

What's New

In

R:BASE eXtreme





What's New in R:BASE eXtreme

by R:BASE Technologies, Inc.

Welcome to R:BASE eXtreme!

This document details the new enhancements added to R:BASE eXtreme, covering versions 9.0, 9.1, and 9.5.

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 New in R:BASE eXtreme for Windows

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First Edition

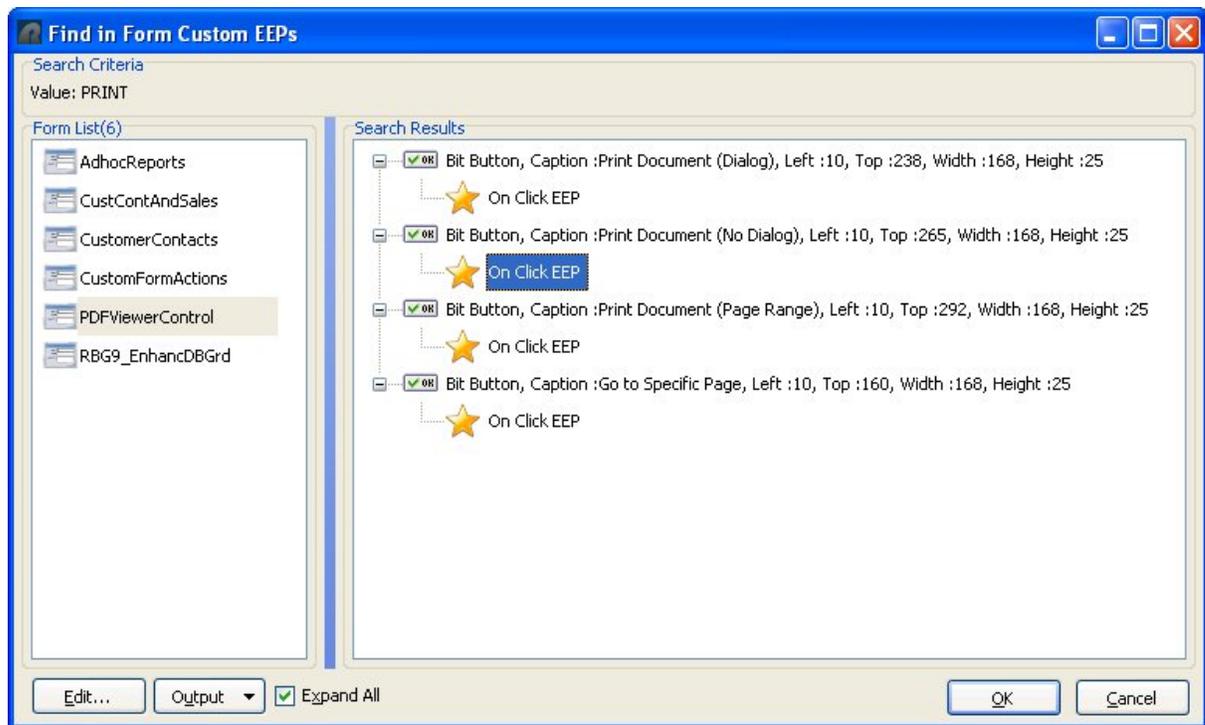
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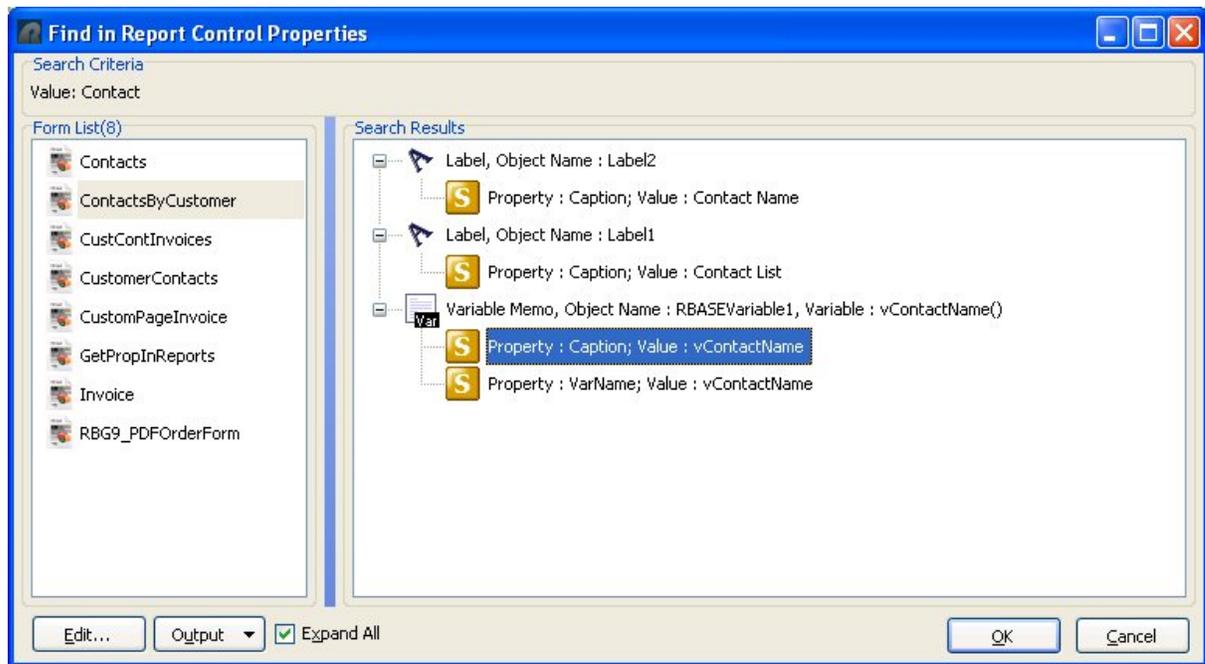
1 Global Environment

The features listed here effect several or all of the areas of the R:BASE development environment.

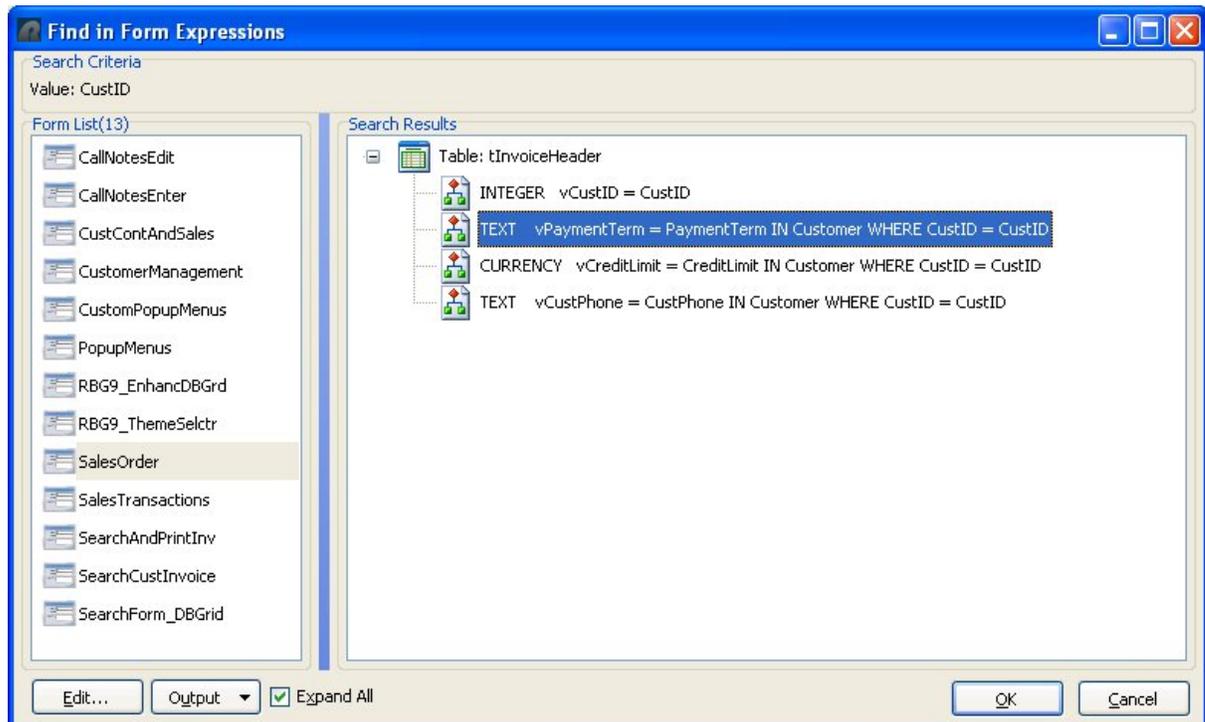
- Completely overhauled front end development interface providing elevated productivity
- Streamlined R:BASE Engine based on Turbo V-8 core functionality
- Single Engine DLL with built-in File I/O efficiency
- **51** new Themes added totaling **86 Themes** (Old = 35, New = 51)
- Support to load external themes into an R:BASE session
- Enhanced Toolbar to design and manage Tables, Views, File Gateway, Forms, Reports, Labels, External Forms and Applications
- Enhanced MS Windows XP/Vista Theme-Aware User Interface
- **6** additional PRINT output options: DIF, PNG, SVG, SYLK, WB1, WK1
- Universal color palette with over 180 options
- New GUID data typeuse of a globally unique identifier value to store values into a primary key column - R:BASE eXtreme 9.5 (**64**) only
- Support for Integrated Windows Authentication (IWA)
- New BSTR (binary string) data type - R:BASE eXtreme 9.1/9.5 (**64**) only
- Support for **40** additional image file formats
- Nested INNER JOINS and OUTER JOINS
- Ability to search for text in Custom EEPs within Forms, Reports, Labels, External Forms, and Applications



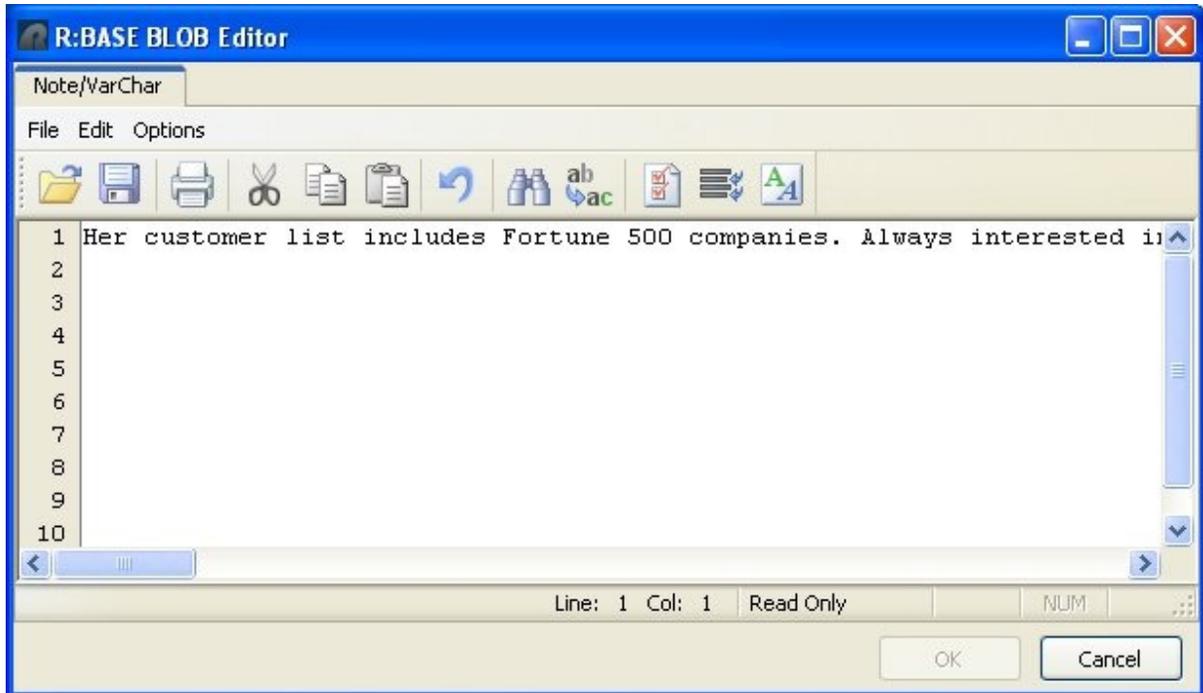
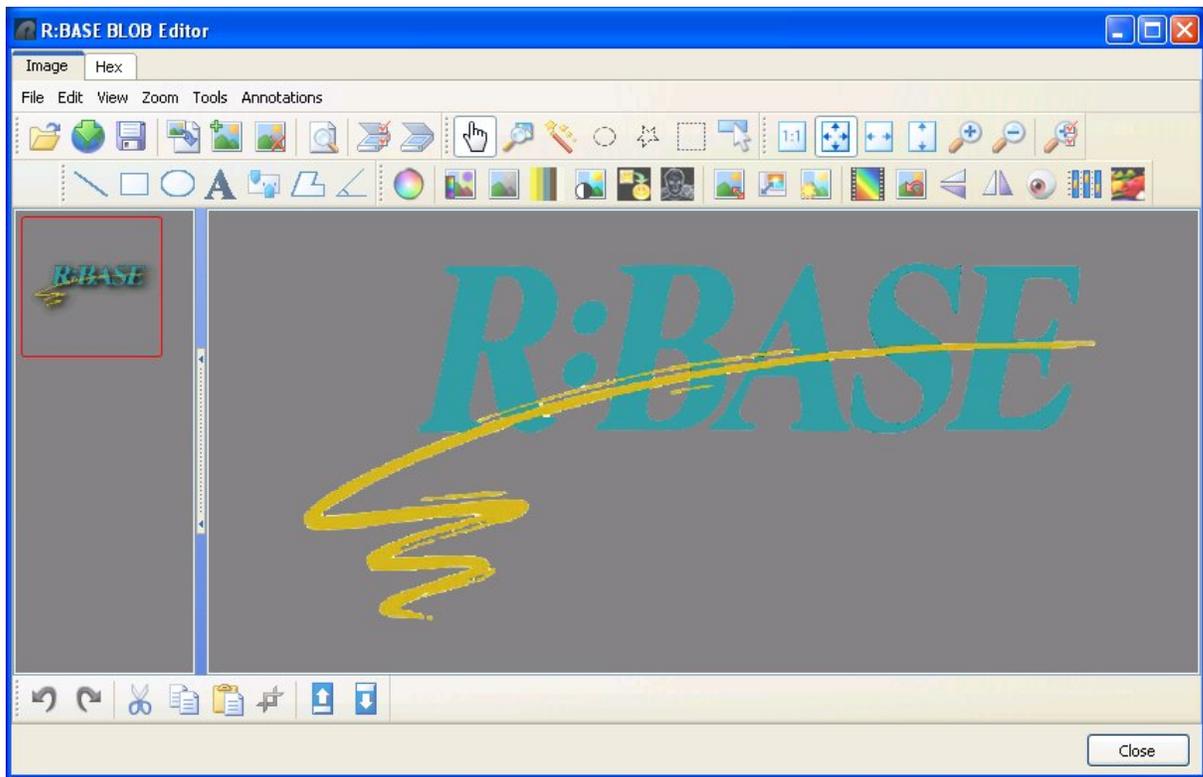
- Ability to search for text in within Form, Report, Label, and External Form control properties

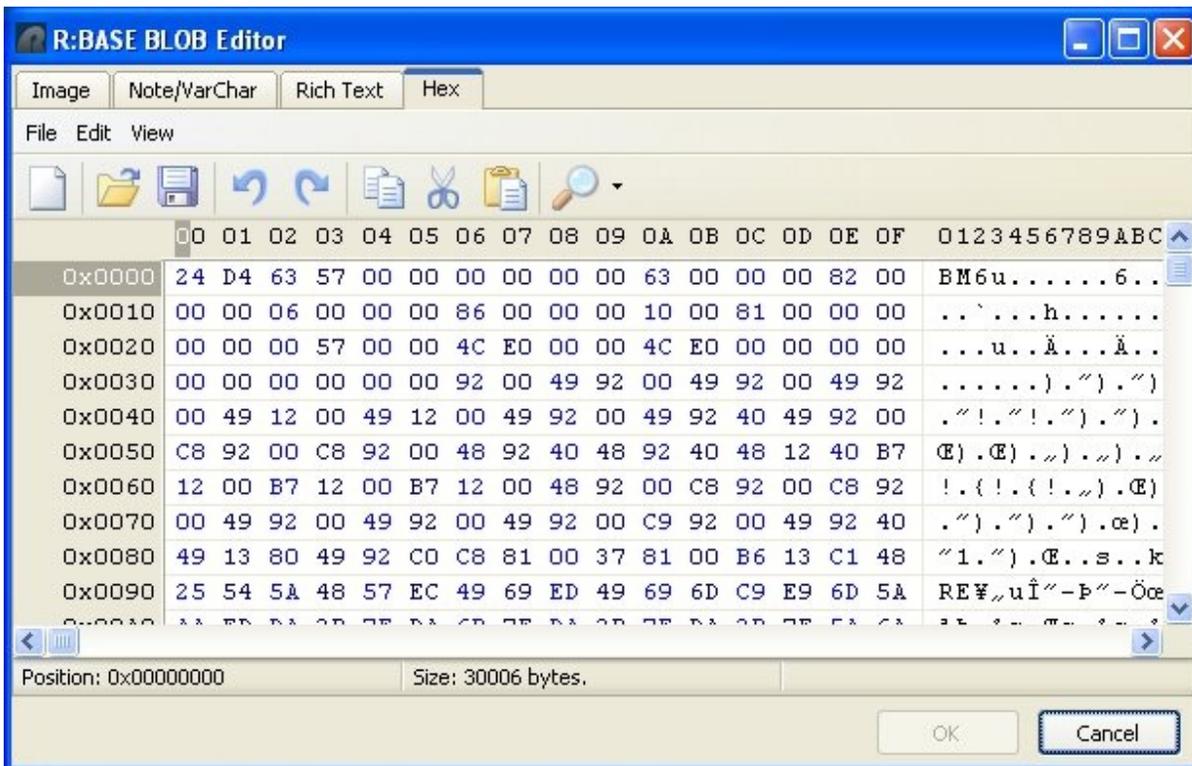
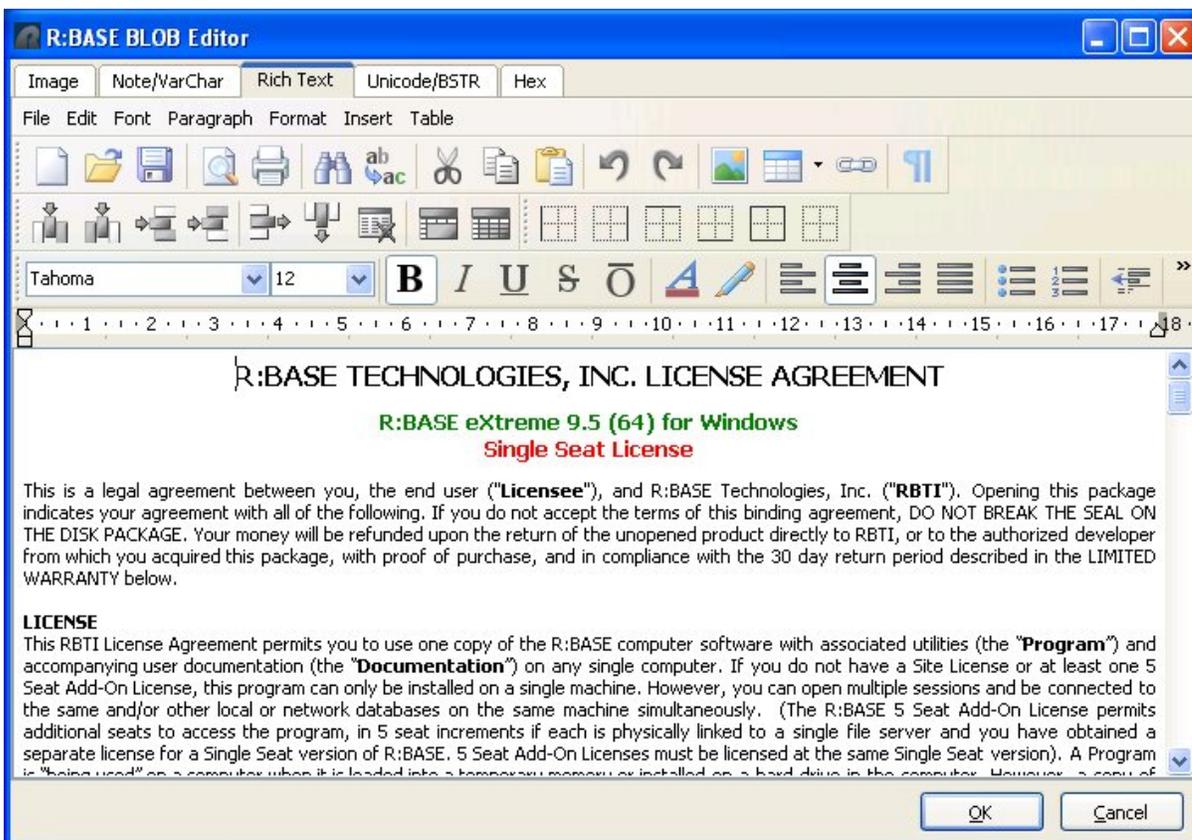


- Ability to search for text within defined Form, Report, and Label variable expressions

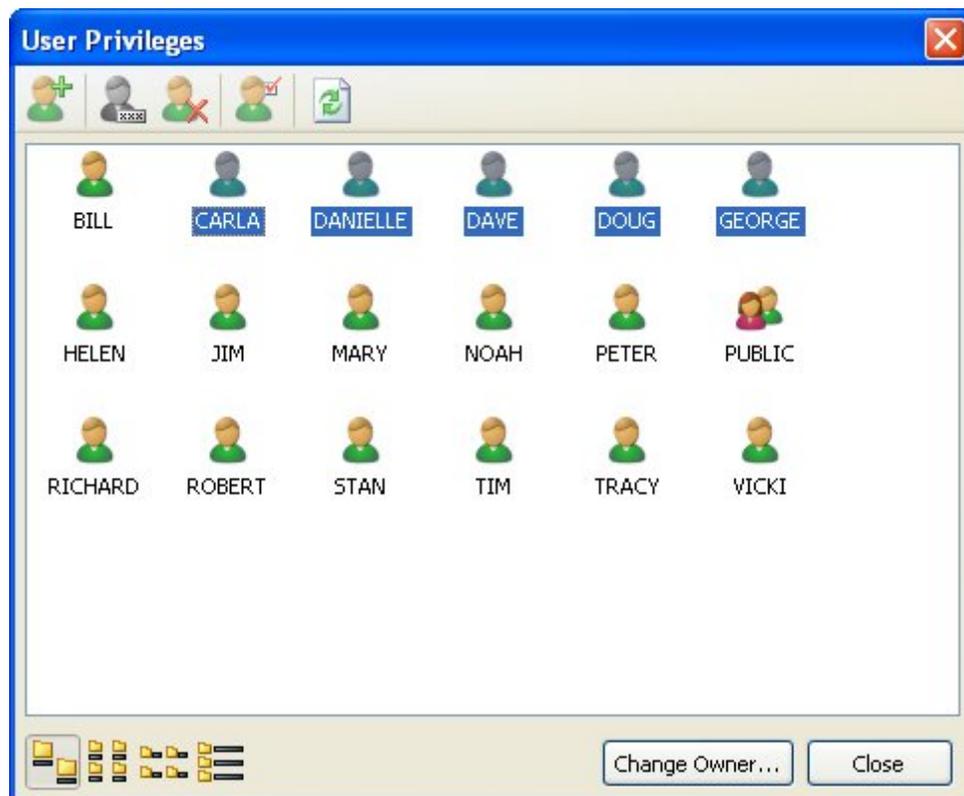


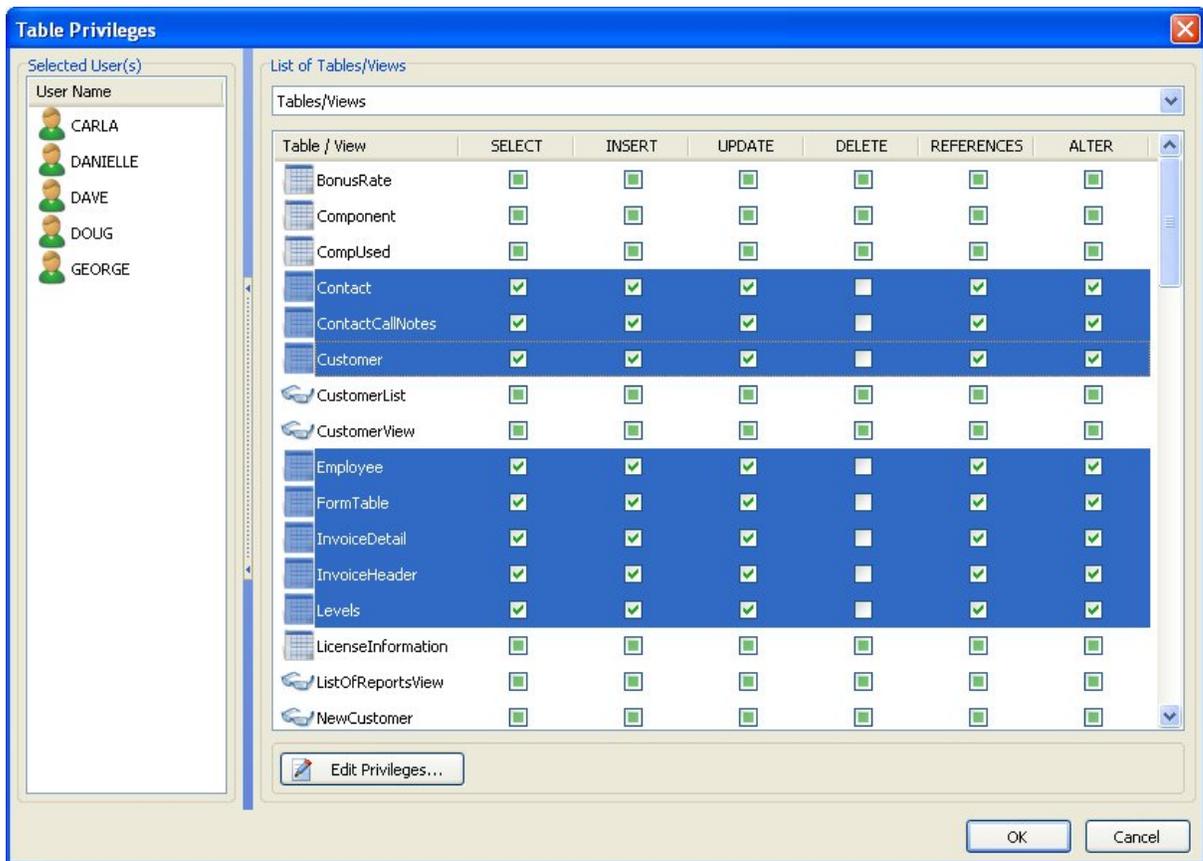
- Enhanced R:BASE Blob Editor, with image annotation and Unicode/binary string support



