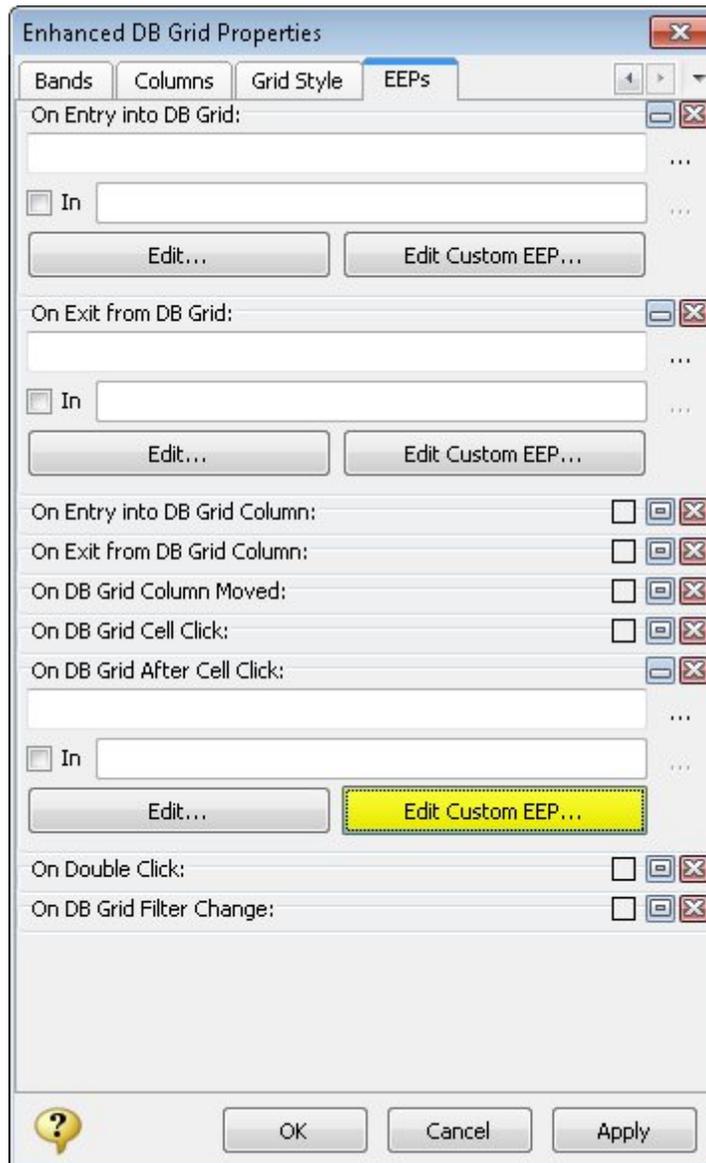
At the bottom of the dialog, there is a help icon (a question mark in a yellow circle), and three buttons: 'OK', 'Cancel', and 'Apply'.

117 Enhanced DB Grid - On After Cell Click EEP

A new "On After Cell Click" EEP has been introduced for the Enhanced DB Grid control, to fire after a cell has been clicked.

The existing "On DB Grid Cell Click" EEP occurs before any changes to the dataset are made.

The new "On DB Grid After Cell Click" EEP has been added to occur after the click.



118 Blank When Zero and NULL Format Properties

The "Blank When Zero" and "NULL Format" properties have been added to the Variable Memo and DB Memo controls within the Report/Label Designers.

"Blank When Zero" specifies an object will display nothing if the value of the variable is zero.