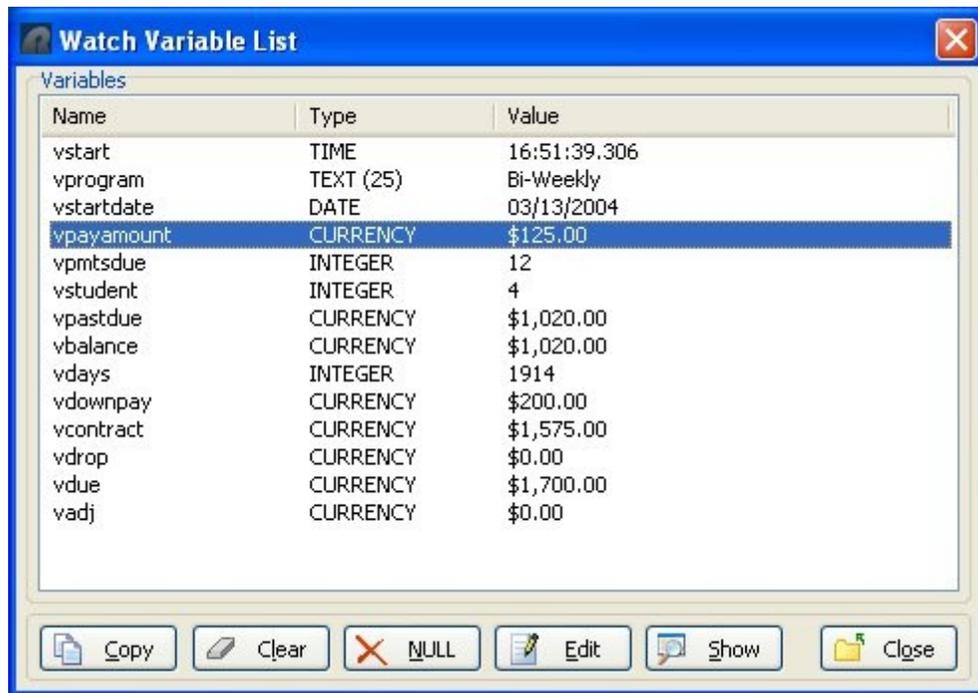


- Rewritten User Privileges interface to allow fast and simplified GRANT/REVOKE permissions to tables





- An R:BASE On-Screen Keyboard is available to display a visual keyboard on the screen for users to type and enter data, instead of relying on a physical keyboard
- Enhanced Watch Variable functionality within the global R:BASE environment

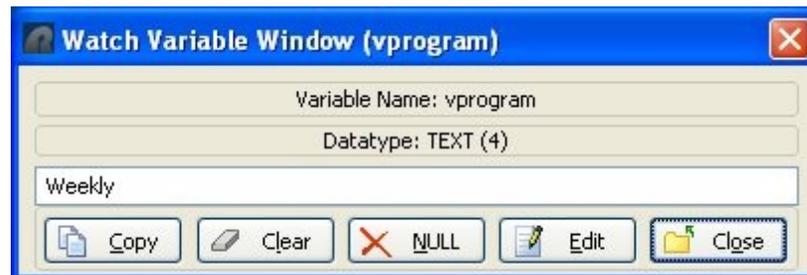


Watch Variable List

Variables

Name	Type	Value
vstart	TIME	16:51:39.306
vprogram	TEXT (25)	Bi-Weekly
vstartdate	DATE	03/13/2004
vpayamount	CURRENCY	\$125.00
vpmtsdue	INTEGER	12
vstudent	INTEGER	4
vpastdue	CURRENCY	\$1,020.00
vbalance	CURRENCY	\$1,020.00
vdays	INTEGER	1914
vdownpay	CURRENCY	\$200.00
vcontract	CURRENCY	\$1,575.00
vdrop	CURRENCY	\$0.00
vdue	CURRENCY	\$1,700.00
vadj	CURRENCY	\$0.00

Copy Clear NULL Edit Show Close



Watch Variable Window (vprogram)

Variable Name: vprogram

Datatype: TEXT (4)

Weekly

Copy Clear NULL Edit Close



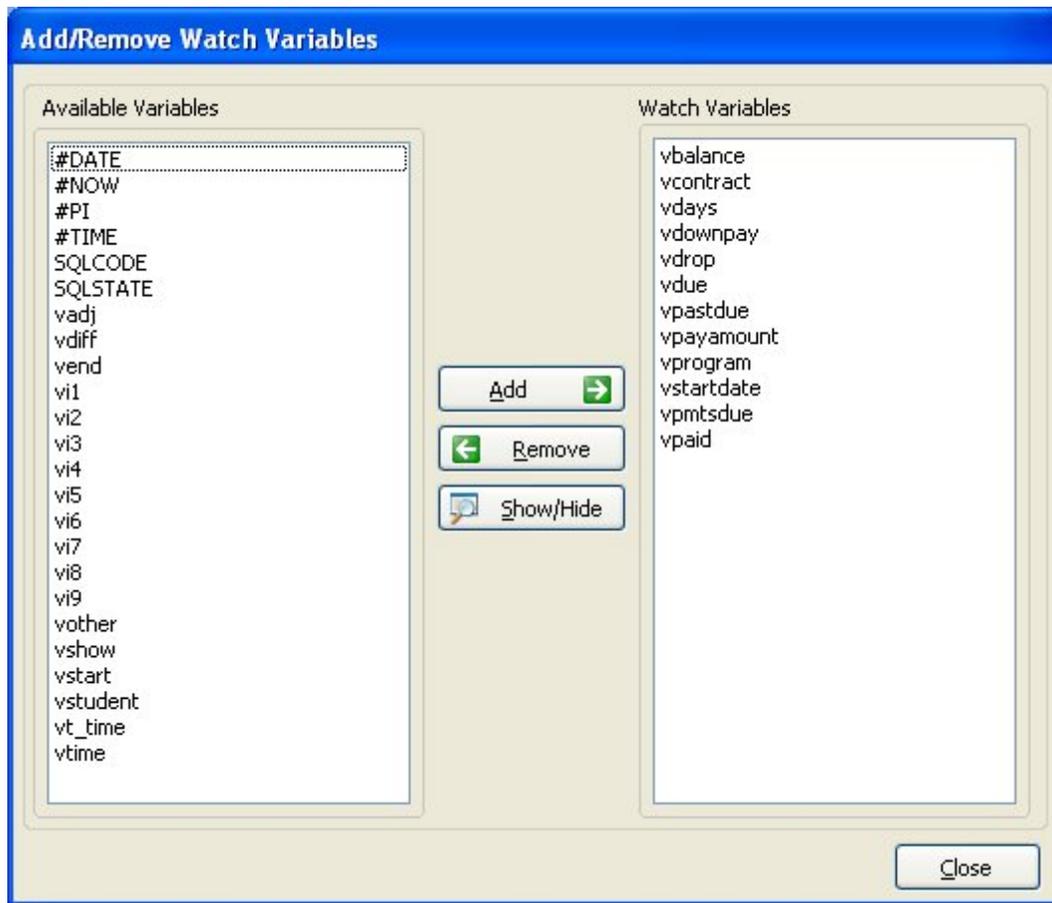
Watch Variable Window (vdownpay)

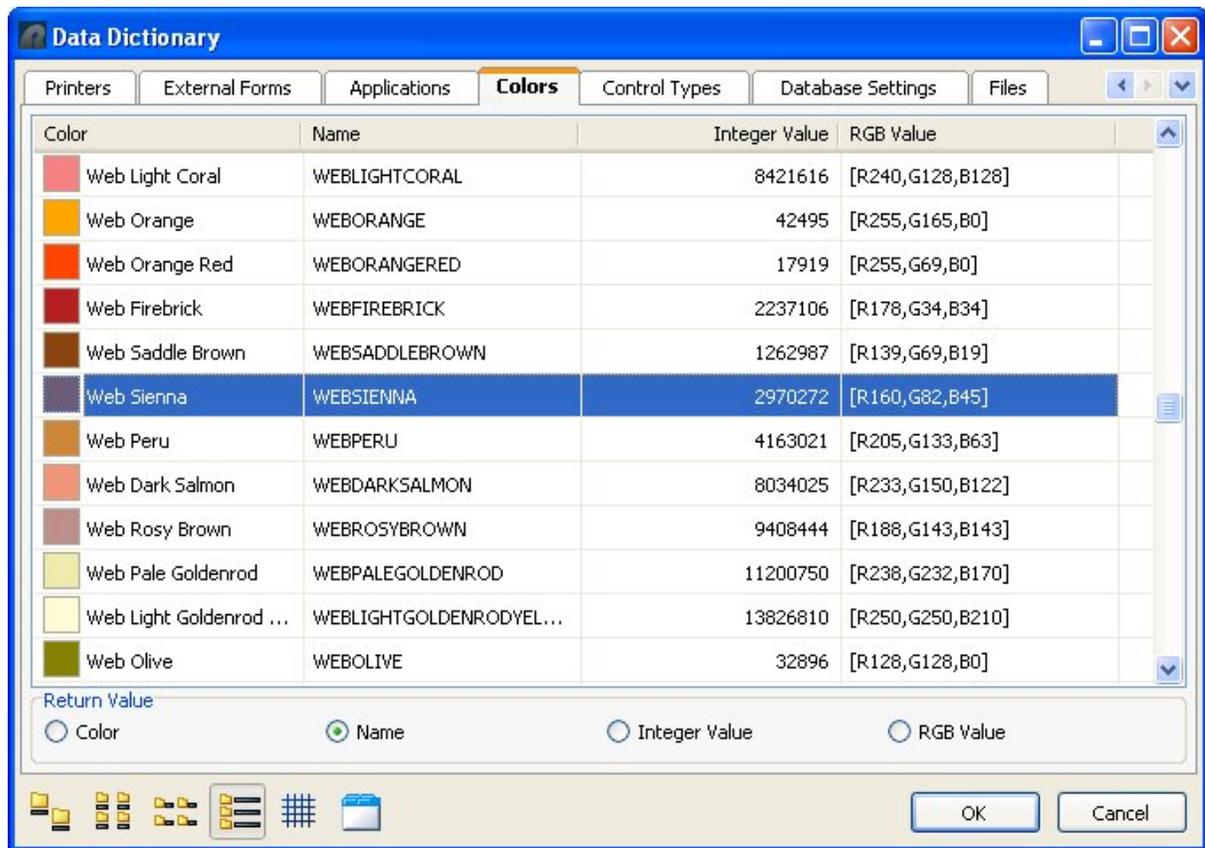
Variable Name: vdownpay

Datatype: CURRENCY

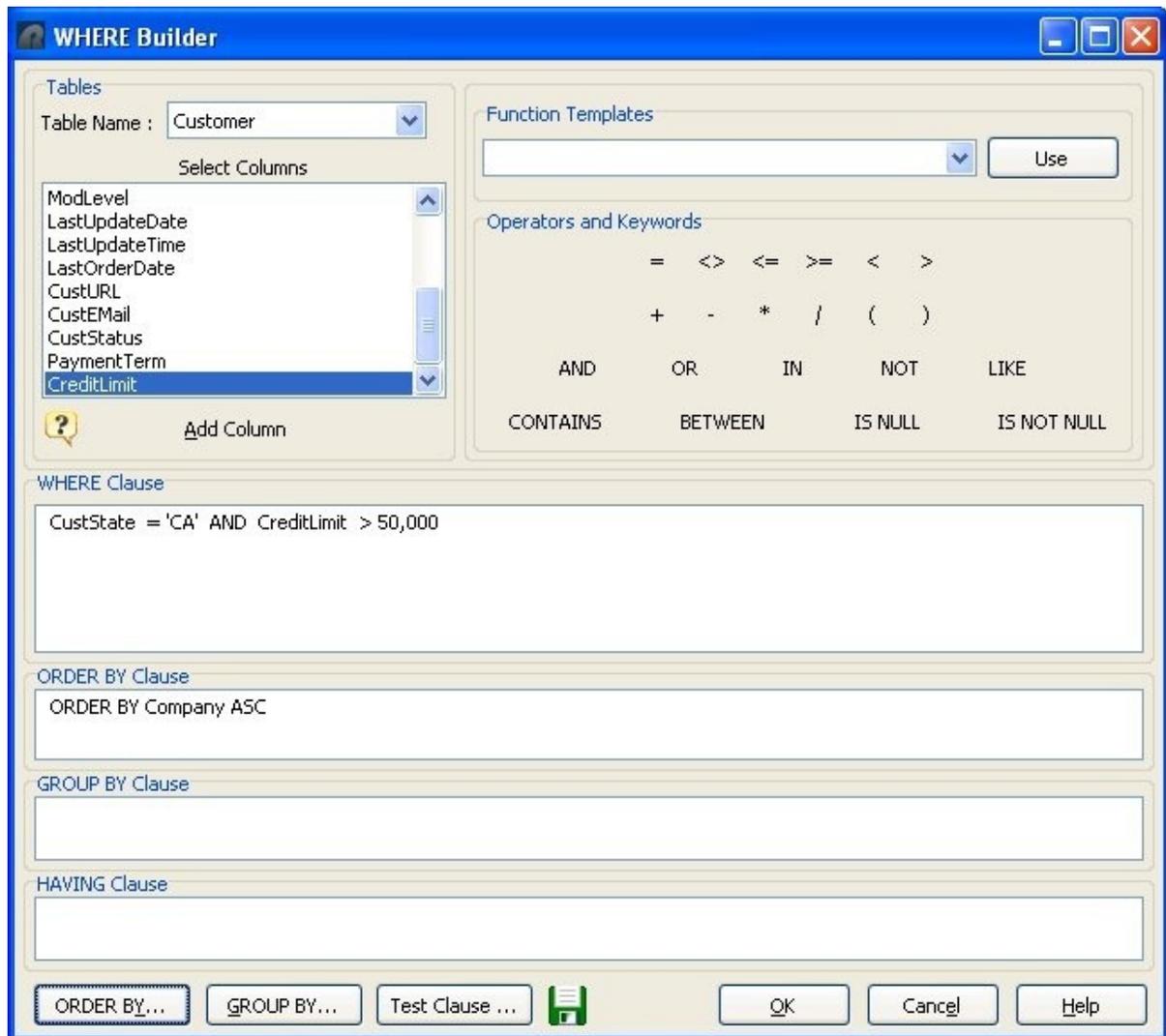
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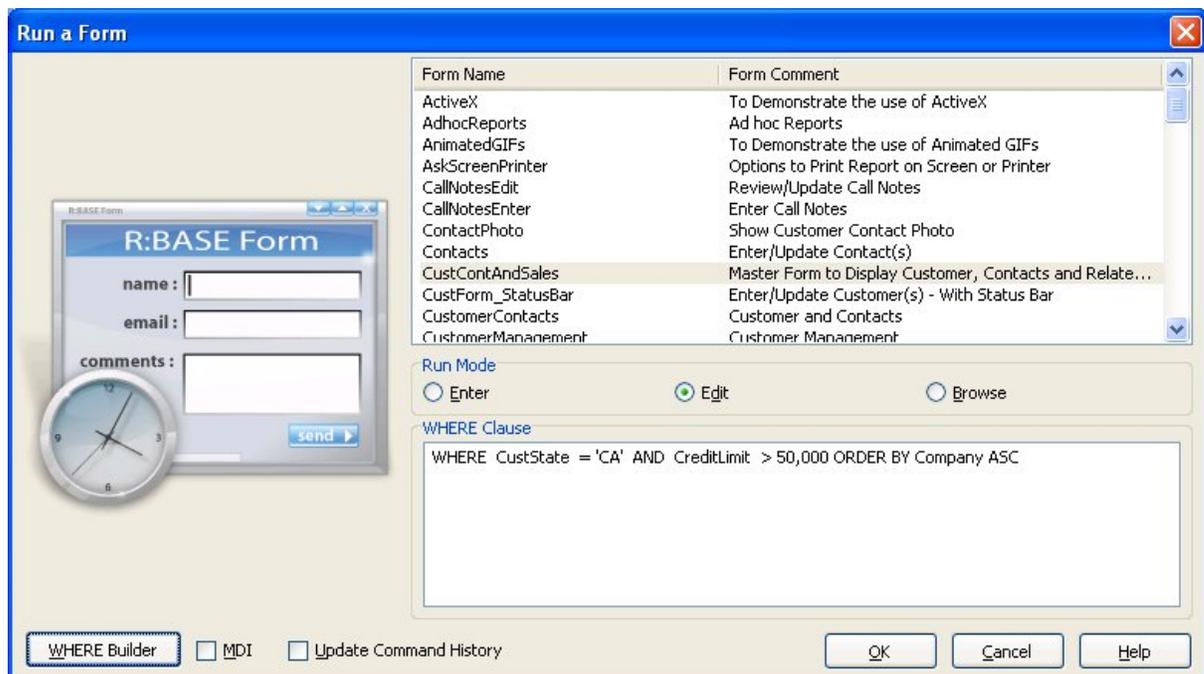
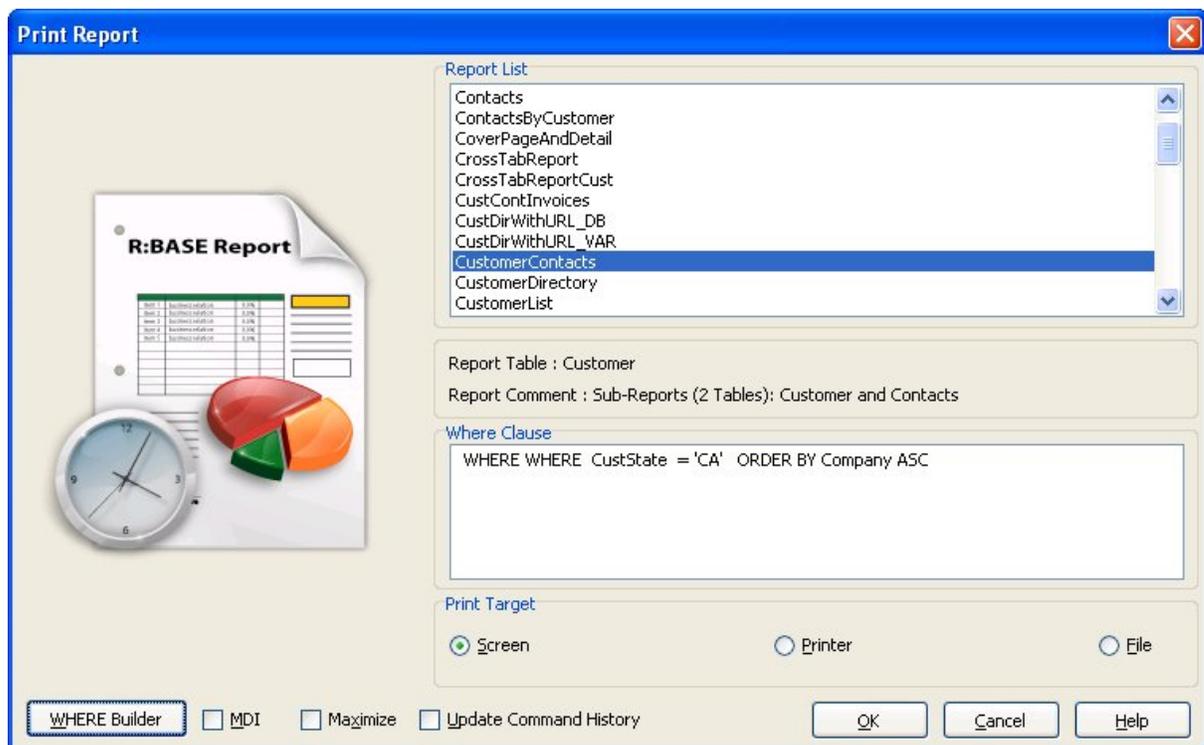




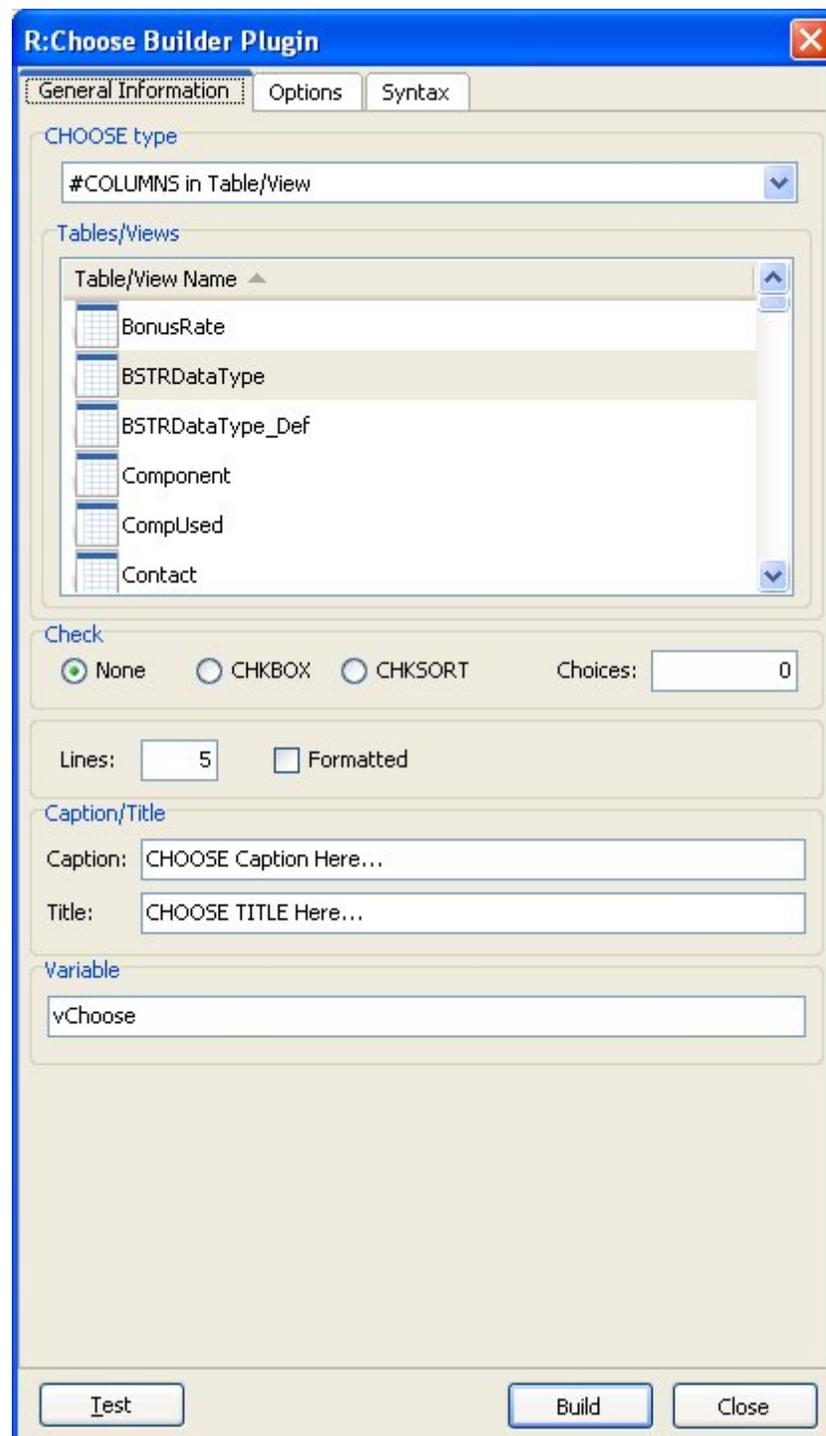
- Enhanced Data Dictionary [F3] to display "Colors"



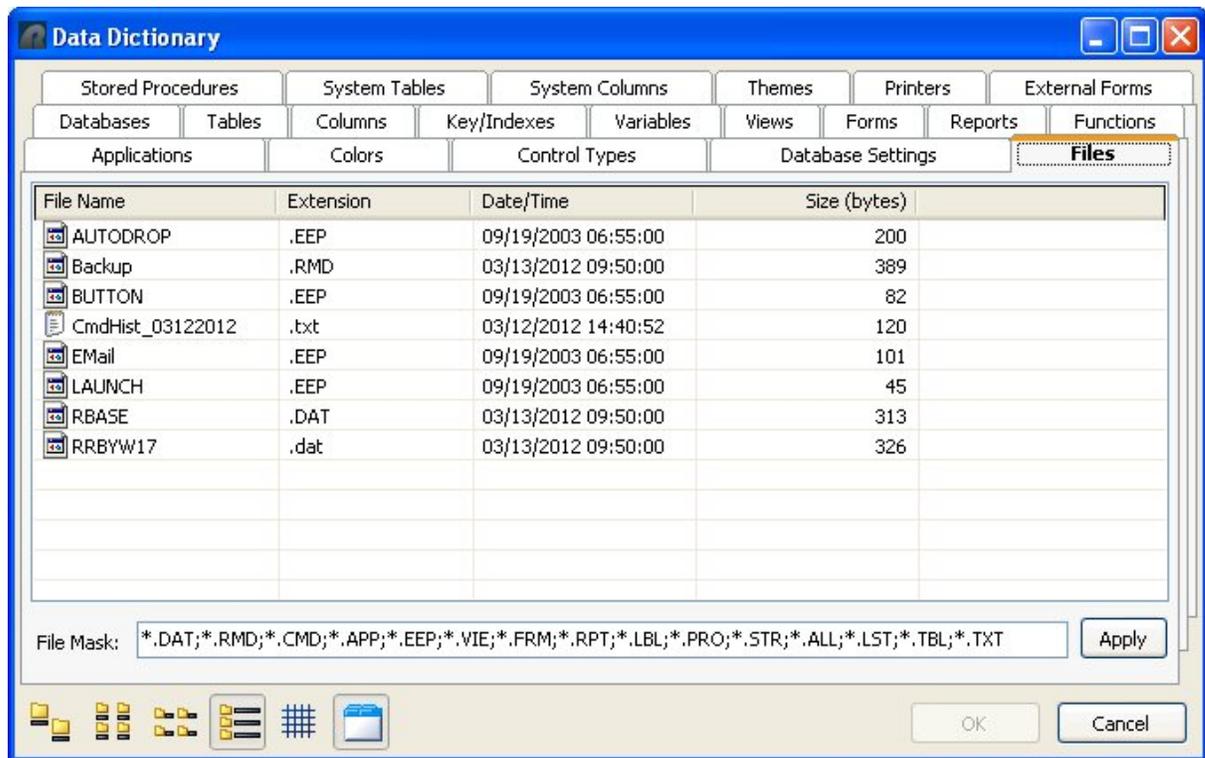
- Ability to expand the WHERE Builder dialog for longer WHERE Clause statements
- Option to Display Column Comments As Hints in the WHERE Builder and Expression Builder
- Additional GROUP BY button added to the WHERE Builder dialog



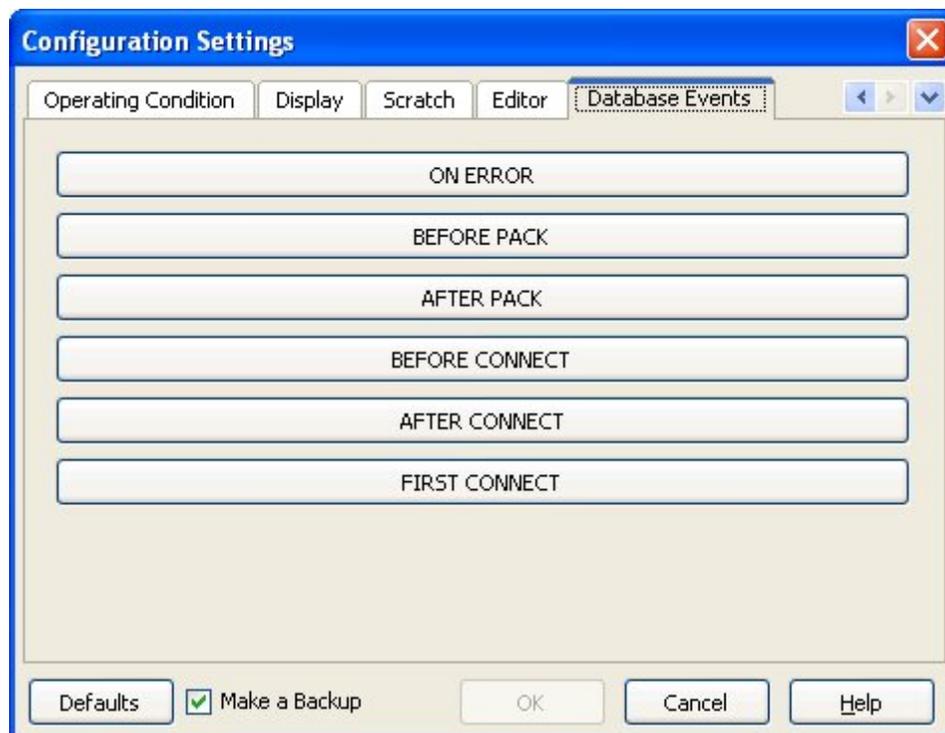
- Enhanced MDI support when running forms and previewing reports



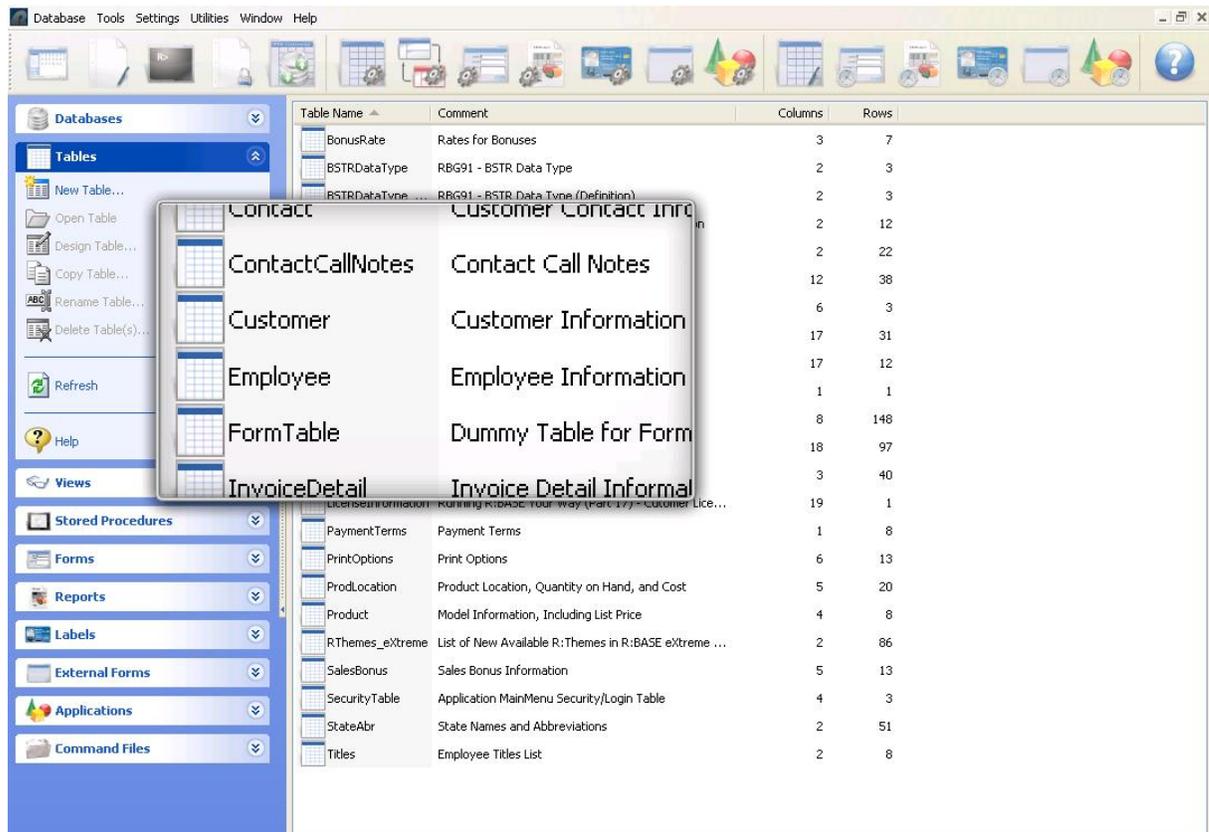
- New "R:Choose Builder Plugin" to create command syntax for the CHOOSE command.