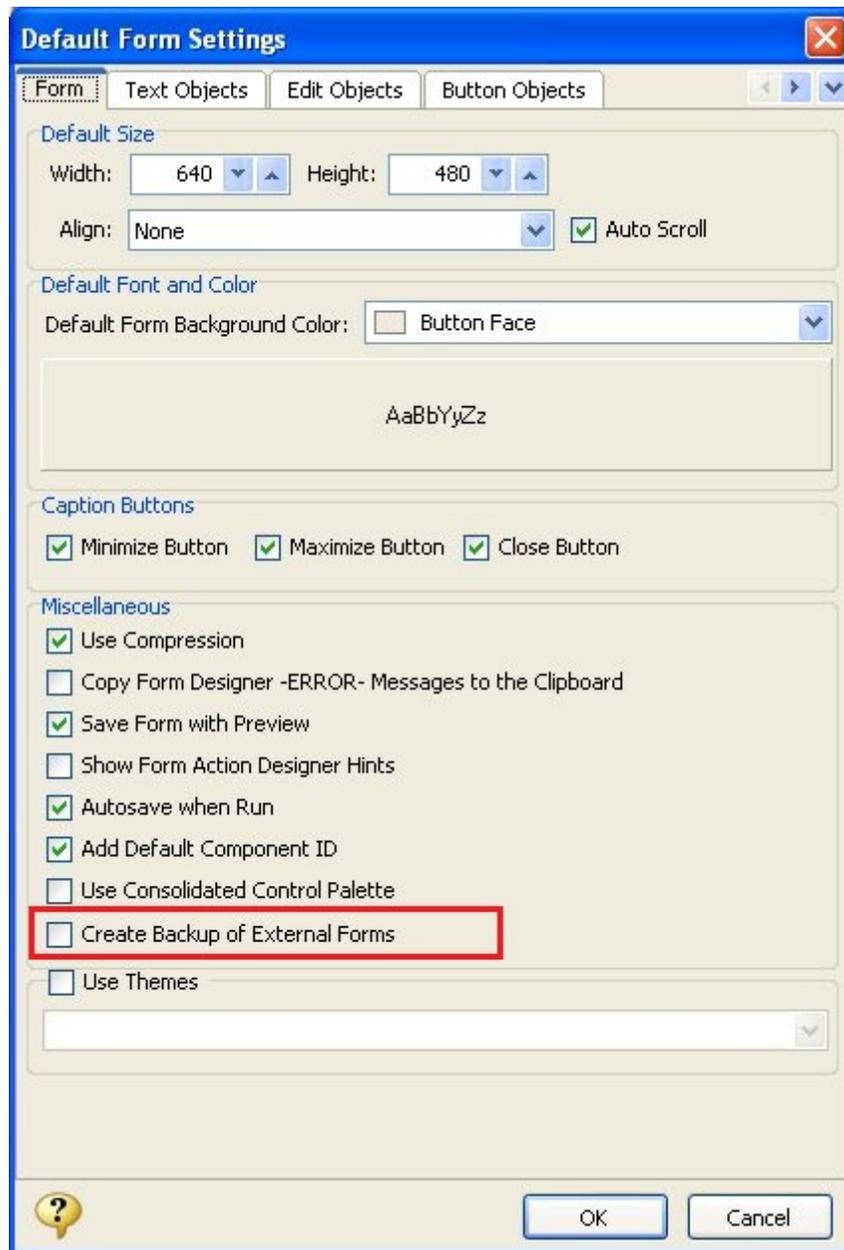
"NULL Format" specifies the display format for a NULL value.



119 Automatic Backup Option for External Form Files

A new "Create Backup Copy" option was added to the Form Settings for external form files. When enabled, R:BASE saves a backup copy of external form files (.rff). The backup copy will reside in the same folder as the original file, only the file extension will contain .rf~.

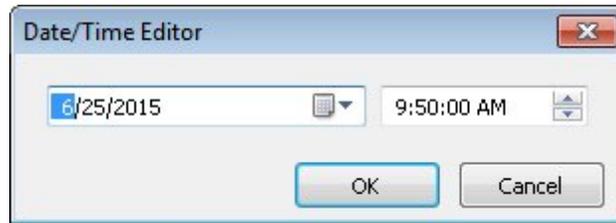
The backup option for external form files, mimics the settings which already exist for command files, application files, and the R:BASE configuration file.



120 Enhanced DATETIME support for DB/Variable Edit controls

The DB Edit and Variable Edit controls now support the ability to display a date/time editor, if the control is based upon a DATETIME data type. The date/time editor will open if the control is double clicked or if [Alt+Insert] is pressed.

If exists, the control hint will be used as the date/time editor title bar text.



Note that double click will only work if there is no EEP assigned to the double click event, nor a defined pop-up menu assigned to the control.