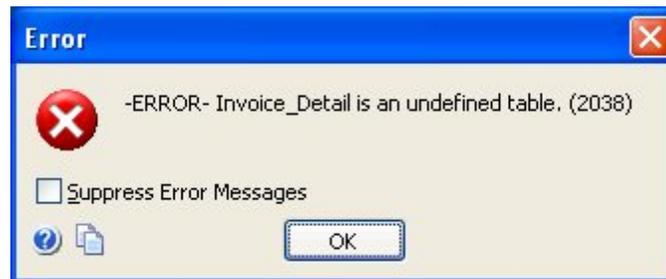
- An additional tab to the Data Dictionary to list the "files" in the current directory.

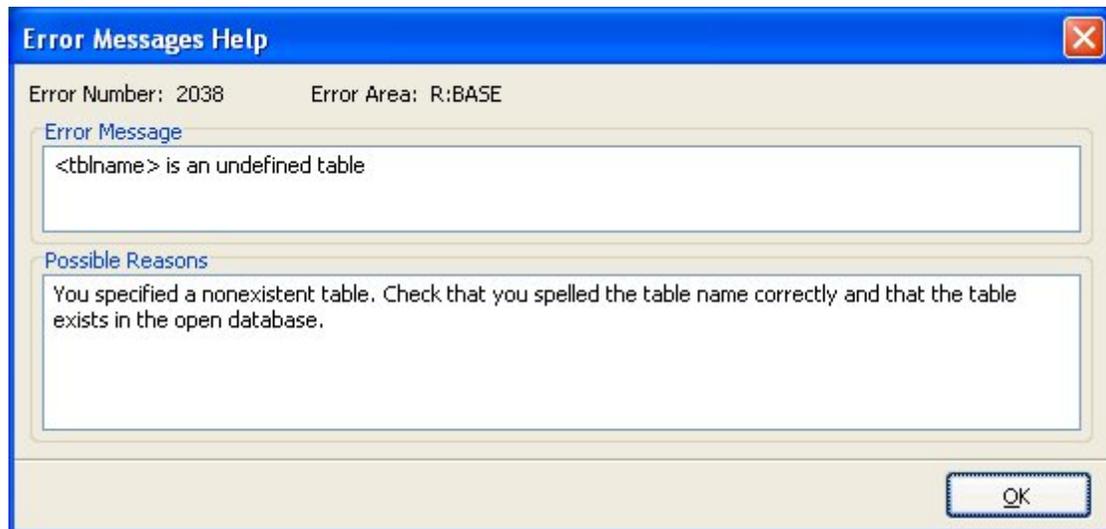


- A "Database Events" interface was added to the Configuration Settings dialog.

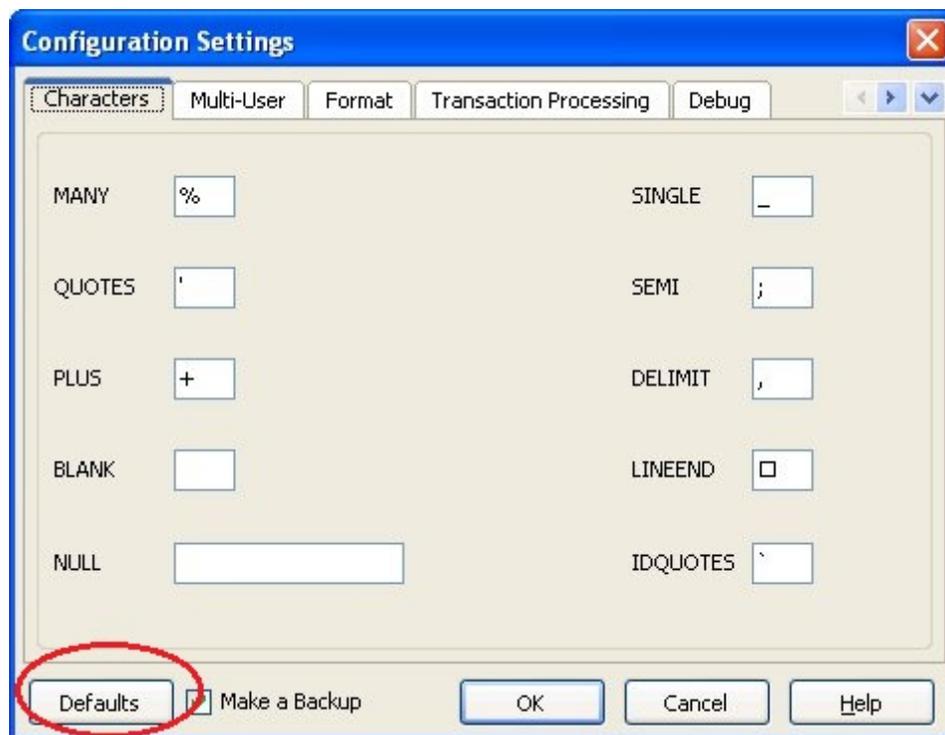


- Cool Magnifying Glass utility to produce an enhanced view of the R:BASE window.

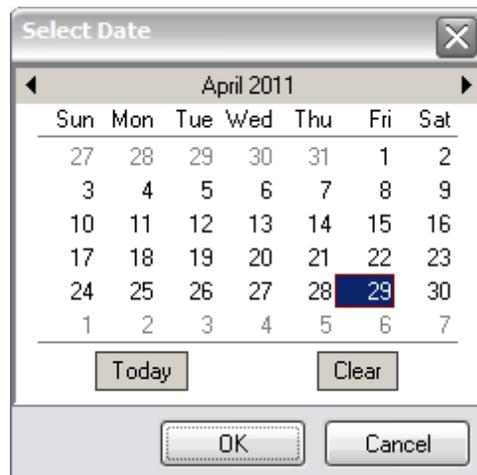




- Enhanced Error Message display with new "Help" and "Copy" buttons



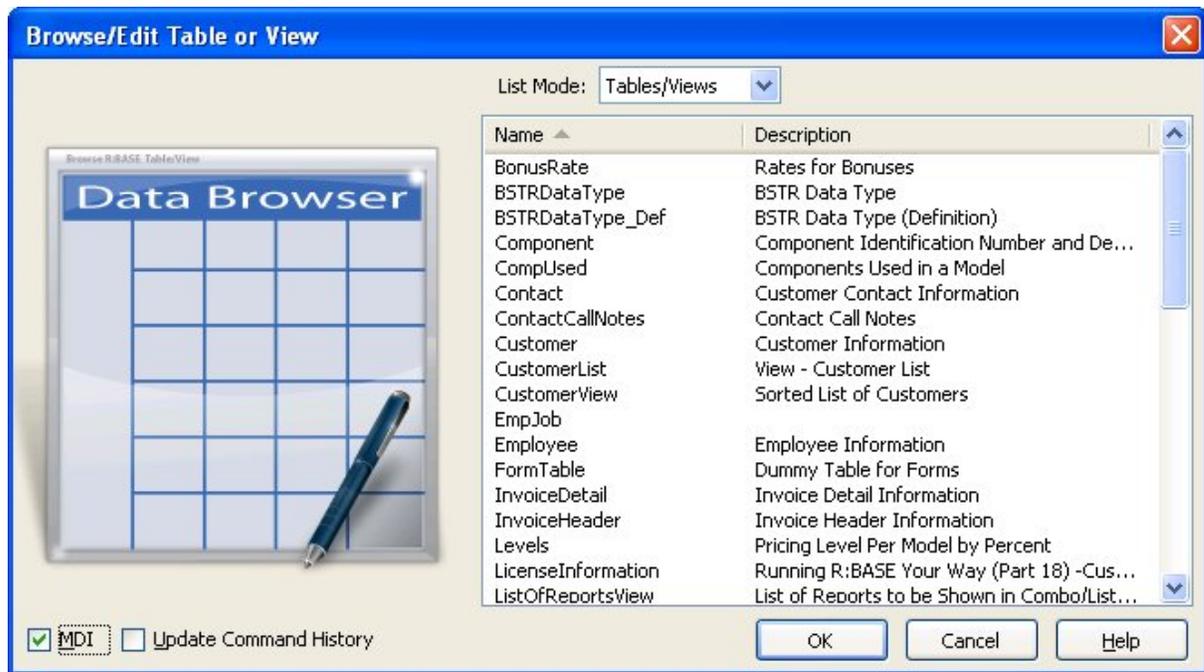
- A "Defaults" button has been added to the Configuration Settings dialog box to restore the default settings for the R:BASE environment.



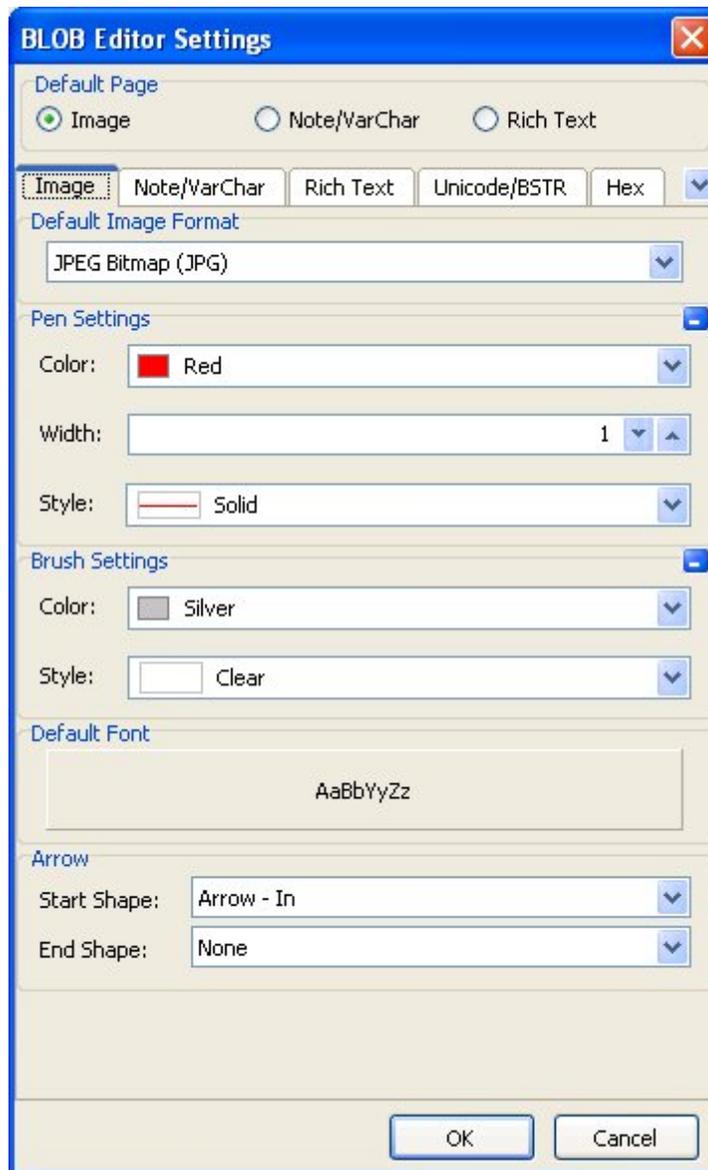
- The **GETDATE** Function supports the ability to specify a custom enhanced calendar, and to display themes



- The font size and color for constraint violation error messages can be altered with two new RBTI System Variables; RBTI_CEM_FONTSIZE and RBTI_CEM_FONTCOLOR



- Support to update the R> Prompt Command History for code used in graphic user interfaces



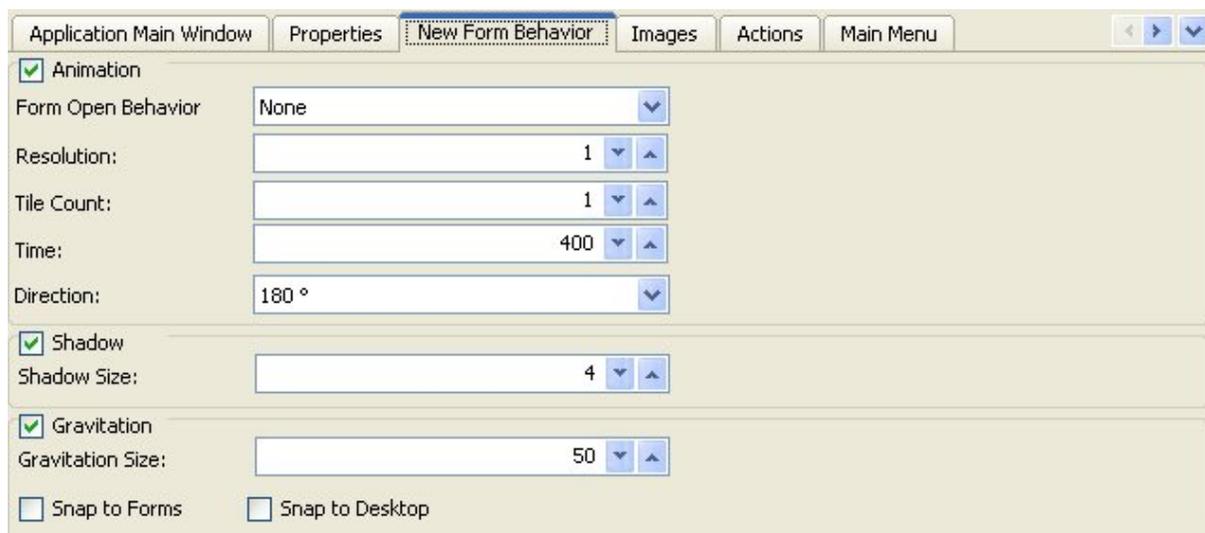
- Enhanced BLOB Editor default settings
- All opened MDI windows are now available from the Windows option on the main Menu Bar
- Added support for mouse "snap to" capability, which causes the cursor to jump to the highlighted button of a new dialog box
- Added RBTI FEEDBACK System Variables RBTI_RowsInserted, RBTI_RowsDeleted, RBTI_RowsUpdated, RBTI_ElapsedTime
- The font size and color for general violation error messages can be altered with two new RBTI System Variables; RBTI_ERR_FONTSIZE and RBTI_ERR_FONTCOLOR
- A new option under the main "Menu Bar" > "Settings" > "Registry Settings" allows users to save and load custom R:BASE environment settings from one development computer to another.
- Ability to display form/report/label name and driving table, during runtime mode, using the [Ctrl]+[Alt]+[I] key combination
- R:BASE BLOB Editor support to add an image at the end of the file list, and to move the selected images up and down the list
- A new RBTI System Variable, RBTI_IMG_FOLDER, is now supported to define a valid folder path where all "Open Image" dialogs will initially start
- Enhanced "Columns" tab of the Data Dictionary will display the expression for a selected computed column

- The Plugin Syntax Builders for the DIALOG and PAUSE commands now include the TOP and LEFT parameters
- The "Scratch" tab of the Configuration Settings dialog has been enhanced to display both the default and active SCRATCH setting
- Support for foreign key constraints on temporary tables
- Support to copy the column definition or just the formula for computed columns in the Data Dictionary
- The R:BASE On-Screen Keyboard has been enhanced to allow resizing, along with HEIGHT and WIDTH parameters to alter the height and width of the ROSK window
- The Print Preview screen has been enhanced to allow users to move from page to page using the [Shift]+Scroll action
- New CHECKPROP setting to toggle the display of PROPERTY/GETPROPERTY errors if a "property" value is invalid.
- Two new CHOOSE command parameters INITVAL and INITPOS are available to preselect a choice in the displayed list
- New NOCALC setting to suppress or process computed column expressions with the UNLOAD and LOAD commands
- Additional options are supported for expanding nodes within the LoadDirectoryName Plugin
- Added "Reset User Count" option to clear invalid database connections
- Enhanced ODBC table attaching, to query the external source and assign keys appropriately
- A new application property allowing forms to be displayed as native
- A new application property allowing form controls to be displayed as native
- Increased VARCHAR variable character-length support for SRPL and similar functions
- New COLCHECK setting which specifies if columns will be checked for consistency when making views
- New CVAL tab in the Data Dictionary
- SELECT TOP parameter support to be implemented within a SUB-SELECT

2 Application Designer

The R:BASE eXtreme Application Designer is has been enhanced with the following features:

- Enhanced "Caption" and "Image Index" display when editing "Main Menu" items
- An "On After Start" Action was added to the Application Designer properties



- A New Form Behavior tab supporting animation, shadowing, and gravitation has been added



- New Dockable Application Designer Toolbar
- Ability to search for text within Custom EEPs

3 Commands

The following enhancements have been made to the R:BASE command syntax:

- Enhanced **CONVERT** command to convert 4.5 and higher database to R:BASE eXtreme
- The table **UNLOAD** functionality has been enhanced to allow the unloading of ODBC Server Table and dBASE table structure
- Enhanced **LAUNCH** command to support several new parameters for operating system operations and show modes for the launched program
- Four new **DIALOG** command parameters are available to customize the font name, font color, font size, and background color for the input field of the message window
 - INPUT_FONT_NAME
 - INPUT_FONT_COLOR
 - INPUT_FONT_SIZE
 - INPUT_BACKGROUND_COLOR
- 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.
- Enhanced **DROP** command to drop multiple views with the same DROP command
- New PROPERTY command parameter **FINDNODE** to search for text in Tree View nodes
- Ability Capture an Enhanced DB Grid Filter as a WHERE Clause with the **GETPROPERTY** command
- Additional **PROPERTY** command parameters to alter R:BASE BLOB Editor window caption and icon
- Additional **PROPERTY** command to cancel the print process
- Additional **PROPERTY** command parameter to disabled and enabled the ability to sort a column title
- Additional **PROPERTY** command parameter to emulate a mouse click on the control column headers
- Enhanced **TURBO** command for improved security for database conversions
- New **PRINT** command PAGE_STYLE_SETTINGS parameter, to control the pages that a Page Style will appear on
- Support for the **CODELOCK** command in Form EEPs and External Form Files
- A new **FIX** parameter GATEWAY EXPORT is supported for fixed width data exports
- A new "MERGE_DATA" option is supported for the GATEWAY EXPORT command when sending data to CSV, TAB, DB, DBF, and fixed length ASCII file formats. If ON, the exported data will be added to the specified file, if exists.
- Enhanced **UNLOAD** table sequence dependency, when rebuilding a database from separate structure and data output
- New **GETPROPERTY** command parameters are available to return executable information
- New command line parameters are available to specify text header and footer values for XLS **GATEWAY** exports
- New **PROPERTY** command parameters have been added to adjust the Pen Style (border) and Brush Style (background) for the "Shape" Control in both Forms and Reports
- New **PROPERTY/GETPROPERTY** command parameters to capture the Enhanced DB Grid Band List count and values, along with the ability to edit the caption and font properties
- New **PROPERTY/GETPROPERTY** command parameters to dynamically pass filter parameters to an Enhanced DB Grid
- The **BROWSE** and **EDIT** commands support additional parameters to toggle the display of zebra stripes, NOTE cell hints, and image hints
- New **PROPERTY/GETPROPERTY** command parameters to dynamically alter hints
- Additional SINGLE_CLICK parameter for the **CHOOSE** command
- Additional **CHOOSE** dialog option to display a "Select All" button when using a **CHKBOX**
- Enhanced **CHOOSE** selection recognition when using the CHKBBOX 1 parameter
- Additional **GETPROPERTY** PAGENO parameter to return the current page number
- Additional **PRINTFIT** parameter for the PDF Viewer Control to print the file output and have the document fit to the page
- New **OPTION STANDARD** parameter for the **PRNSETUP** used to display the standard Windows operating system "Printer Setup" dialog window
- The **DEFF** command includes the MODAL option so an external form file can be modified within an

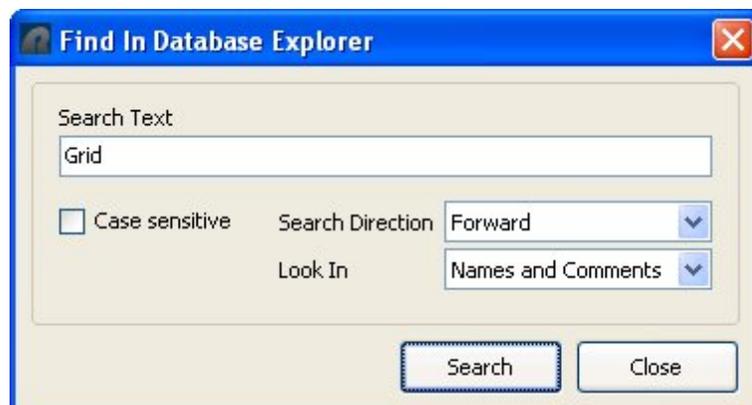
application

- The LIST command supports a new parameter to list only dBASE tables
- The LIST command supports a new parameter to list only Server tables
- The LIST command supports a new parameter to list only temporary tables
- The LIST command supports a new parameter to list only locked tables
- 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).
- A new **PROPERTY** command parameter is available to flush the allocated memory for the R:BASE application instance; PROPERTY APPLICATION FLUSHMEM 'TRUE'
- The **REFF** command, to run an external form file, has been enhanced to support the AS ALIAS and CAPTION parameters
- A new operating condition setting, **SET UINOTIF ON/OFF**, is available to display or suppress table, view, stored procedure, form, report, and label user interface updates at the Database Explorer. Setting UINOTIF to OFF within an application will improve the performance.
- 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 **RBBEDIT** command has been enhanced to specify a "zoom mode" for images and the default tab, for the R:BASE BLOB Editor
- A new command, **RUNRBA**, is now supported to specifically run a .RBA application file
- The **PROPERTY** command support to capture image of the current window and screen has been enhanced to place the image content in the clipboard
- The **INTERSECT** command supports the creation of a new table with common columns with NOTE data types
- A TEMPORARY option has been enhanced for the **JOIN**, **INTERSECT**, **SUBTRACT**, and **UNION** commands, to support the creation of a temporary table
- The **DIALOG** command has been enhanced with the RESIZE_ICON parameter, to resize a specified image to 32x32 pixels
- Additional **PROPERTY** command output options (FITTOPAGE, PROPORTIONAL, FIXEDDPI) are available when printing a form as it is displayed on the screen
- Enhanced **SATTACH** command to limit the columns from an SQL data source
- Enhanced **PRINT** and **LBLPRINT** commands to specify a default printer selection for the Print Preview
- Enhanced **PAUSE** command to support additional font types for button text, and custom button width and height
- Enhanced YES/NO button parameters for the **DIALOG** command to support additional font types, and custom button widths

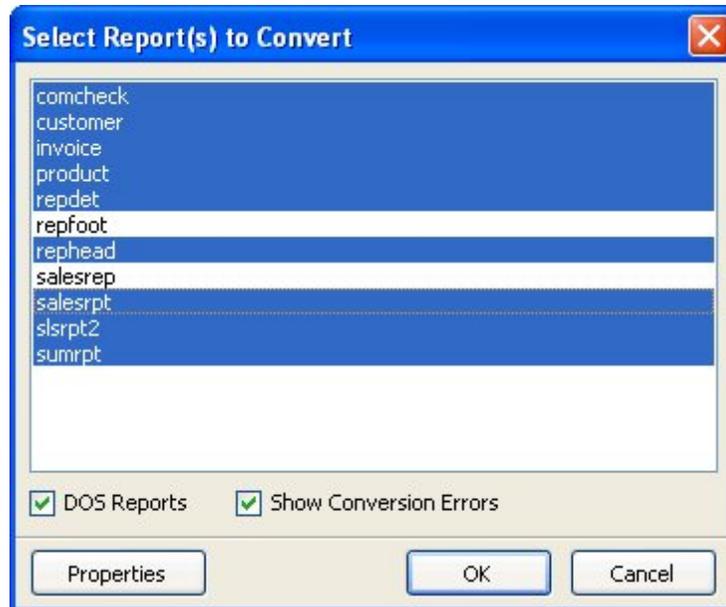
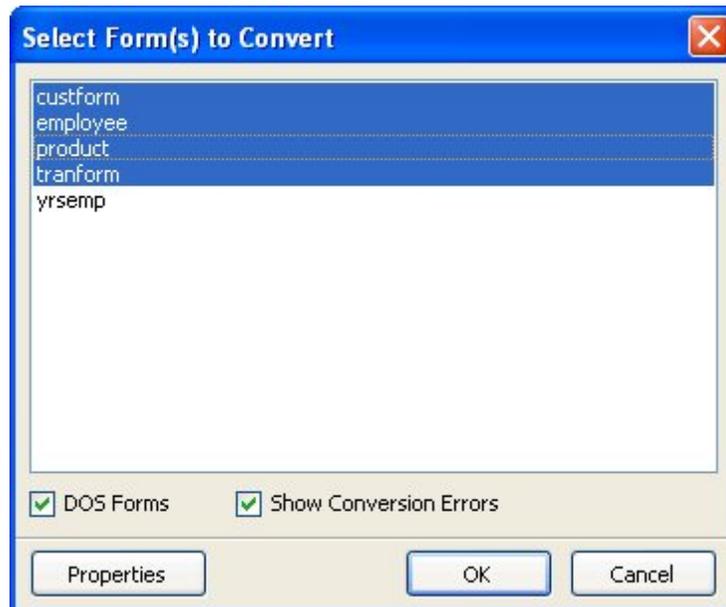
4 Database Explorer

The all new Database Explorer is the central interface to R:BASE eXtreme. New features include:

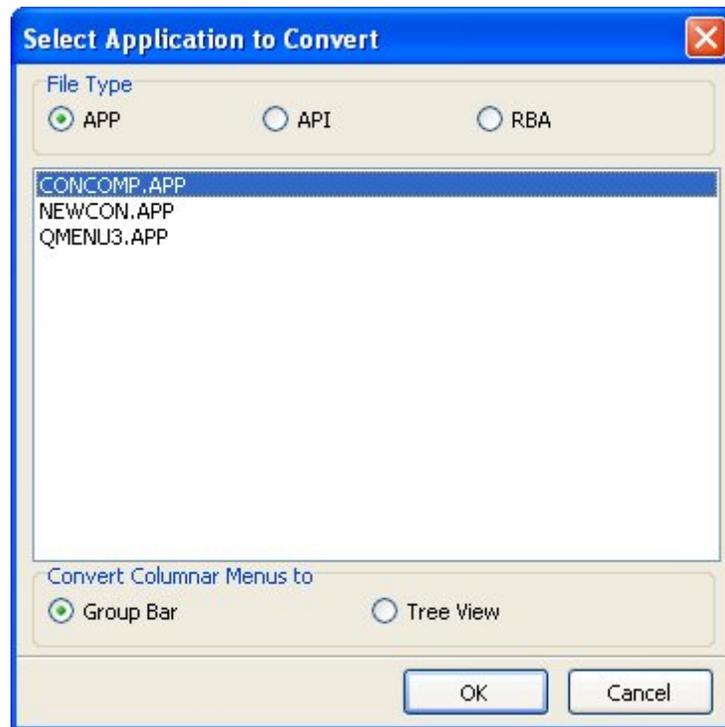
- A "Find in Database Explorer" search utility has been implemented to locate specific text in the Database Explorer



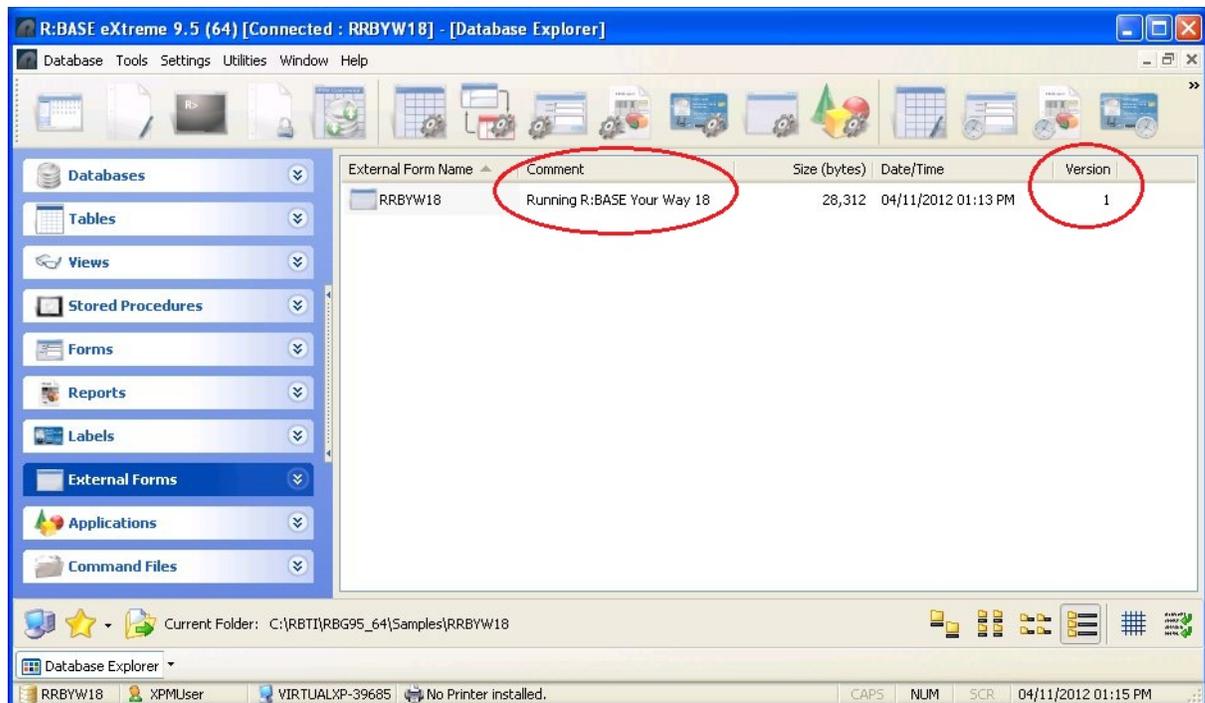
- Enhanced DOS to Windows and Windows to Windows conversion process for forms, reports, and labels



- Ability to convert R:BASE Windows/DOS legacy application files (.APP/.API) and R:BASE 7.x and higher Windows .RBA application files to External Form Files



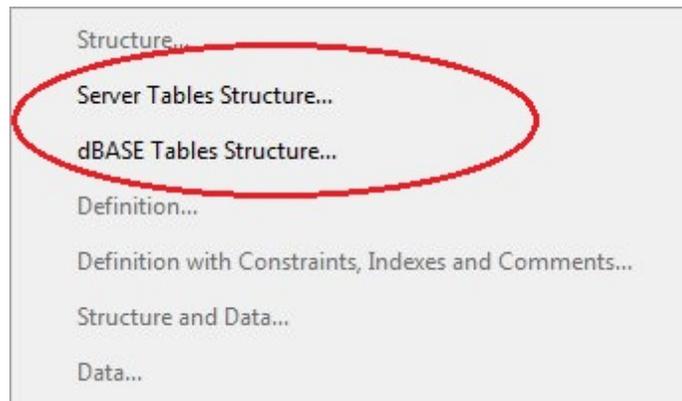
- Support to store Comment and Version information for External Form Files



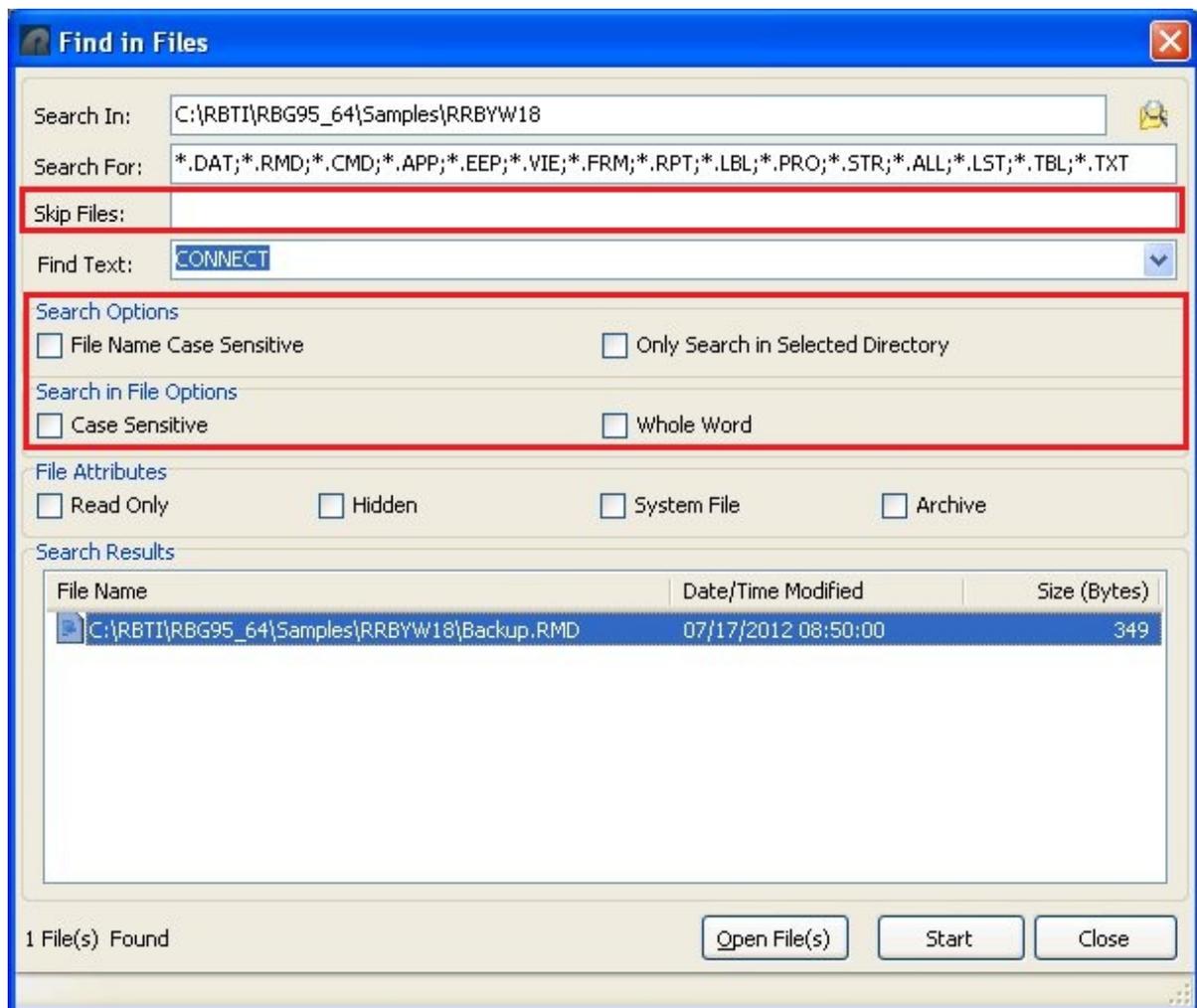
- An Additional menu option is available to copy a database to another folder location when right clicking on a database



- New right click menu options to unload the structure of Server and dBASE tables is available



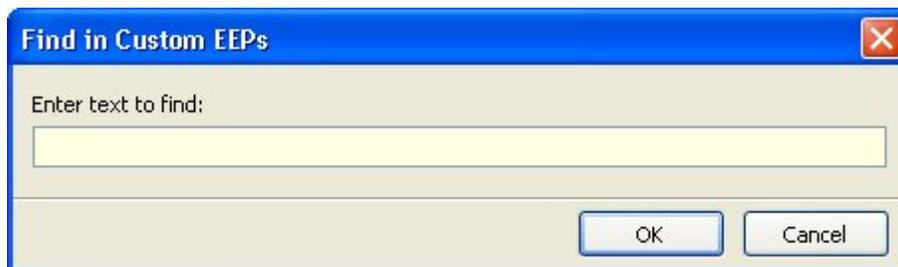
- The "Find in Files" utility includes additional Search options allowing the search for text to be more precise



- A new feature within the "Forms" options allows for a Variable Form to be saved as an External Form File

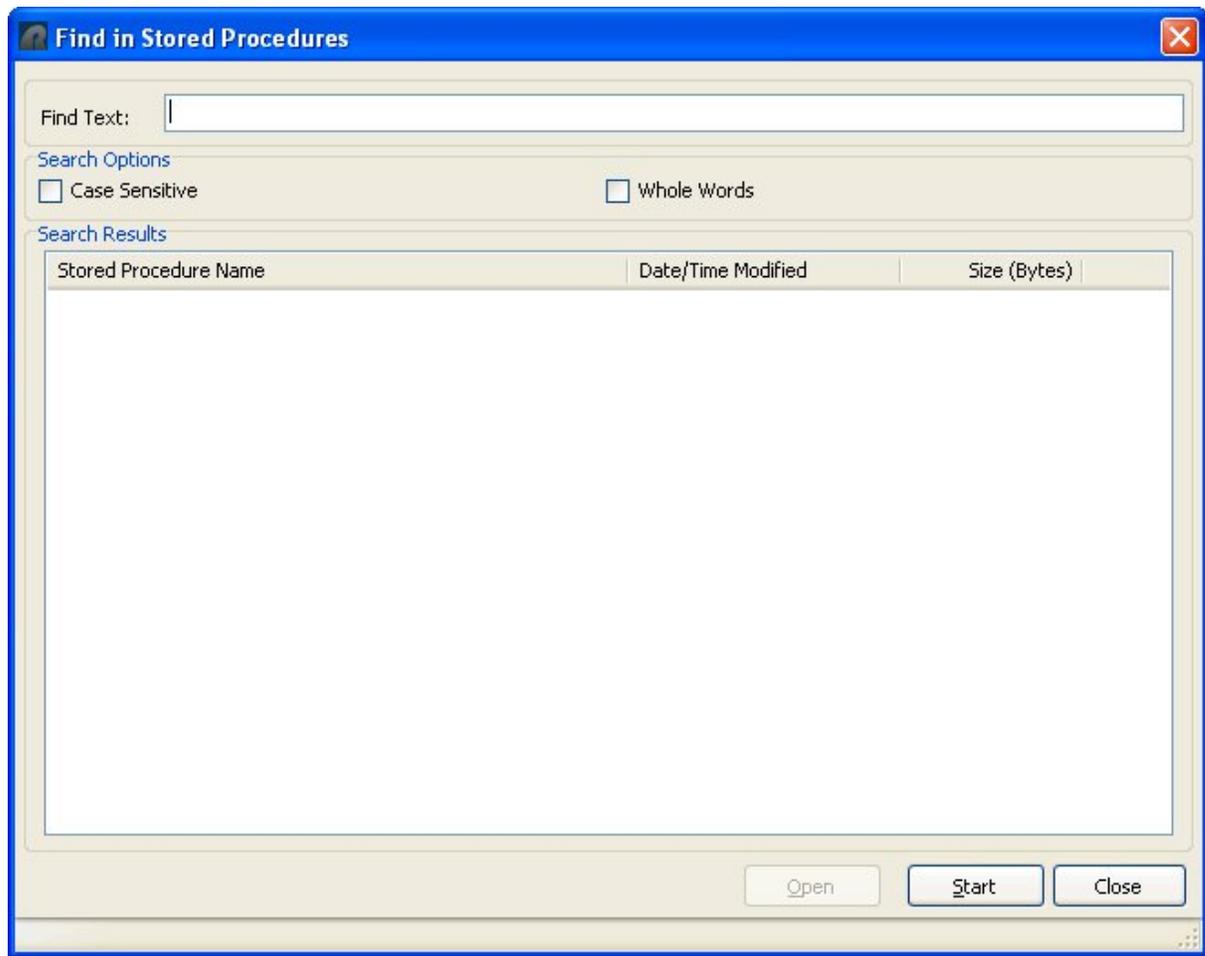


- Ability to search for text in Custom EEPs within Forms, Reports, Labels, External Forms, and Applications

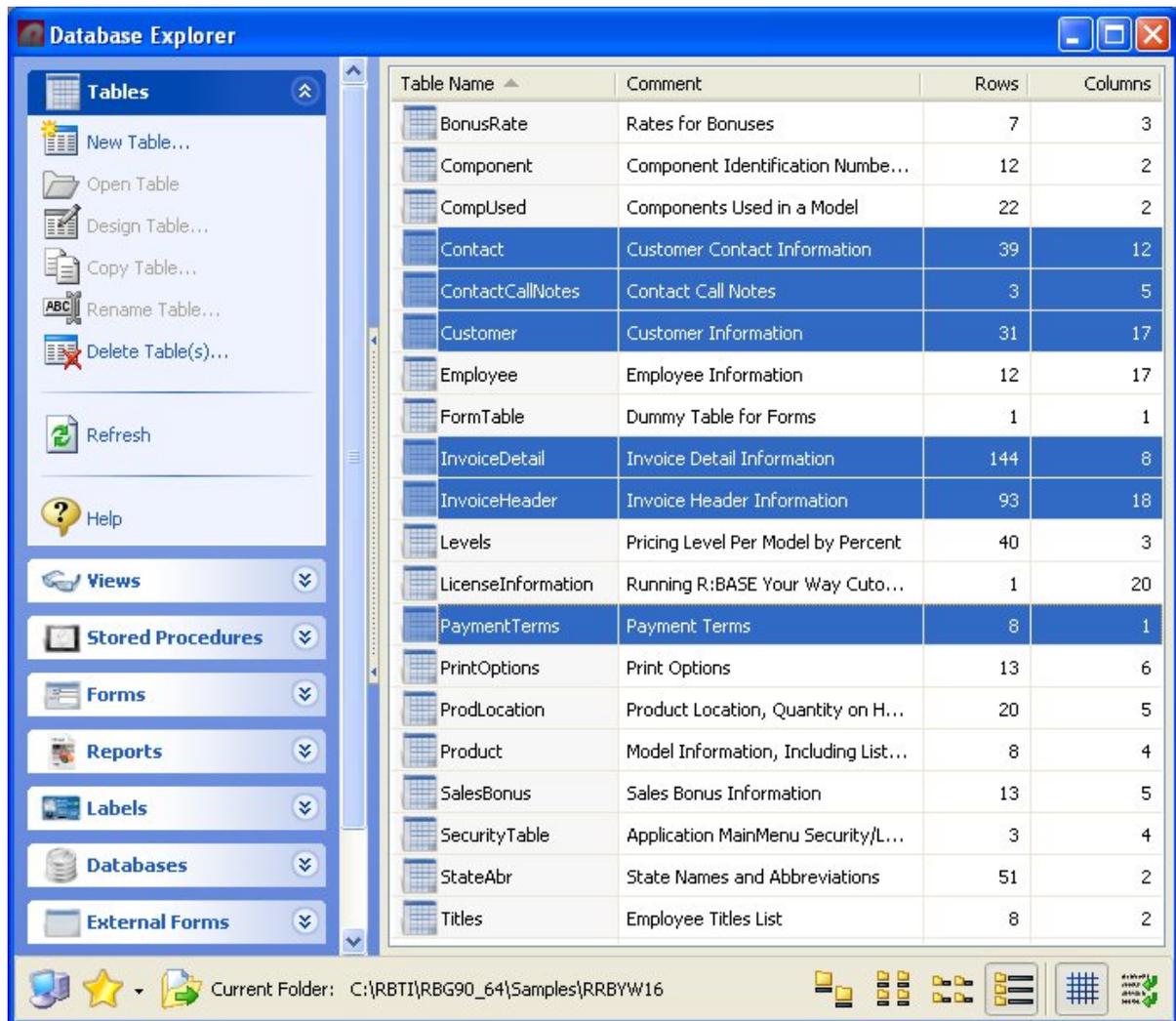


- Support for drag-and-drop "unload capabilities" from Database Explorer objects (forms, reports, labels, tables, views, and stored procedures) to Windows Explorer windows
- The "Find" options for the Forms/Reports/Labels/External Forms/Applications Group Bar menus and right click options now also contain "Find in Expressions... Ctrl+Shift+F" and "Find in Control Properties... Ctrl+L"
- Detailed lock status for connected databases and opened tables

Database Name ▲	Date/Time	Size (bytes)
 RRBYW16	4/28/2009 4:45:22 PM	6,109,788



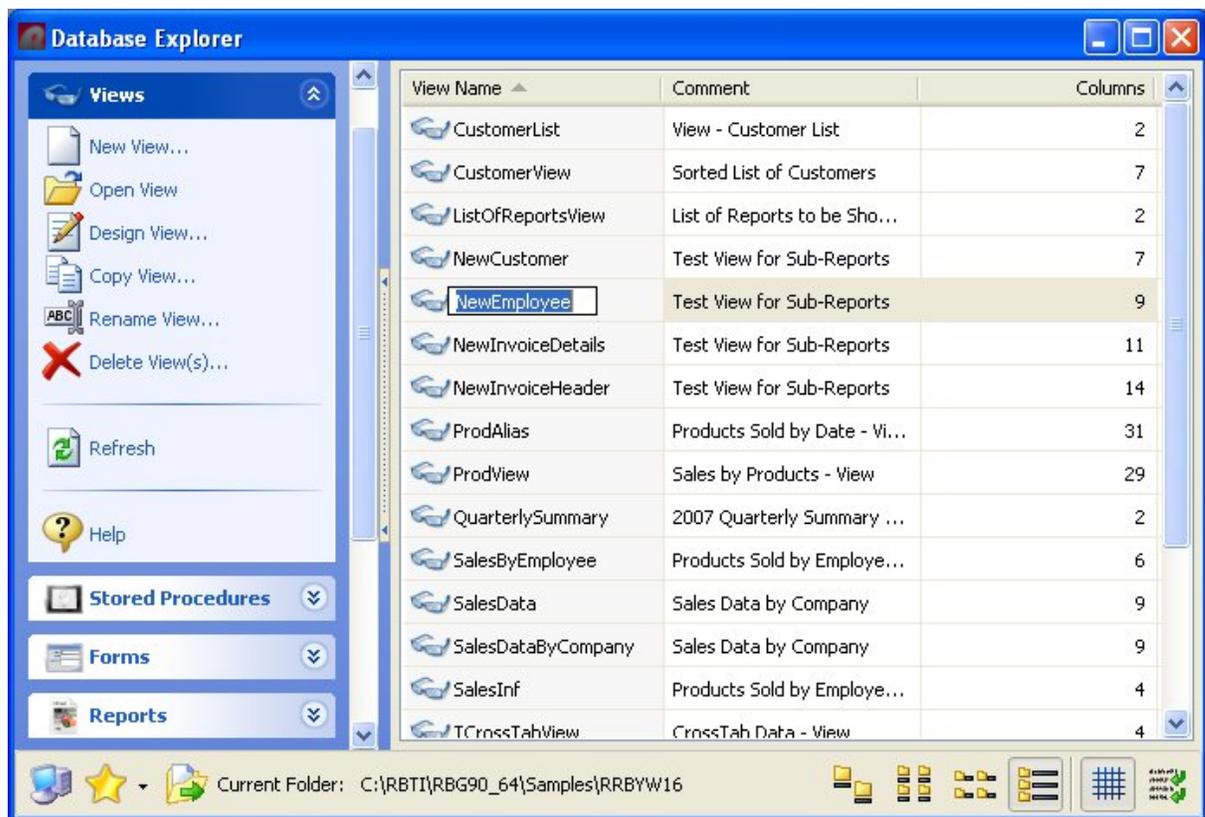
- Ability to search for text within Stored Procedures from the Group Bar
- Ability to cut, copy and paste (using [Ctrl]+[X], [Ctrl]+[C] and [Ctrl]+[V]) External Form Files, Command Files, and Application files into Windows Explorer windows



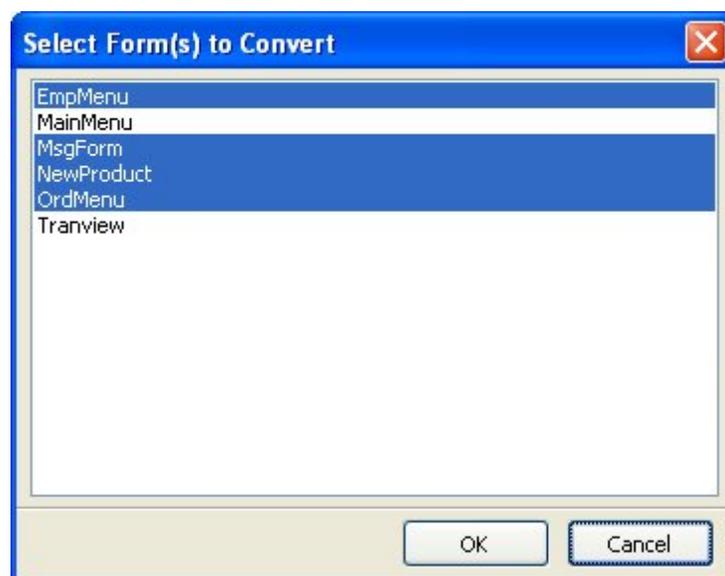
- Multi-Select is available for all Database Explorer objects

Form Name ▲	Main Table	Comment	Size (bytes)	Date/Time	Version
ActiveX	FormTable	To Demonstrate the use of ActiveX	3,240	11/17/2008 11:59:27	13
AdhocReports		RRBYW15 - Ad hoc Reports	14,967	02/19/2009 10:30:56	2
AnimatedGIFs	FormTable	To Demonstrate the use of Animat...	73,387	04/02/2009 15:57:37	2
AskScreenPrinter	FormTable	Options to Print Report on Screen ...	22,401	10/18/2008 01:41:15	1
CallNotesEdit	ContactCallNotes	Review/Update Call Notes	51,094	10/18/2008 01:41:15	1
CallNotesEnter	ContactCallNotes	Enter Call Notes	25,328	10/18/2008 01:41:15	1
ContactPhoto	Contact	Show Customer Contact Photo	8,109	10/18/2008 01:41:15	1
Contacts	Contact	Enter/Update Contact(s)	47,363	11/21/2008 09:36:11	4
CustContAndSales	Customer	Master Form to Display Customer, ...	10,280	11/21/2008 10:55:34	3
CustForm_StatusBar	Customer	Enter/Update Customer(s) - With ...	66,460	10/18/2008 01:41:15	1
CustomerContacts	Customer	Customer and Contacts	79,738	10/18/2008 01:41:15	1
CustomerManagement	FormTable	Customer Management	54,582	10/18/2008 01:41:15	1
Customers	Customer	Enter/Update Customer(s)	7,679	04/10/2009 14:12:26	4
Customers_Users	Customer	Enter/Update Customer(s)	61,842	10/18/2008 01:41:15	1
CustomFormActions	FormTable	To Demonstrate the Use of Custo...	16,504	10/18/2008 01:41:15	1
CustomPopupMenus	FormTable	To Demonstrate the use of Custo...	56,940	10/18/2008 01:41:15	1
CustomPopupSplash	FormTable	Custom Pop-ups Splash Screen	2,645	10/18/2008 01:41:15	1
CustSearchByST	FormTable	Customer Search By State (Using ...	93,589	10/18/2008 01:41:15	1
CustSearchByST_Tot	FormTable	Customer Search By State (Using ...	96,649	10/18/2008 01:41:15	1
DBChkBoxInSR	Customer	DB CheckBox in Scrolling Region	8,375	10/18/2008 01:41:15	1
DBGridProperties	Employee	To Demonstrate the Use of Dyna...	11,629	10/18/2008 01:41:15	1
DBGridWithPickList	Employee	To Display DBGrid with Pick List	2,453	04/24/2009 14:38:39	16
DigitalClock		Digital Clock	1,665	10/18/2008 01:41:15	1

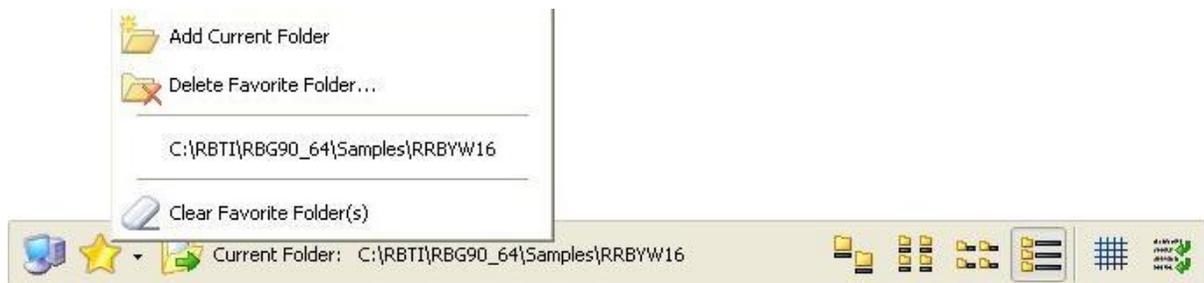
- Added "Date/Time" column for Forms, Reports, and Labels (R:BASE eXtreme 9.1 (**64**) only)
- Added "Version" column for Forms, Reports, and Labels (R:BASE eXtreme 9.1 (**64**) only)