121 New Query Driven RBTI System Variable

A new RBTI System Variable has been implemented to store a view name when the Query Builder is utilized.

The RBTI_QBE_NAME variable will be defined with the view name after any "Save" menu options are used to create a new object, and will also store a view name after the query is opened and closed within the Query Builder.

```
R>SHOW VAR
Variable                = Value
  Type
-----
#DATE                    = 07/09/2015
  DATE
#TIME                    = 10:53
  TIME
#PI                      = 3.14159265358979
  DOUBLE
SQLCODE                  = 0
  INTEGER
SQLSTATE                 = 00000
  TEXT
#NOW                    = 07/09/2015 10:53
  DATETIME
RBTI_QBE_NAME           = SalesByEmployee
  TEXT
```

Knowing the view name (RBTI_QBE_NAME), users can then capture get the SYS_TABLE_ID from the SYS_TABLES system table, and then gather the "SYS_COLUMN_LIST" and "SYS_QUERY" for the the entire view syntax from the SYS_VIEWS system table.

122 Added R:BASE Editor Setting for Trailing Spaces

A new "Keep Trailing Spaces" setting has been added to the R:BASE Editor, within the "String" menu tab. When checked, the setting will retain trailing spaces added at the end of code lines.



123 New COLCHECK View Setting

A new setting, COLCHECK, has been implemented which specifies if columns will be checked for consistency when making views. When COLCHECK is ON (the default), view alias/column names will be checked for consistency to other occurrences of those names in the database, when the view is created.

```
SET COLCHECK ON/OFF
```

Similar checking is already in place when creating or modifying tables, and when attaching tables to a database, where R:BASE requires an alias that does not cause name/data type conflicts.

An impact may exist for a view that has already been defined, because when COLCHECK is on, the values generated for the view will follow the data type of the alias. If an error occurs, the view definition should be reviewed.

If an application requires COLCHECK be off to define a view that, the proper proper results should not be expected once COLCHECK is switched back to ON when using the view. If a view needs to be created with COLCHECK off, it also needs to be used with COLCHECK off.

Index

- \$ -

\$COMMAND 7
\$MENU 7

- A -

Action 78
Add Image from File 54
Additional 50, 53
Advanced Variable Rich Edit 108
AFTER CONNECT 18
AFTER PACK 18
ALIAS 73
AliasList 73
Align 38
Align with Margins 38
alignment 82
Annotation Object 1
API 7
APP 7
Application Designer 76, 78
application file 76
Apply 19
ASCII text 74
ATTACH 33, 73
Autosize Buttons 44

- B -

Background 77
background color 22, 116
Background Color Mapping 122
backup 137
Balloon Tip 53
BEFORE CONNECT 18
BEFORE PACK 18
Bidirectional Mode 83
Bit Button 47
Blank When Zero 136
BLOB 74
BLOB Editor 54, 86, 87, 88, 89, 90
Blocks 7

Bottom 38
BSTR 74, 89
button 129, 130
button alignment 82

- C -

calendar 10, 124
capture 27
Capture Keyboard Events 102
CAPTURE_FROM_SCREEN 80
CAPTURE_FROM_WINDOW 80
Case Sensitive 41
cell 82
Character Case 58, 70
check box 3, 113, 120
CHECKPROP 113
CHOOSE 111
Clear Error List 57
CLICKHEADER 81, 101
Clipboard 80
CMD_EXPLORE 48
CMD_FIND 48
CMD_PRINT 48
COLCHECK 140
collapse 125
Collapsed Panel 10
color 77, 111
column 44, 126
Column Comments 55
columnar 7
Combo Box 4
Command 72
Command History 46
Commands 74
Comment 55
Compare by Content 104
computed columns 115
condition 79
Configuration Settings 24
connections 126
consolidated 13
Context Help 15
control properties 19, 133
controls 37, 133
Conversion 5, 7, 59
CONVERT 5
Convert Application 7, 59

Convert to Enhanced DB Navigator 44
 Copy 32, 36
 Copy Database To 36
 Count Down Timer 106
 Cue Banner 50
 CURSOR_POS 22
 custom color highlighting 122
 Custom Form Action 7, 63, 101
 CVAL 8, 12