- Renaming of Database Explorer objects using the [F2] key is enabled
- Smart default output file naming conventions provided when unloading all Database Explorer objects
- Ability to launch the R:BASE Editor for several selected command files



- Enhanced legacy object conversion to support multiple forms, reports, or labels
- Sort options are kept for each Database Explorer object group

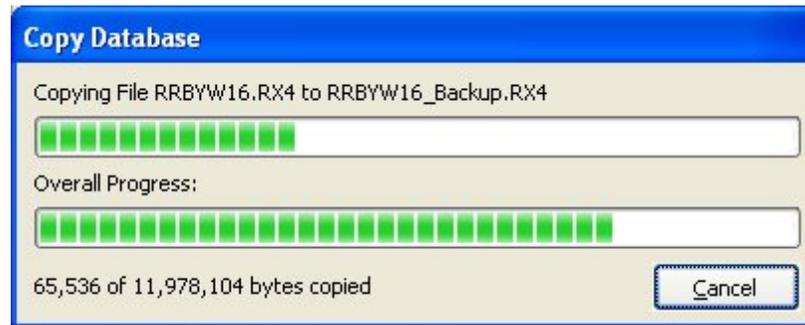


- New "Favorite Folders" feature within the Property Bar, to store common folder locations
- New "Show/Hide Grid Lines" button within the Property Bar
- New "Launch File Explorer" button within the Property Bar
- The "Current Folder" displayed will act as an active link to launch the folder
- Sort visualization enabled, by showing an "Asc/Desc" arrow within the column

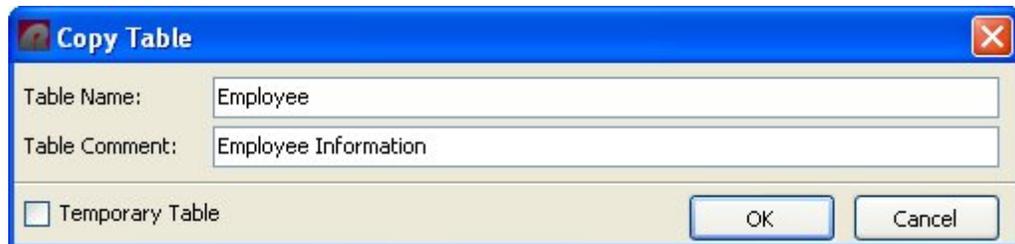
Table Name ▲	Comment	Rows	Columns ▲
--------------	---------	------	-----------

Table Name ▲	Comment	Rows	Columns ▲
- I - [2]			
InvoiceDetail	Invoice Detail Information	144	8
InvoiceHeader	Invoice Header Information	93	18
- L - [2]			
Levels	Pricing Level Per Model by Percent	40	3
LicenseInformation	Running R:BASE Your Way Cutomer License Inf ...	1	20
- P - [4]			
PaymentTerms	Payment Terms	8	1
PrintOptions	Print Options	13	6
ProdLocation	Product Location, Quantity on Hand, and Cost	20	5
Product	Model Information, Including List Price	8	4
- S - [3]			
SalesBonus	Sales Bonus Information	13	5
SecurityTable	Application MainMenu Security/Login Table	3	4
StateAbr	State Names and Abbreviations	51	2
- T - [1]			

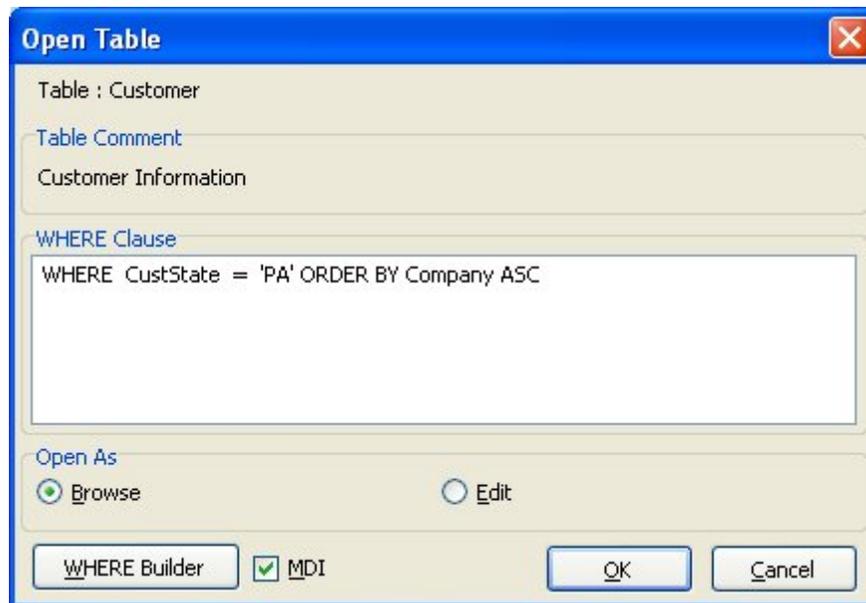
- New "Show in Group" button within the Property Bar for easier sorting of objects



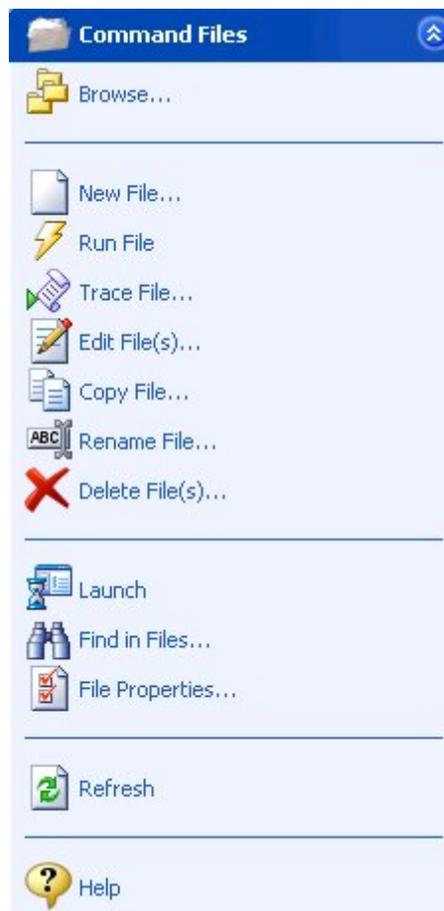
- Enhanced feedback display when copying a database greater than 10MB
- Enhanced feedback display when copying a table with greater than 25,000 records



- Added "Temporary Table/View" check box option when copying a table or view



- New setting to add a WHERE Clause, change the browse mode, and use an MDI window when opening any table/view



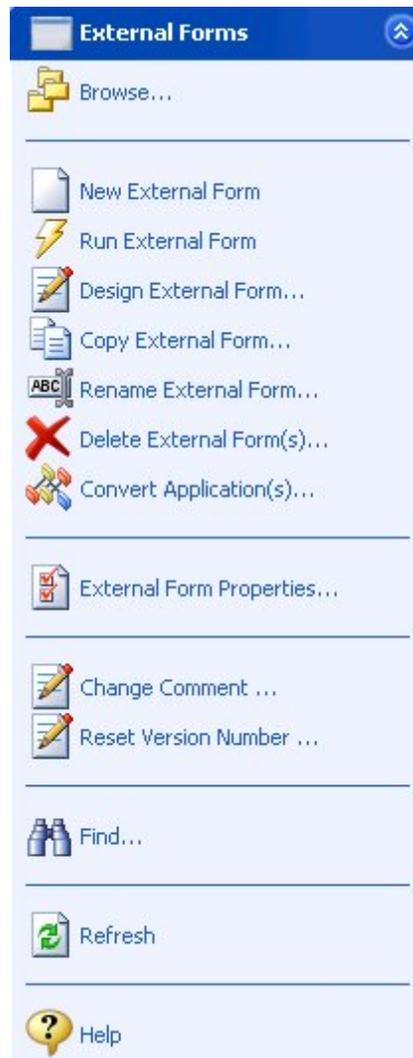
- New "Launch" option added to the Group Bar for Command Files



- Added "Load/Unload" options added to the Group Bar for Forms, Reports, and Labels



- Added "Compress/Uncompress" options added to the Group Bar for Forms
- Added "Change Form(s) Theme" option added to the Group Bar for Forms



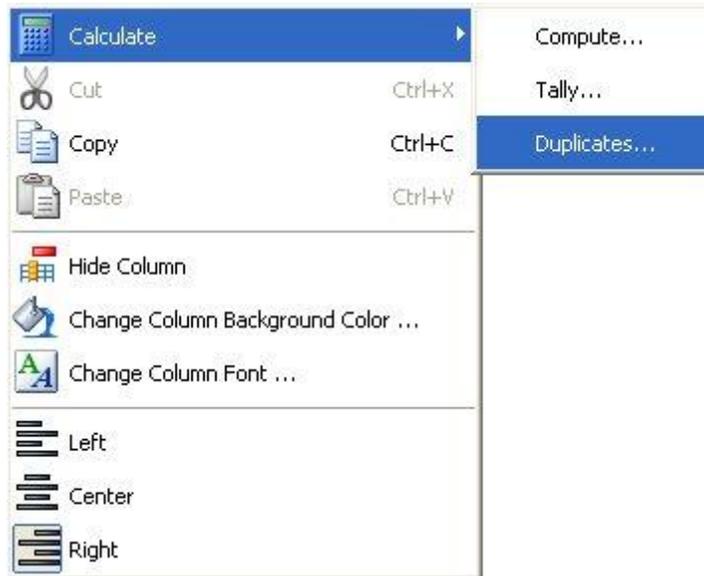
- Added file "Properties" option for External Forms, Applications, and Command Files
- New option to change the background color for multiple forms at once
- Enhanced "Find in Control Properties" search utility [Ctrl+L], to also locate specific text defined within the properties of Custom Form Action definitions (Command Name, Description, Component ID)

5 Data Browser/Editor

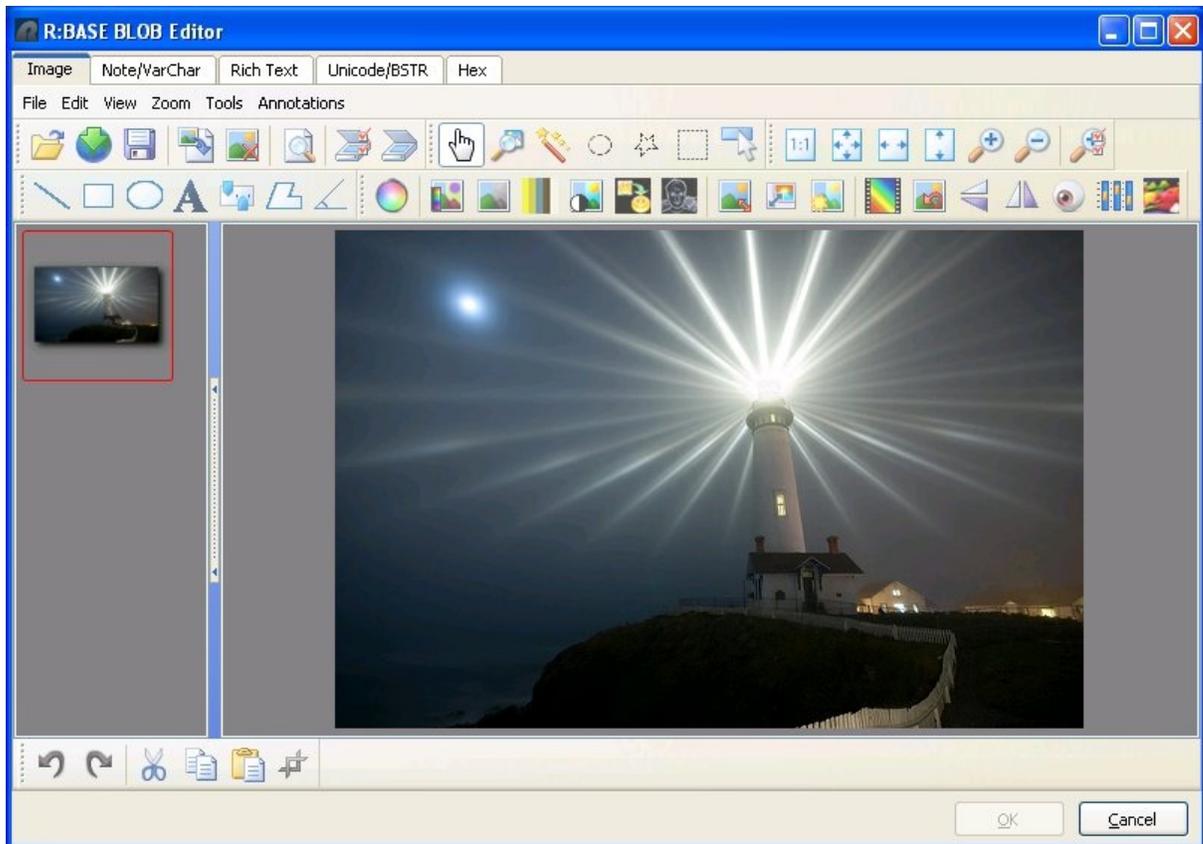
The R:BASE eXtreme Data Browser/Editor is a powerful yet simple interface to browse and edit data in your R:BASE database. The following new features allow for streamlined data review and modification:



- Additional "Duplicate Row" option [Ctrl+F2] added



- Additional right click speed menu "Calculate" option for Compute, Tally, and Duplicates



- Enhanced NOTE/VARCHAR/BLOB display with the integrated "R:BASE BLOB Editor" within the Data Browser



- New "Save Layout" button



- New Dockable Toolbars

Data Browser. . . [SalesData]

Company	InvoiceTotal	Freight	Tax	NetAmount
Bytes & Words	\$35,250.21	\$323.10	\$2,617.11	\$32,310.00
Computer Warehouse - II	\$28,975.87	\$265.59	\$2,151.28	\$26,559.00
RAM Data Systems, Inc.	\$27,007.16	\$247.55	\$2,005.11	\$24,754.50
RAM Data Systems, Inc.	\$24,581.87	\$225.32	\$1,825.05	\$22,531.50
RAM Data Systems, Inc.	\$23,468.50	\$215.11	\$1,742.39	\$21,511.00
Bytes & Words	\$23,297.54	\$213.54	\$1,729.70	\$21,354.30
RAM Data Systems, Inc.	\$22,858.09	\$209.52	\$1,697.07	\$20,951.50
Compumasters Computer Supply	\$22,750.08	\$208.53	\$1,689.05	\$20,852.50
RAM Data Systems, Inc.	\$21,552.71	\$197.55	\$1,600.16	\$19,755.00
RAM Data Systems, Inc.	\$21,552.71	\$197.55	\$1,600.16	\$19,755.00
RAM Data Systems, Inc.	\$21,552.71	\$197.55	\$1,600.16	\$19,755.00
Compdat Computer Consulting	\$21,552.71	\$197.55	\$1,600.16	\$19,755.00
Bytes & Words	\$19,157.96	\$175.60	\$1,422.36	\$17,560.00
Blue Ridge Technologies, Inc.	\$18,801.20	\$172.33	\$1,395.87	\$17,233.00
Compdat Computer Consulting	\$17,625.11	\$161.55	\$1,308.56	\$16,155.00
Compdat Computer Consulting	\$17,625.11	\$161.55	\$1,308.56	\$16,155.00
RAM Data Systems, Inc.	\$16,966.14	\$155.51	\$1,259.63	\$15,551.00

Record : 1

View as Grid | View as Row

Table Name : SalesData | Edit Mode | Field Name : Company | Datatype : TEXT (40)

- Enhanced layout functionality to save the for column order

TransID	DetailNum	Model	Units	Price	Discount	SalePrice	ExtPrice
1007	1	PB3050	4	\$2,195.00	20	\$1,756.00	\$7,024.00
1008	1	PX3040	3	\$1,540.00	10	\$1,386.00	\$4,158.00
1009	1	PX3040	6	\$1,540.00	20	\$1,232.00	\$7,392.00
1010	1	MB3030	2	\$1,195.00	10	\$1,075.50	\$2,151.00
1011	1	PX3040	4	\$1,540.00	10	\$1,386.00	\$5,544.00
1012	1	MX3030	1	\$1,795.00	10	\$1,615.50	\$1,615.50
1012	2	PX3040	3	\$1,540.00	10	\$1,386.00	\$4,158.00
1013	1	CX3020	5	\$995.00	10	\$895.50	\$4,477.50
1014	1	CX3010	2	\$1,045.00	10	\$940.50	\$1,881.00
1015	1	CX3000	2	\$945.00	10	\$850.50	\$1,701.00
1016	1	MX3020	3	\$1,345.00	3	\$1,304.65	\$3,913.95
1017	1	CX3000	5	\$945.00	10	\$850.50	\$4,252.50
1018	1	CX3000	2	\$945.00	10	\$850.50	\$1,701.00
1019	1	CX3000	2	\$945.00	0	\$945.00	\$1,890.00
1020	1	PX3040	2	\$1,540.00	10	\$1,386.00	\$2,772.00
1021	1	PX3040	1	\$1,540.00	10	\$1,386.00	\$1,386.00
1022	1	MX3020	4	\$1,345.00	10	\$1,210.50	\$4,842.00
1023	1	CX3010	6	\$1,045.00	10	\$940.50	\$5,643.00
1024	1	MB3030	10	\$1,195.00	10	\$1,075.50	\$10,755.00
1025	1	MB3030	3	\$1,195.00	10	\$1,075.50	\$3,226.50
1026	1	CX3020	1	\$995.00	10	\$895.50	\$895.50
1026	2	CX3010	1	\$1,045.00	10	\$940.50	\$940.50
1026	3	PB3050	1	\$2,195.00	10	\$1,975.50	\$1,975.50
1026	4	PB3050	1	\$2,195.00	10	\$1,975.50	\$1,975.50
1027	1	MB3030	2	\$1,195.00	0	\$1,195.00	\$2,390.00
1028	1	CX3000	10	\$945.00	0	\$945.00	\$9,450.00

Record : 39

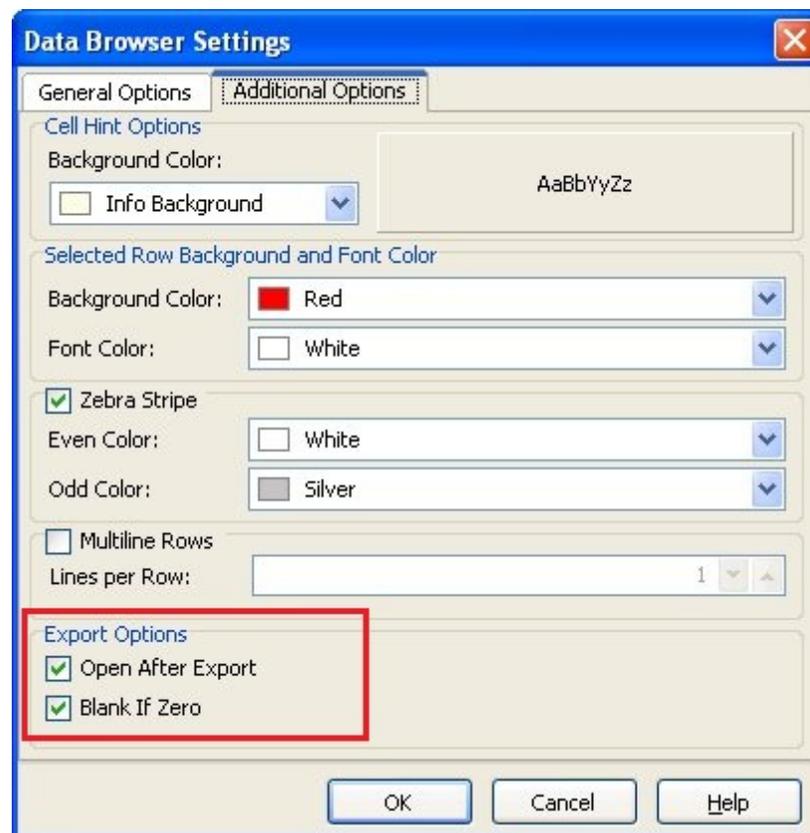
View as Grid View as Row

Table Name : InvoiceDetail Browse Mode Field Name : Units Datatype : INTEGER

- Support for AutoScroll to easily scroll up and down table data

ContPager	ContEMail	ContInfo	ContPhoto	LastContactDate
613-231-7812	hroy@ccs.com	Works closely v		06/05/2009
206-980-8866	chris@dsolutions.com	CIO of corpora		06/05/2009
714-285-6766	fredmantz@osio.com	Will be on saba		06/05/2009
303-131-7877	marciahoward@ldc.com	Tough to barga		06/05/2009
702-624-0266	sandramando@msinc.com	Always needs t		06/05/2009
305-452-4366	cjweber@mdist.com	MIS departmen		06/05/2009
509-643-0566	rachael@misbydesign.com	Data security is		06/05/2009
617-123-1234	fs@cwi.com	Assists Sarah. I		Size : 30006 bytes.
617-123-4577	sj@cwi.com	Her customer li		
303-239-7888	jane@ici.com	Usually on the i		
617-123-4509	me@cwi.com	Her customer li		
303-271-1588	bstevens@cmi.com	Loves his job.		
206-123-4544	maryjones@dsolutions.com	Very happy wit		
516-154-2345	mm@ba.com	Always interest		
801-989-4588	gcooper@bw.com	Likes new wirel		06/05/2009
303-239-7877	nealb@ici.com	Wants more inf		06/05/2009
724-733-6699	mmancino@ramonline.com	Works closely v		06/05/2009

- Ability to preview images as a hint when the cursor hovers over the table cell



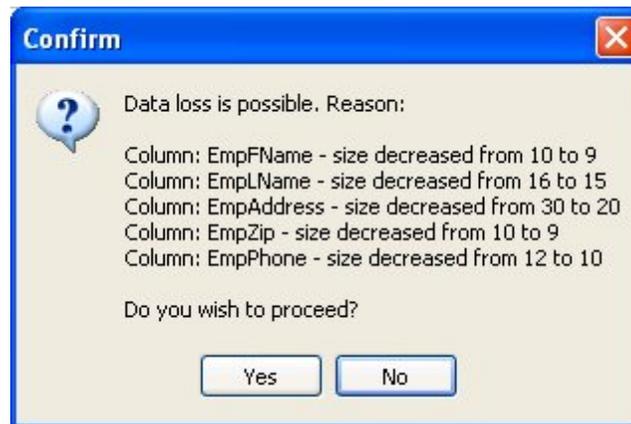
- Added Data Browser export options, to assign a blank value for zeros, and to open the document after

- export
- Updated Data Browser "Replace All Column Values" option to exceed the limit of 51 characters

6 Data Designer

The R:BASE eXtreme Data Designer has been updated to make table design as easy and efficient as possible. The newest features include:

- 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.



- New GUID data type is available to create unique values, e.g. {**38530B17-8049-4D8B-B03B-5B851EB56B93**}
- Display of an index's **Duplicate** and **Adjacency** Factors to help determine efficiency

Type	Key/Index Name	Primary Key Table	Duplicate Factor	Adjacency Factor
Index	Hire_Date		9	1
Foreign Key	#51	Titles	2,25	1
Primary Key	#50		1	1
Unique Key	#49		1	1

Column(s)

EmpID ASC

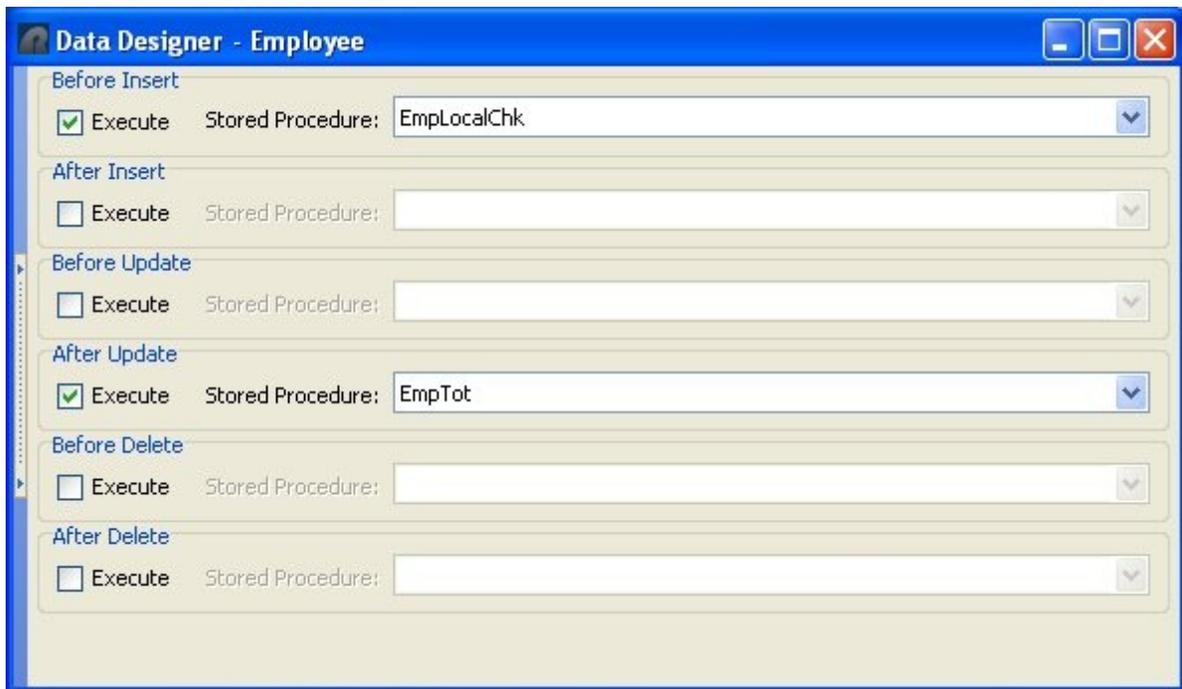
Message

Message on insert of Primary Key value which is not unique:
There must be a unique id number per employee.

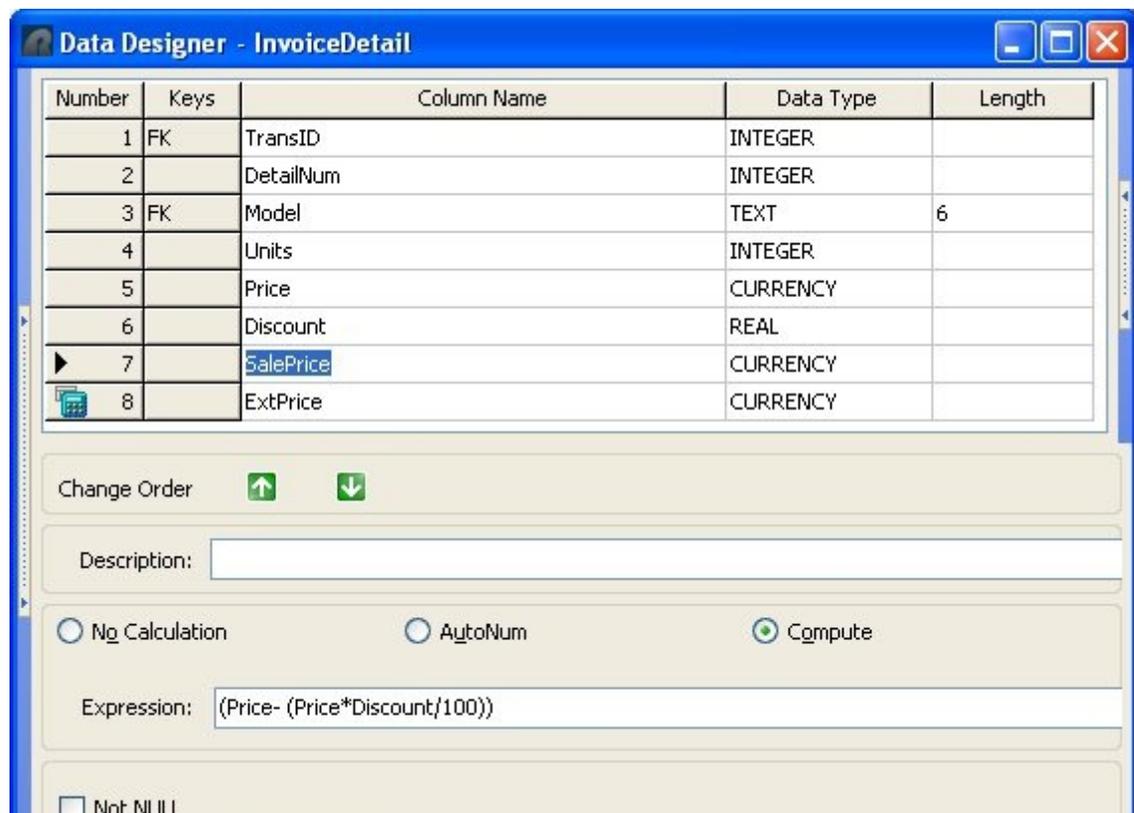
Message on delete of Primary Key value also in referencing Foreign Key:
You cannot delete an employee id that is being referenced in another table.

Message on update of a Primary Key value also in a referencing Foreign Key:
Cannot change employee id value that is referenced in another table.

- New "Triggers" interface to execute stored procedures upon table events



- Added internal checking when adding a default value for a TEXT column
- Additional checking for table names using reserved words
- A calculator image will be displayed within the column list, indicating a computed column



- Increased user friendliness for for column definition layout

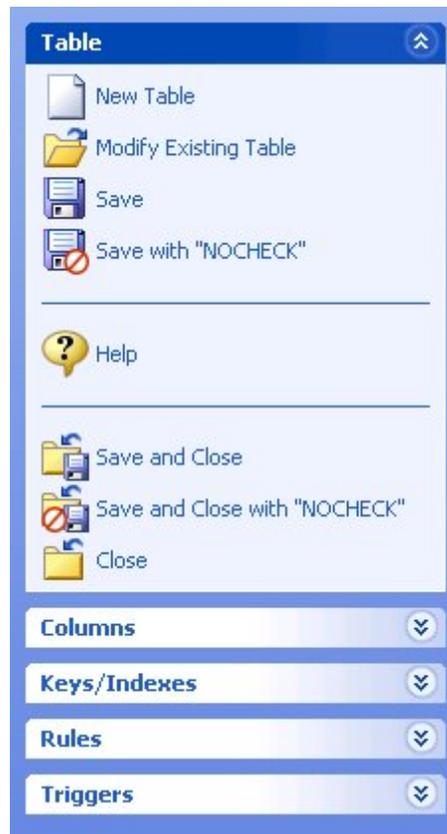
Description

A column name can contain up to 128 alpha-numeric characters, excluding spaces.

All column names must start with an alphacharacter (letter) and can include the following: letters (Aa-Zz), numbers (0-9), pound sign (#), underscore (_), dollar sign(\$), and percent sign (%).

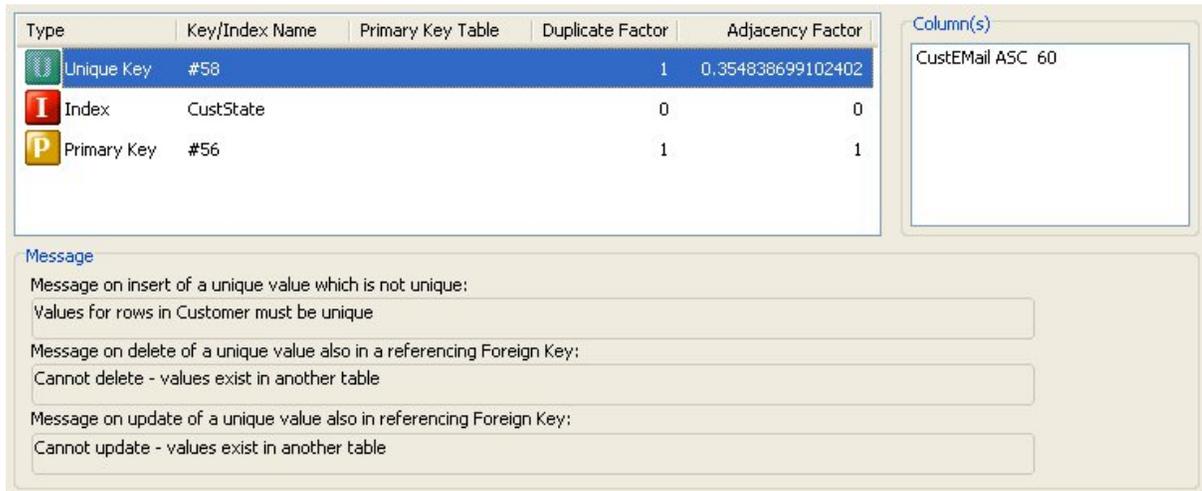
For ODBC compliance, it is not recommended to use the pound sign character in a column name even though R:BASE permits it.

- New dynamic description display panel for Column definitions

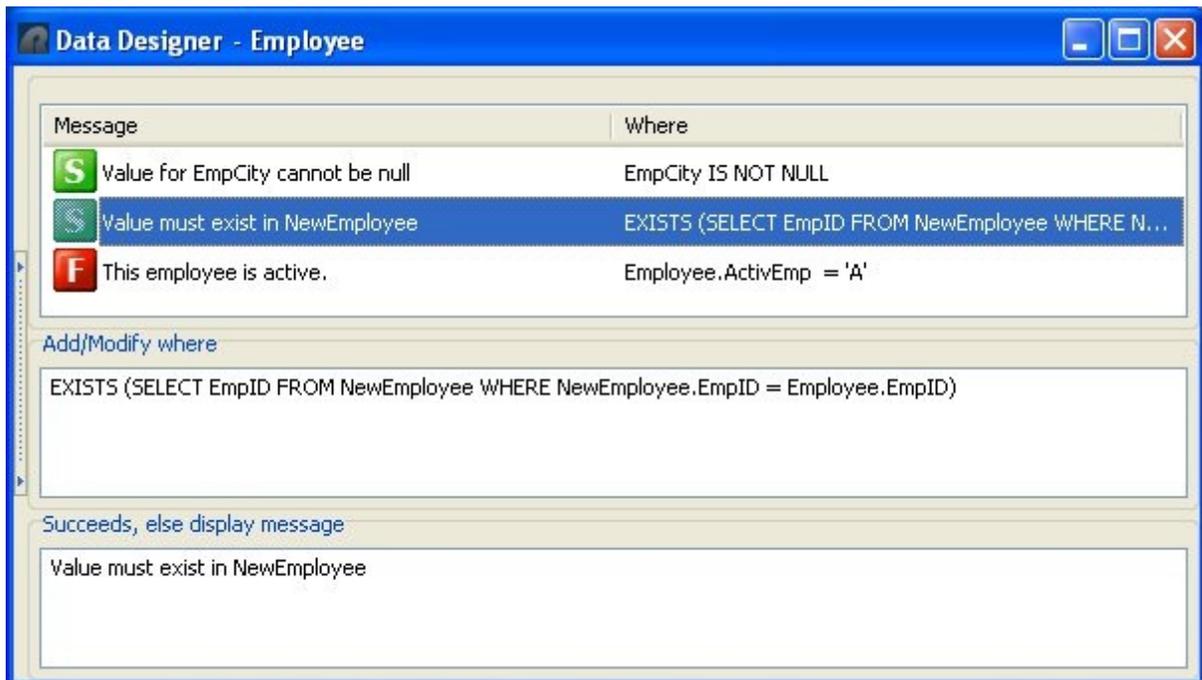


- Additional "NO CHECK" option is available to NOT update references to views, tables, and columns in forms, reports, labels, access rights, and rules
- Ability to resize columns when viewing "Columns"

Number	Keys	Column Name	Data Type	Length
1	PK	CustID	INTEGER	
2		Company	TEXT	40
3		CustAddress	TEXT	30
4		CustCity	TEXT	20
5	I	CustState	TEXT	2
6		CustZip	TEXT	10
7		CustPhone	TEXT	12
8		CustFax	TEXT	12
9		ModLevel	INTEGER	
10		LastUpdateDate	DATE	
11		LastUpdateTime	TIME	
12		LastOrderDate	DATE	
13		CustURL	TEXT	60
14		CustEMail	TEXT	60
15		CustStatus	TEXT	1
16		PaymentTerm	TEXT	20
17		CreditLimit	CURRENCY	



- Enhanced display for keys and indexes, based on type of key or index
- Enhanced rules editing supporting double clicking on a rule
- Enhanced display for rules, based upon succeed or fail



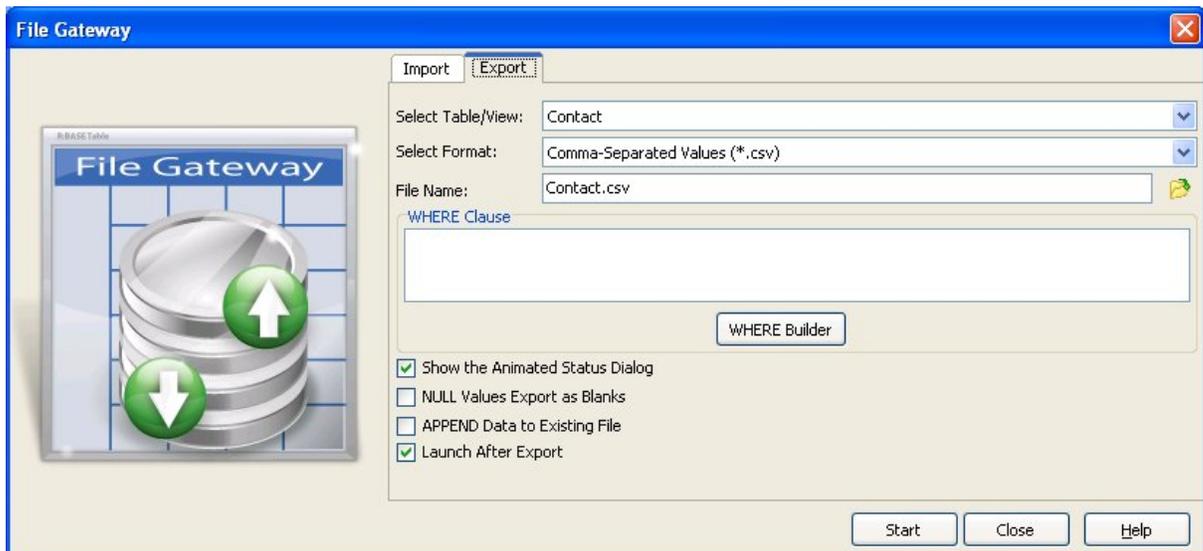
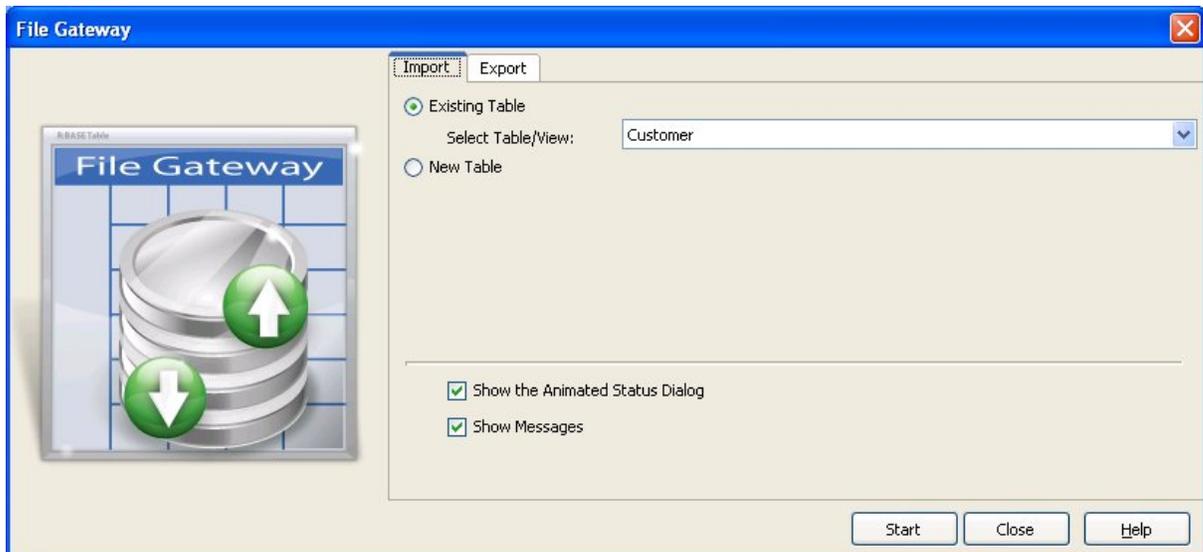
7 External Form Designer

The R:BASE eXtreme External Form Designer includes the same features and enhancements as the Form Design with the exception of any Database/Variable-based control features. Like the Form Designer, it combines the power and flexibility of a GUI to provide virtually infinite options in design.

8 File Gateway

The File Gateway utility contains many powerful features to allow the importing and exporting of data including:

- DATE columns will be exported as DATE when using the option as XLS or XLSW
- Supports the import of data from the Microsoft XLSX format
- Prompt screens increased for easier readability for import/export



- Additional Import Wizard option to create the new table as TEMPORARY
- Additional COLUMN_COUNT parameter to define the exact number of columns to be loaded while importing data from a file

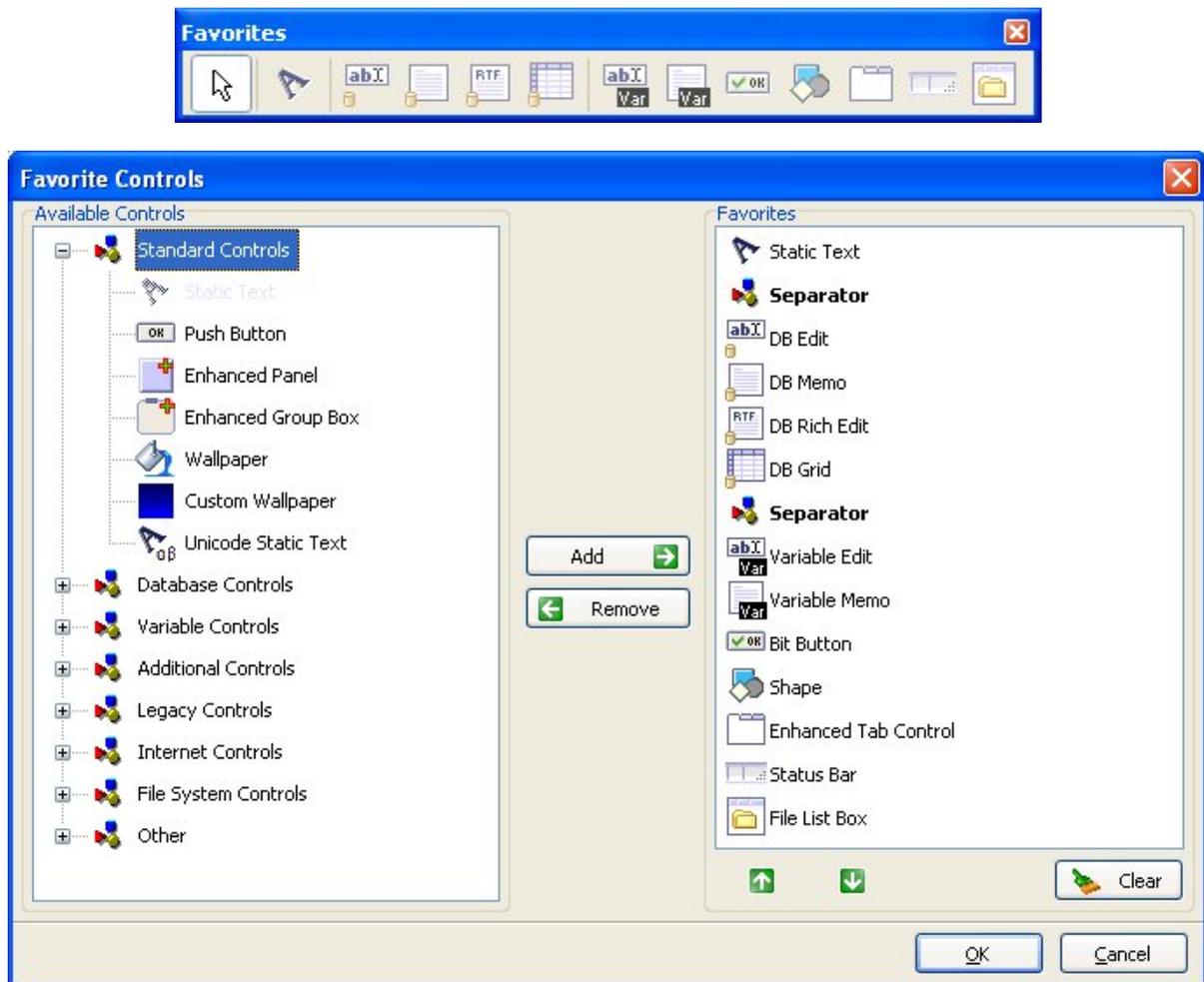
```
GATEWAY IMPORT TXT D:\TEMP\NewTempTrans.txt +
CREATE TempTrans OPTION +
SPECIFICATION_FILE_NAME TransTemp10.RGW +
|COLUMN_COUNT 25
```

- Additional Import Wizard option to show/hide the import status dialog
- Additional Import Wizard option to show/hide import messages
- Multi-line header and footer support for Excel exports

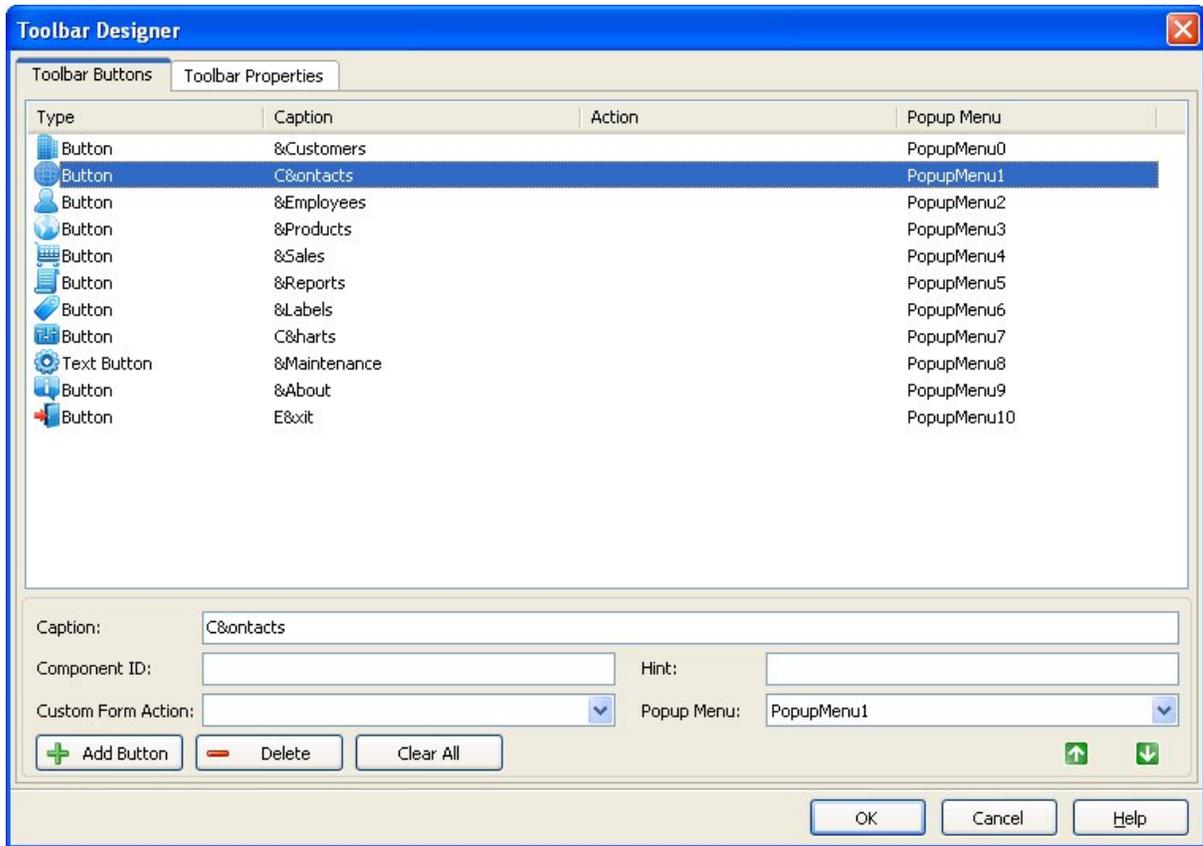
9 Form Designer

The R:BASE eXtreme Form Designer is a totally new innovation in object oriented form design. It combines the power and flexibility of a GUI to provide virtually infinite options in design.

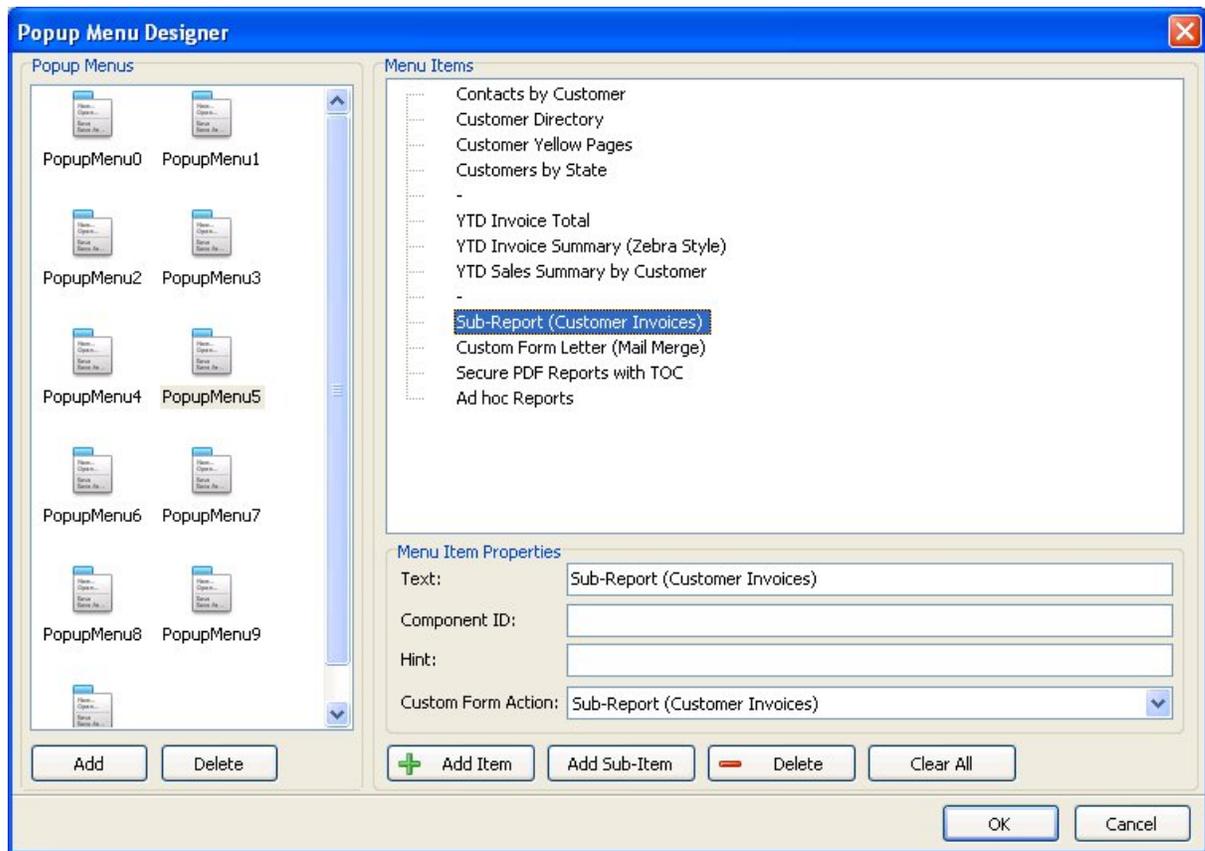
- A new "Favorites Toolbar" is available for users to customize their favorite controls onto a single toolbar that lists their commonly used items



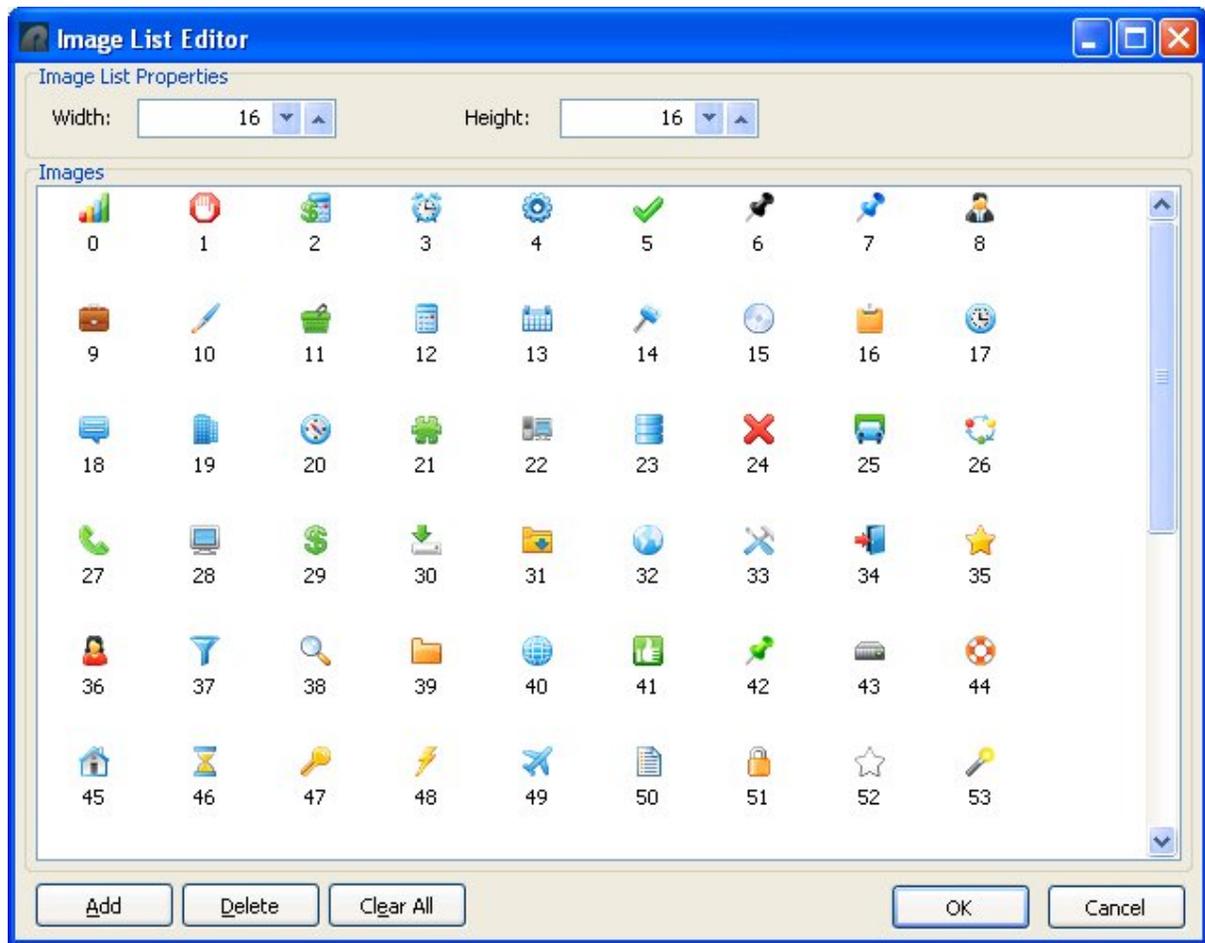
- New Toolbar Designer to create a custom toolbar for forms



- New Popup Menu Designer to create a menu for the Toolbar Designer



- New Image List Editor to store images that can be accessed from the Menu Bar Designer, Popup Menu Designer, Toolbar Designer, and in Custom Form Actions



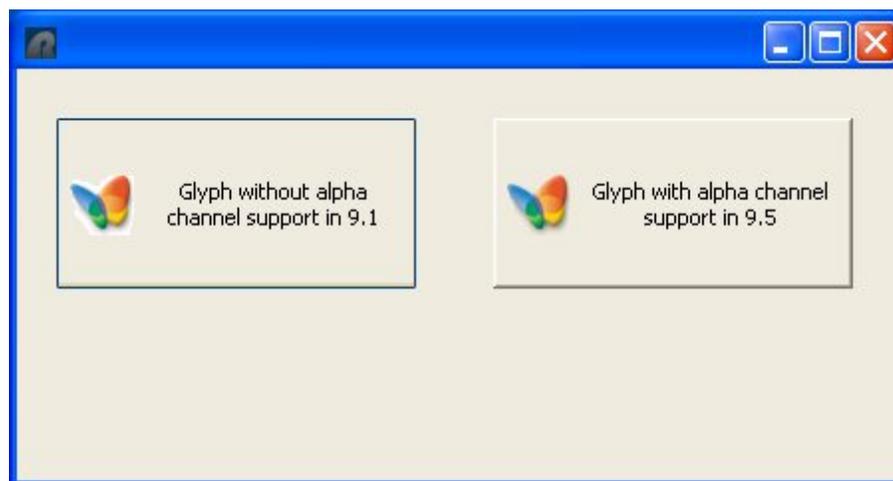
- Available Consolidate Control Palette for better screen use



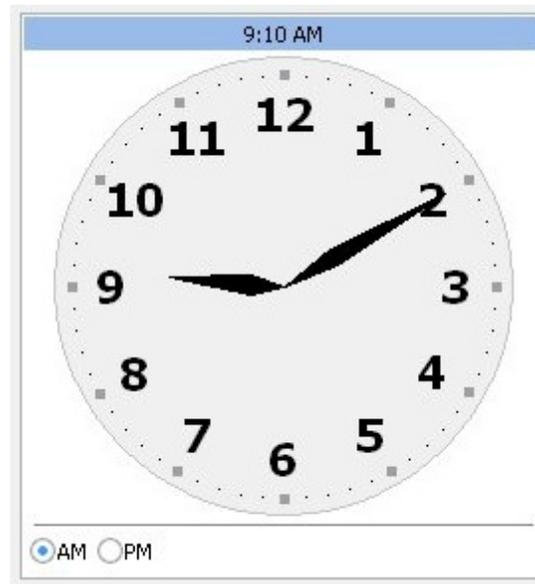
- The Drop Down Menu Button and Bit Button permit the ability to load a glyph from an executable, dynamic link library (DLL), OCX file, or icon file (.ICO). A 32x32 or 16x16 pixel glyph can be displayed.