- D -

Data Browser 66, 119, 128
 Data Designer 44
 Data Dictionary 24
 Data Editor 66
 Data Type 9
 database events 18
 Database Explorer 36, 83
 date/time editor 138
 Date/Time Picker 124
 DATETIME 138
 DB Check Box 83
 DB Edit 50, 53, 138
 DB Lookup List View 77, 98, 113
 DB Memo 58, 136
 DB Navigator 44
 DB Radio Button 83
 DB Radio Group 82, 83
 DB Spinner 67
 DB Tree View 31
 dBASE 33, 68, 73
 Default Form Setting 35
 Defaults 24
 DEFF 67
 design 94
 DIALOG 22, 94, 130
 Display Format 134
 DOS to Windows 5
 Drag Form 35
 DROP 66
 Drop Down Menu Button 47
 Duplicate Row 66

- E -

Editor 74

EEP 102, 109, 135
 EEPs 124
 ends with 27
 Enhanced Calendar 10, 17
 Enhanced DB Grid 17, 27, 81, 82, 109, 122, 126, 135
 Enhanced DB Navigator 17, 44
 Enhanced Group Box 17
 Enhanced Panel 17, 35
 Enhanced Speed Button 17
 Enhanced Tab Control 17
 Enhanced Variable Calendar 17
 Error List Toolbar 57
 error messages 113
 Errors 57
 Exclusive Mode 118
 expand 125
 expand node 123
 Explorer 48
 export 119
 Expression Builder 55, 97
 expressions 115
 external form file 7, 42, 55, 59, 67
 external form files 137
 External Forms 72

- F -

Favorite Controls 37
 Favorites 37
 file format 94
 filter 27, 109, 126
 Filter Setup 27
 FILTEREDWHERE 27
 FILTERTYPE 109
 find 41, 125
 Find in Database Explorer 83
 Find in Files 41
 FINDNODE 31
 FIRST CONNECT 18
 font 77, 111
 font color 22
 font name 22
 font size 22
 form 116
 Form Control 19
 Form Controls 9, 10
 Form Designer 20, 97

Form Properties 13
function 49, 74, 79

- G -

GETPROPERTY 27, 67, 82, 101, 102, 113, 120
Group Bar 7, 59
GUID 9, 12

- H -

Help 15
Hex 74, 90
hidden 48
HIDE 48
hot key 128
Hot Keys 27

- I -

IFF 79
IFGE 74
IFLE 74
IFNE 74
image 54, 64, 74, 86, 94
Image List Editor 64
initial position 111
initial value 111
INITPOS 111
INITVAL 111
input field 22
INPUT_BACKGROUND_COLOR 22
INPUT_FONT_COLOR 22
INPUT_FONT_NAME 22
INPUT_FONT_SIZE 22
Integrated Windows Authentication 8
INTERSECT 91

- J -

JOIN 91

- K -

Keep Trailing Spaces 139
key 127

Keyboard 51
Keyboard Events 102

- L -

Label 76, 136
 security 94
Label Designer 97
Labels 1
LAUNCH 48
Layout 38
LBLPRINT 106
LIST 68
List Box 5, 120
List Color 32
List Font 32
List View 113, 118
LOAD 115
LoadDirectoryName 123
LOCK 68
Lock Control 20
Logical Functions 74
lower case 58

- M -

Margin 38
MAXIMIZED 48
Memo 58
menu bar 7, 59, 111
Menu Bar Designer 111
Menu Items 63
message window 22
MINIMIZED 48
MODAL 67
Move Selected Image Down 54
Move Selected Image Up 54
Multi-Column Sorting 27
Multi-line Tabs 24
multi-page images 54

- N -

native form 132, 133
NATIVE_CONTROLS 133
NATIVE_FORMS 132, 133
NETGROUP 12

NETLOCALGROUP 12
 NOCALC 115
 node 125
 NORMAL 48
 Note 87
 NOTEVARCHAR 74
 NULL Format 136
 Number of Lines 32

- O -

ODBC 105, 127
 On After Start 78
 On Close Up 124
 On Drop Down 124
 ON ERROR 18
 On Key Down 102
 On Key Press 102
 On Key Up 102
 ONLY 105
 On-Screen Keyboard 51
 Open Image 65
 operations 48
 optimization 132, 133
 optimizations 118
 output 33