- 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.



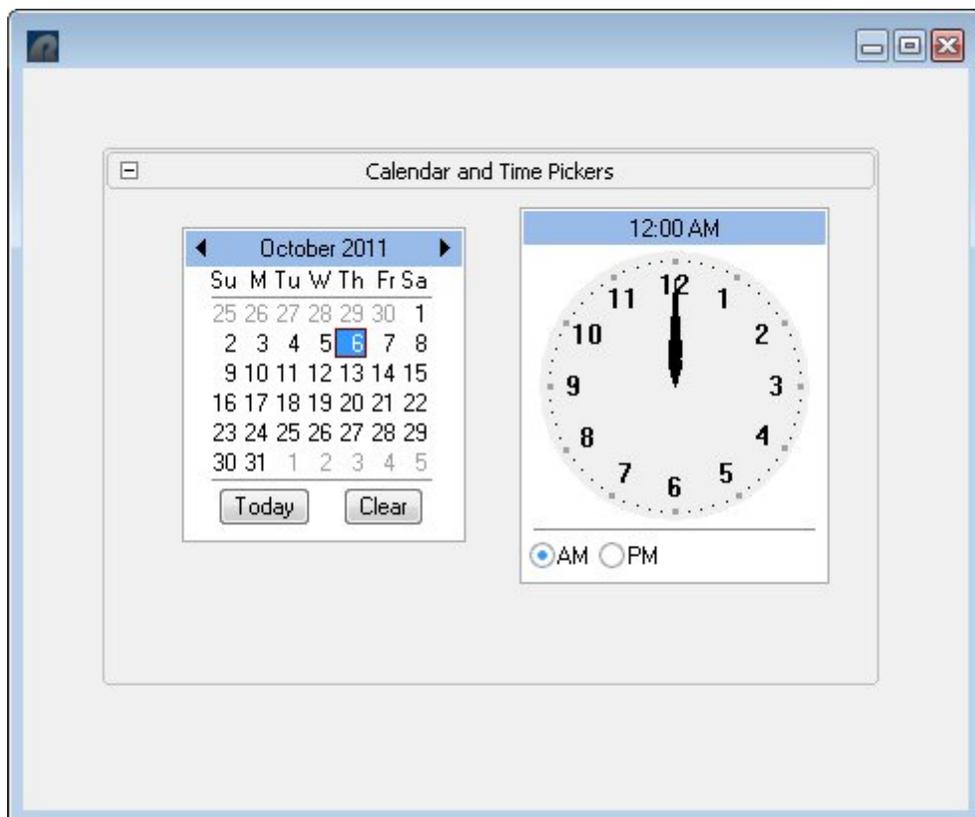
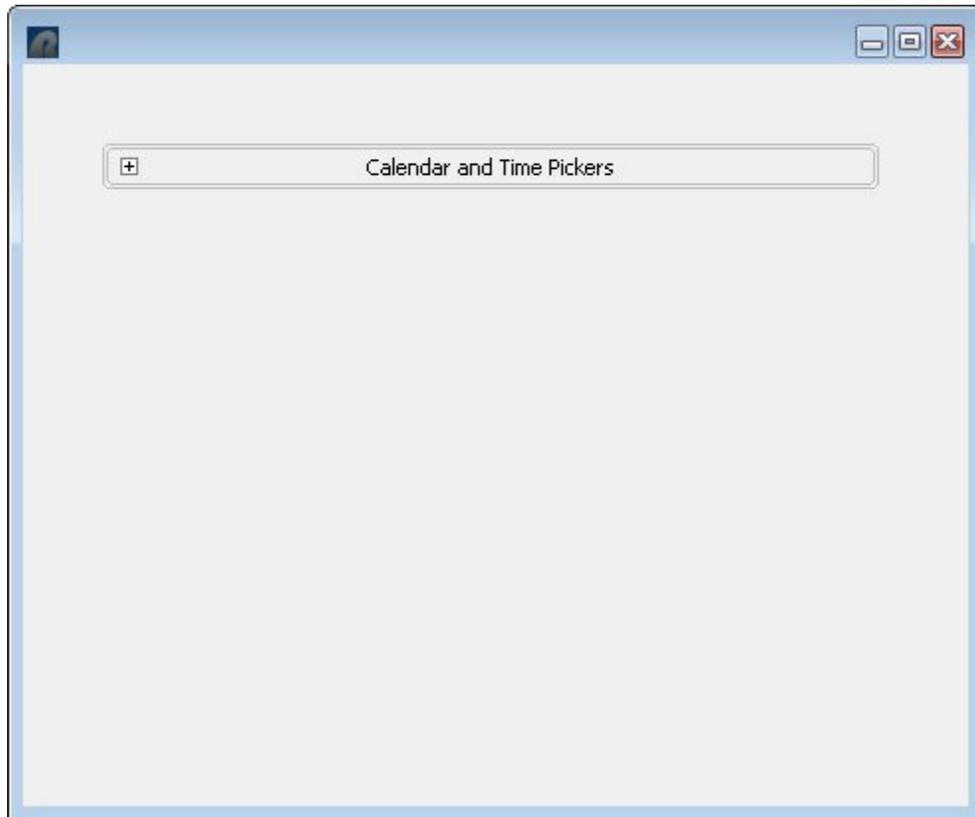
- A new Time Picker control has been added to the Form Designer to display a clock to edit time values. A standard Time Picker, DB Time Picker, and Variable Time Picker are available.



- 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 are available.



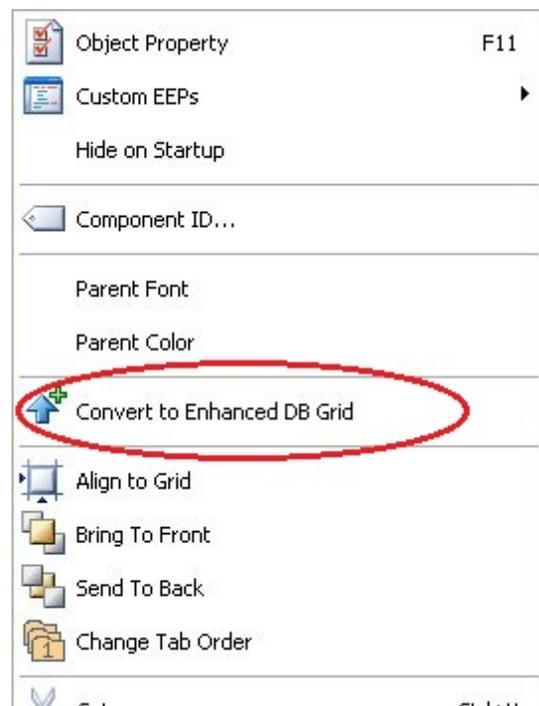
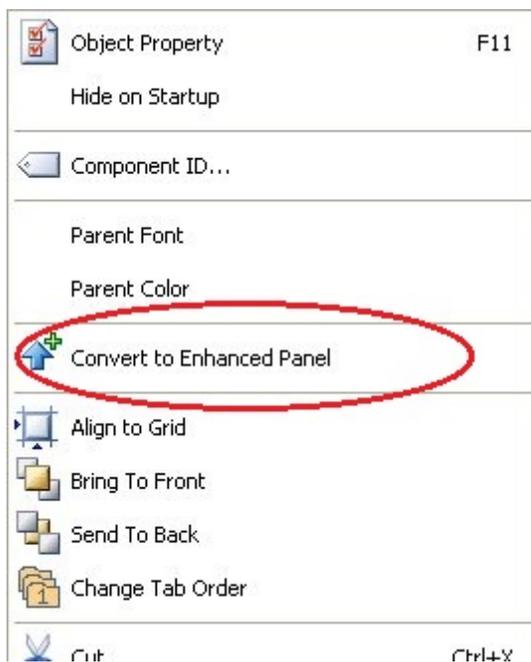
- A new Collapse Panel control has been added to the Form Designer to display a special panel that will collapse and recede when clicked upon to contain form controls. A more recent enhancement allows for an EEP to be executed when the collapse state for the panel is changed.



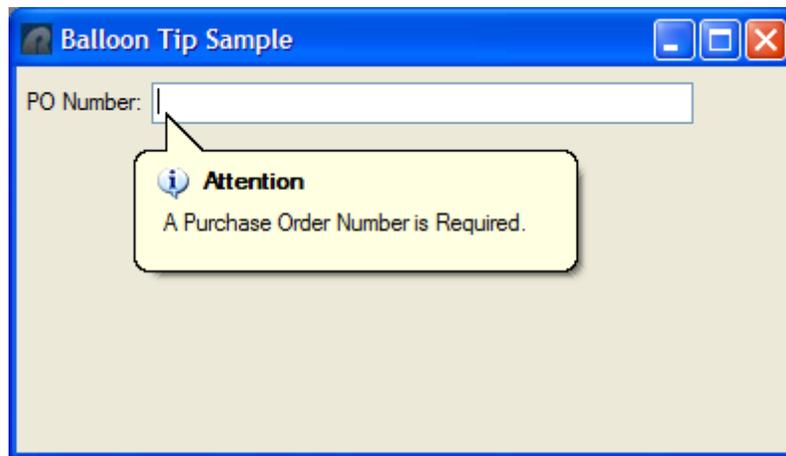
- The new DB Spinner and Variable Spinner Form Controls has been added to scroll integer values



- Single Click Form Object Conversions in order to take advantage of the "enhanced" control
 - 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
 - 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



- Balloon Tip support for DB Edit and Variable Edit fields, which displays a balloon hint message that can contain a title, message text, and icon

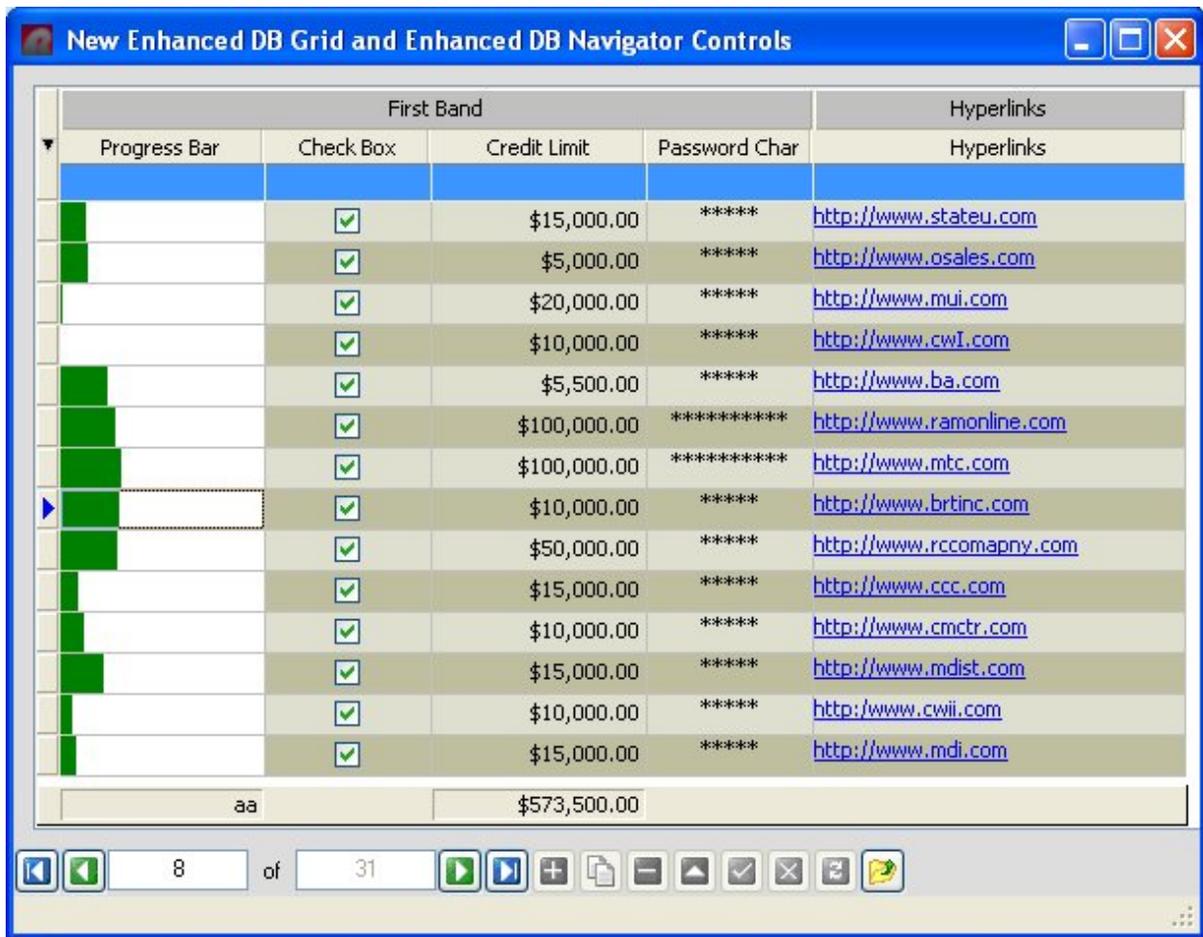


- Cue Banner support for DB Edit and Variable Edit fields, which displays a text hint that disappears when the focus lands on the field

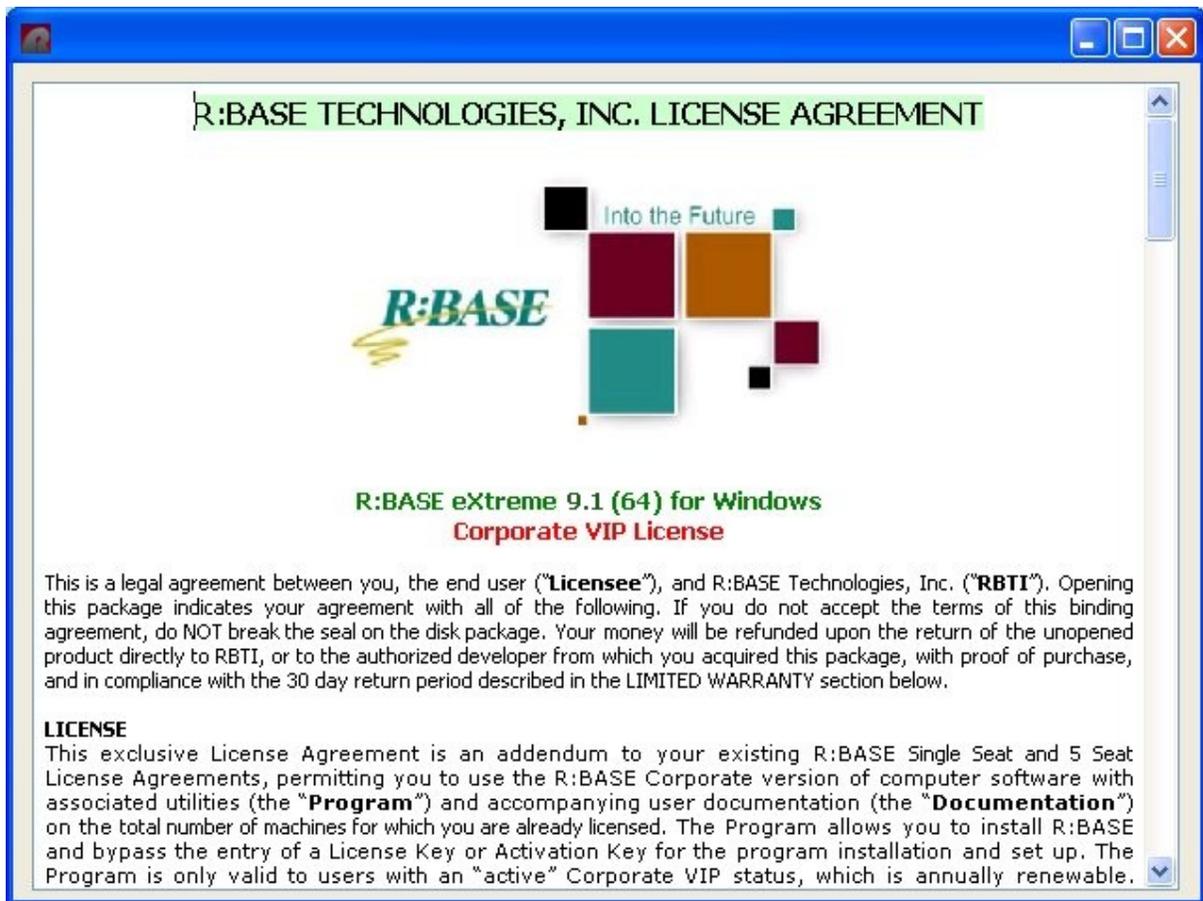


- New Enhanced DB Navigator control

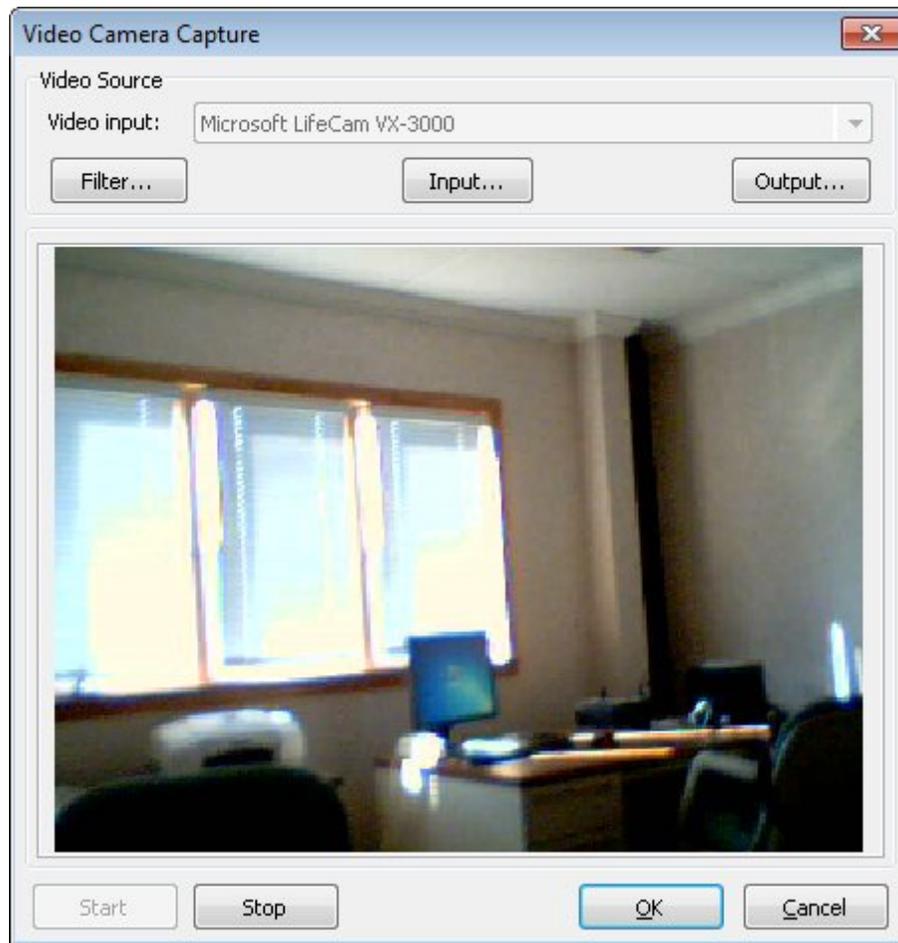




- New "Enhanced DB Grid" control, with hot key support (search, show/hide, filter, and sort) for additional functionality



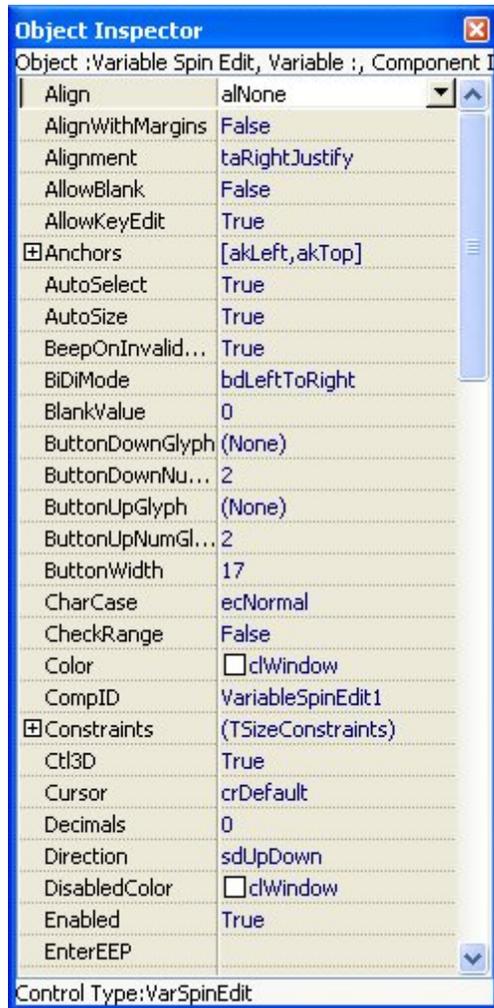
- New Advanced DB Rich Edit control for additional rich text formatting support



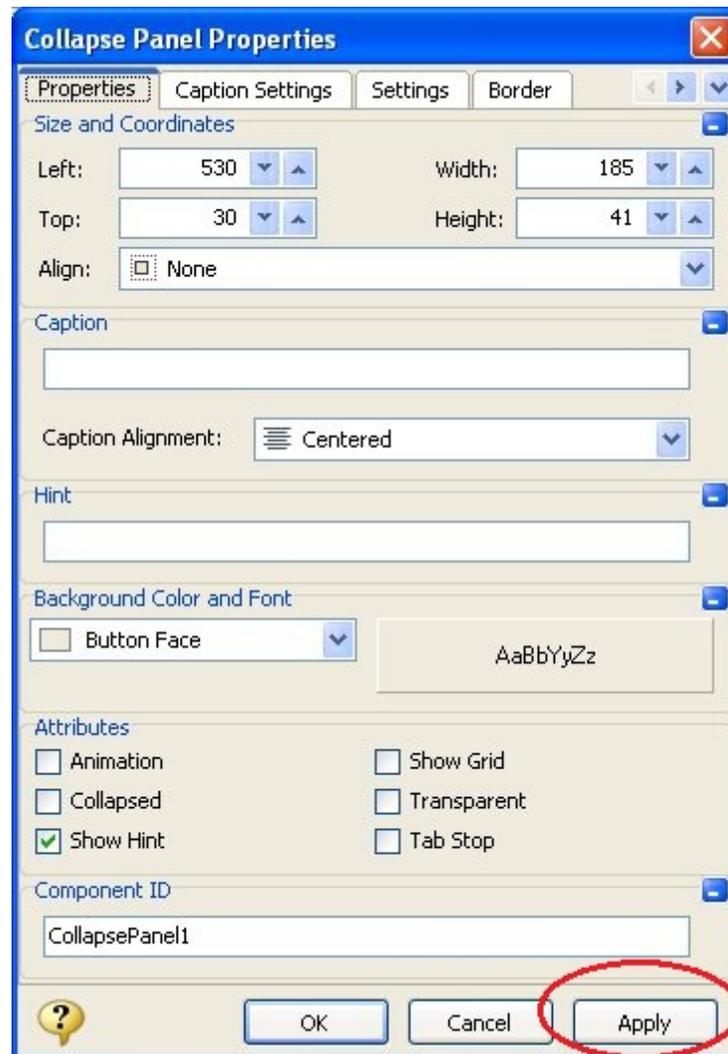
- The DB Image control can be used to capture images from any Windows camera, to save the data into a table



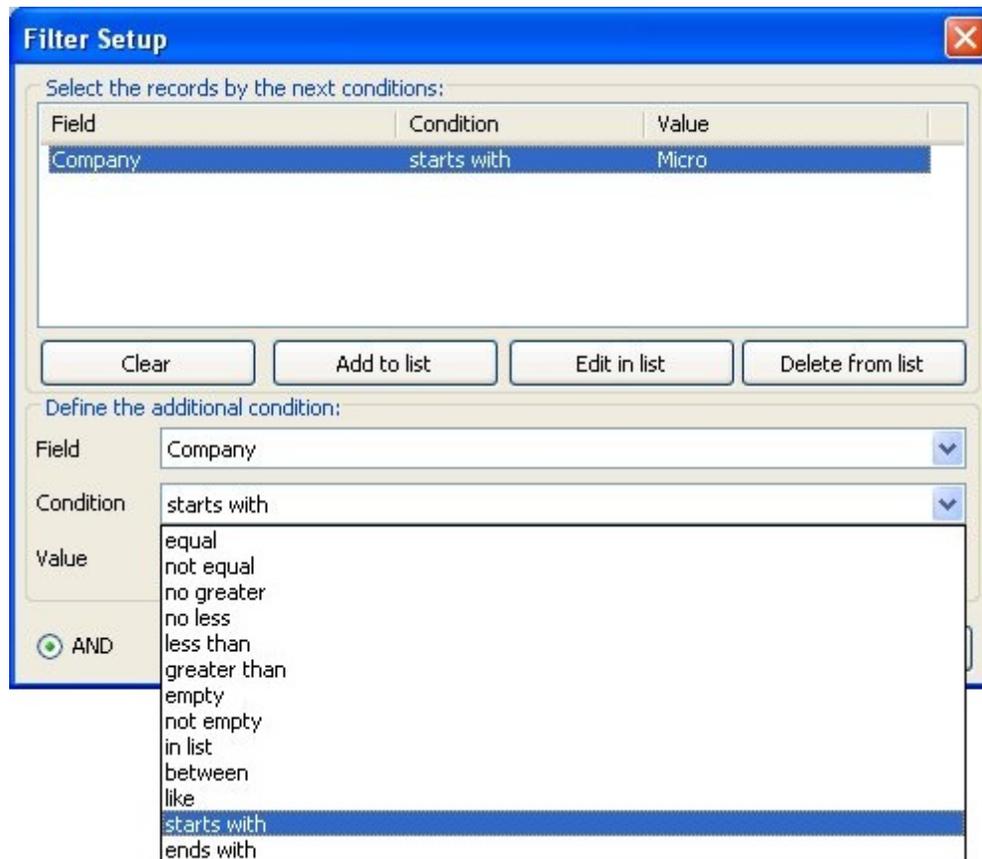
- New Link Label Control to add HTML support to a text label



- Integrated Object Inspector Toolbar for "under the hood" manipulation of form objects
- 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.