- P -

Page Footer 76
 Page Header 76
 page number 67
 PAGENO 67
 palette 13
 panel 35
 password 94
 paste 32
 Paste File Names 46
 PAUSE 129
 PDF Annotation Object 1
 PDF Check Box 3
 PDF Combo Box 4
 PDF Form Controls 1
 PDF List Box 5
 PDF Push Button 2
 PDF Radio Button 4
 PDF Signature Field 5

PDF Text Field 2
 performance 132, 133
 Persistent Space 76
 PLUGIN 123
 Pop up Menu 35
 Popup 32
 Popup Menu 35
 Pop-up Menu 32, 35
 Popup Menu Designer 63
 preselect 111
 PRINT 48, 94, 97, 106
 print form 97
 print preview 99, 106
 progress dialog 27
 PROPERTY 27, 31, 50, 51, 53, 80, 81, 95, 97, 98,
 101, 106, 109, 111, 113, 118, 120, 125, 132, 133, 134
 pull down 7
 Push Button 2

- Q -

qualkey 127
 query 139
 Query Builder 139
 Query System Variable 139

- R -

R:BASE Editor 104, 139
 R:BASE On-Screen Keyboard 51, 95
 R> Prompt 46
 Radio Button 4
 Radio Group 82
 RBA 59, 76, 78
 RBBEDIT 74
 RBTI 139
 RBTI System Variable 65
 RBTI System Variables 108
 RBTI_FORM_CLICKED 108
 RBTI_FORM_CTRLTEXT 108
 RBTI_FORM_DBLCLKED 108
 RBTI_IMG_FOLDER 65
 RBTI_QBE_NAME 139
 Record Search 27
 REFF 72
 relational operator 122
 Replace All Column Values 128

Report 76, 136
 security 94
ReportDesigner 97
Reports 1
reset 118
Reset User Count 126
RESIZE_ICON 94
resized 44
rff 42
Rich Edit 108
Rich Text 74, 88, 108
RICHTEXT 74
RNDDOWN 49
ROSK 51, 95
round down 49
Row Numbers 98
RTF 74, 108
RUNRBA 76

- S -

SATTACH 33, 105, 127
Save As Variable Form 42
SCONNECT 33
scroll 99
search 31, 41, 48, 83
search conditions 27
Selected Row 77
Sentence Case 70
separator 63
SERVER 68
Server Table 33
setting 35, 113, 140
settings 86, 87, 88, 89, 90, 95
shortcut 101
Shortcut Key 101
Show Lines 32
show modes 48
Show/Hide Columns 27
SHOWBALLOONTIP 53
Signature Field 5
Size and Coordinates 38
sort 81
SortAsc 81
SortDesc 81
sorting 81
SORTORDER 101
spaces 139

SQL 127
SQL data source 105
starts with 27
String 139
structure 33
Sub-Items 63
SUBTRACT 91
Syntax 27
system variable 65, 85
system variables 108

- T -

Tables 68
tabs 128
TEMP 68
temporary 73
temporary table 91
TEXT 74
TEXT data type 44
Text Field 2
theme 132, 133
Time Picker 9
Timeout 106
timer 106
Title Case 70
Title Color 32
Title Font 32
Toolbar 63
Toolbars 13, 37
Top 38
Trace Debugger 57
Tree View 7, 31, 59, 118, 125
truncated 44

- U -

Unicode 74, 89
UNICODEBSTR 74
UNION 91
UNLOAD 33, 115
upper case 58
USING 73
Utilities 51

- V -

VarChar 74, 87
Variable Check Box 83
Variable Edit 50, 53, 138
Variable Form 42
Variable Lookup List View 77, 98, 113
Variable Memo 58, 136
Variable Radio Button 83
Variable Radio Group 82, 83
Variable Spinner 67
Version 55
version number
 form 85
 label 85
 report 85
view 66, 139, 140

- W -

warning 44
WHERE Builder 55
WHERE Clause 27
Whole Word 41
WINAUTH 8, 12

Notes