- The Enhanced DB Grid contains a "Filter Setup" that can be launched while running the form by pressing [Ctrl]+[L]. The list of search conditions now contain two additional options:
 - starts with
 - ends with



- The Enhanced DB Grid contains a "Record Search" that can be launched while running the form by pressing [Ctrl]+[F]. A progress dialog will now be displayed during the search process, so the user knows the search is working.



- The Enhanced DB Grid supports "Record Search" capabilities, [Ctrl + L], that can be launched while running the form



The Record Search dialog box is used to find records in a database. It features a search value field, search scope options, and search options.

Value:

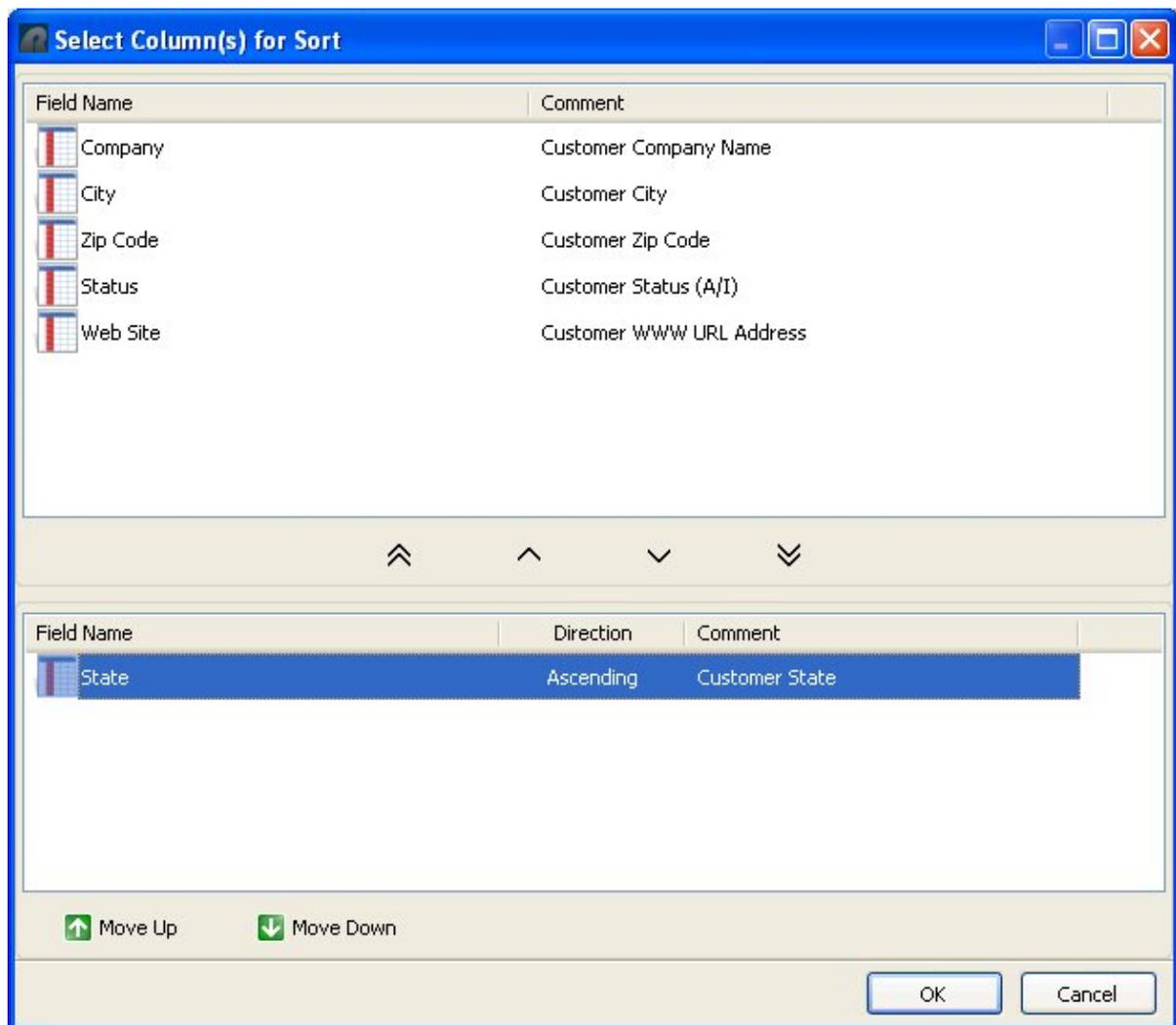
in all fields
 in field

Options
 case sensitive

Origin
 from first record
 from current record

Buttons: OK, Cancel

- One or more of the Enhanced DB Grid columns can be sorted in either ascending or descending order, [Ctrl + S]



The Select Column(s) for Sort dialog box allows users to select a column for sorting. It displays a list of fields and their comments, and provides options to move up or down in the list.

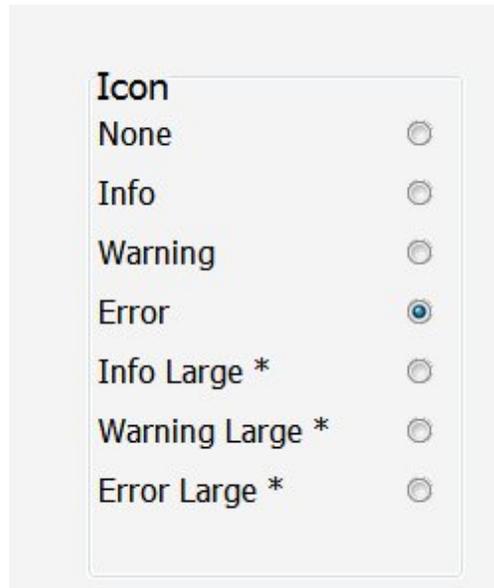
Field Name	Comment
Company	Customer Company Name
City	Customer City
Zip Code	Customer Zip Code
Status	Customer Status (A/I)
Web Site	Customer WWW URL Address

Navigation: ⏪ ⏩ ⏴ ⏵

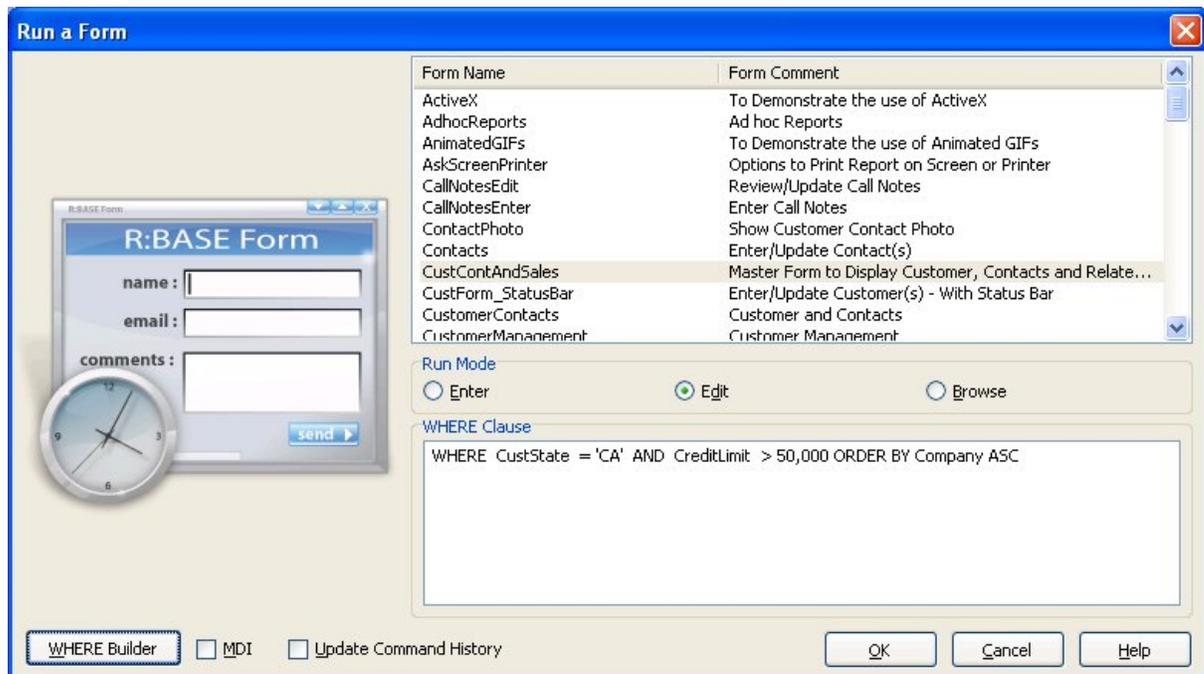
Field Name	Direction	Comment
State	Ascending	Customer State

Buttons: Move Up, Move Down, OK, Cancel

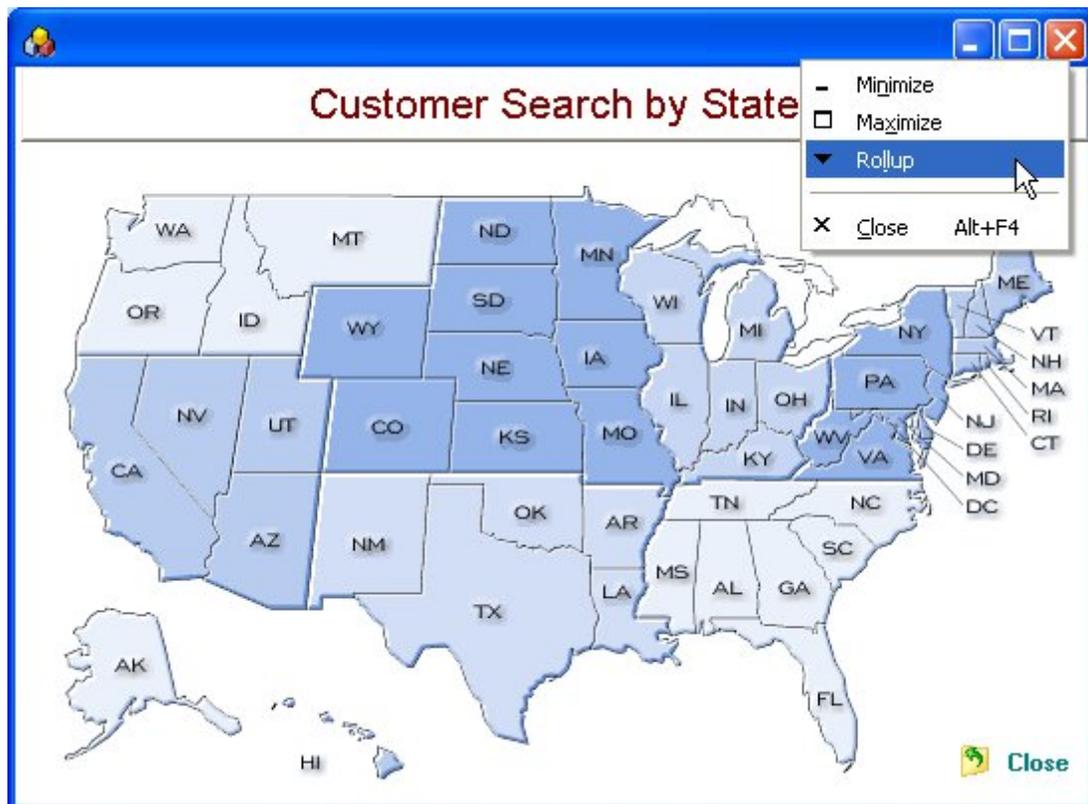
- Scrollable Form Designer window when using the mouse scroll button
- All Form controls have been enabled with the ability to enable/disable hints
- Support for the [Shift + F3] key combination to display DB Grid pop-up menus
- All Form controls have been enabled with the ability to enable/disable inclusion of the tab order
- 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



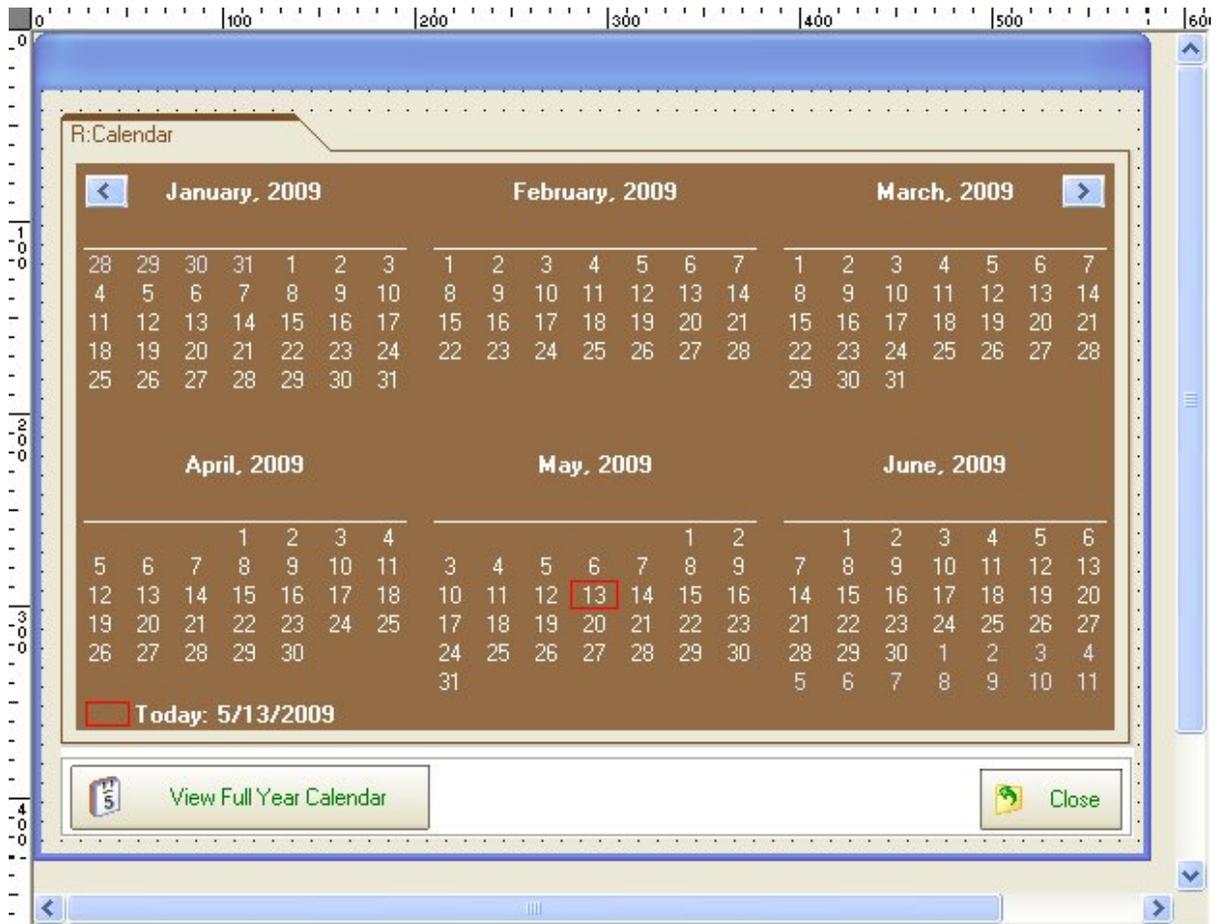
- New Bidirectional Mode support has been added for Check Box, Radio Button, and Radio Group controls, which adjusts the text appearance and behavior when the application runs in a locale that reads from right to left instead of left to right
- New System Variable Control supporting the following available values:
 - Date
 - Date and Time
 - Time
 - R:BASE User
 - Windows User
 - Computer Name
 - Database Name
 - Default Printer
 - Current Printer
 - R:BASE Version
 - R:BASE Build
 - R:BASE Version and Build
 - Current Directory
 - Record Count
 - Record Number and Count
 - Record Number and Count with Description
 - Record Number
 - Record Number with Description
- Enhanced DB Image control to receive an image by direct paste [Ctrl + V], to load the image
- Form Control "Locks" are Saved within the Form
- Support to add external content (text, rich text, images) directly into the Form Designer from the Windows clipboard



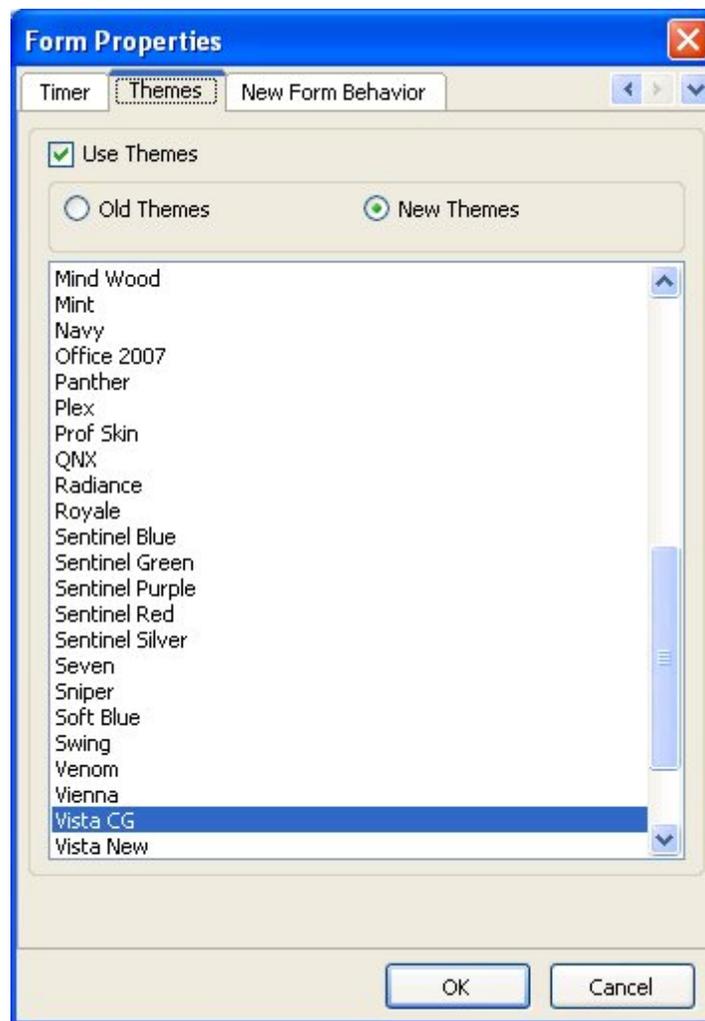
- Added MDI option when running forms from the Database Explorer



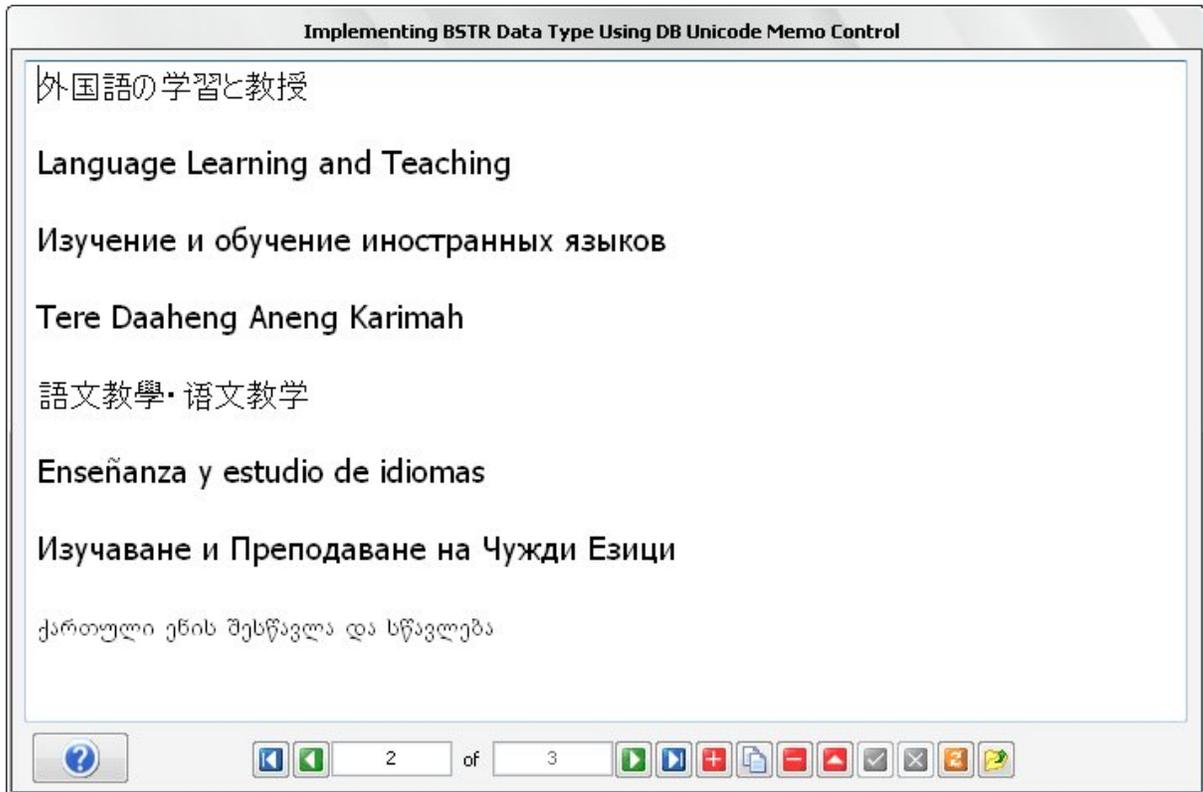
- New "Roll-Up" setting to allow collapsible forms, which rolls the form up into the caption bar
- Additional "On Roll Up" and "On Roll Down" Form Property EEP options



- Addition of X and Y axis rulers, in screen pixel measurements in the Form Designer

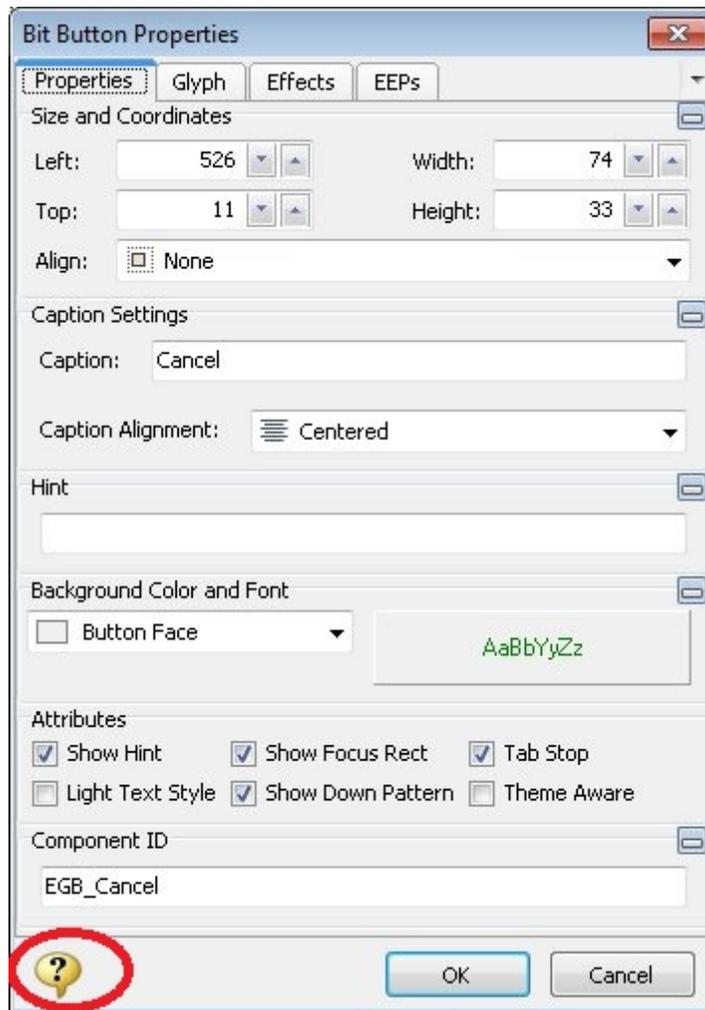


- **51** new Themes added totaling 86 Themes (Old = 35, New = 51)

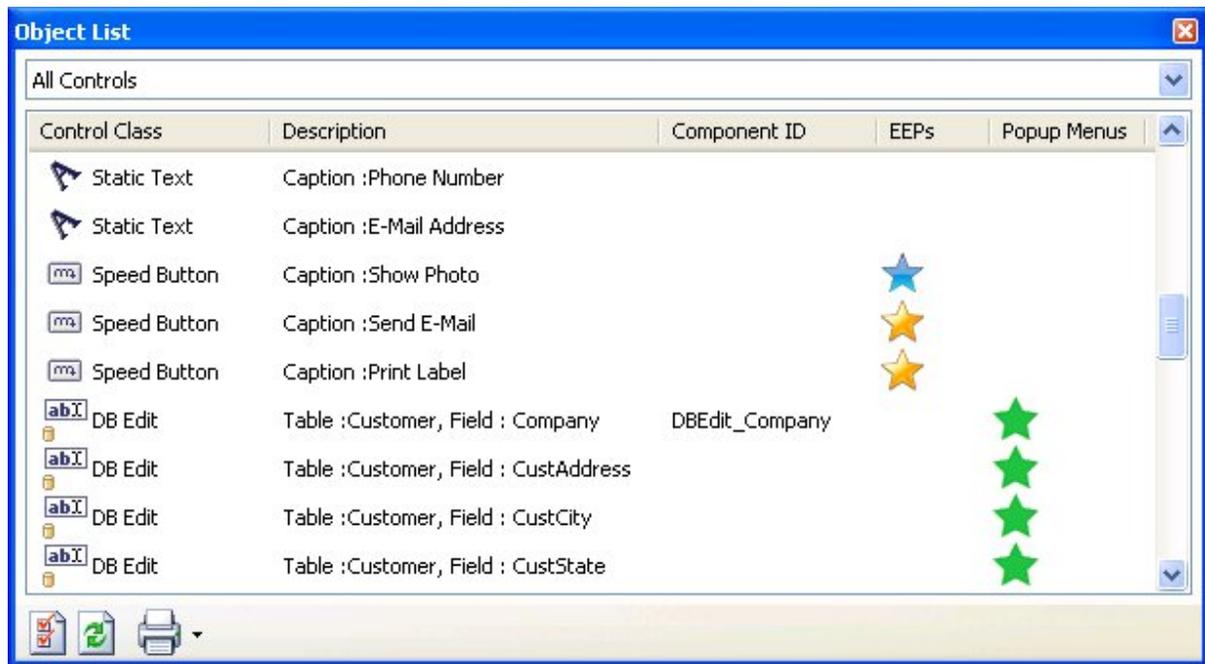


- Unicode and binary string data can be opened within forms with the new DB/Variable Unicode Memo controls. The controls are only available in R:BASE eXtreme 9.1 (**64**).

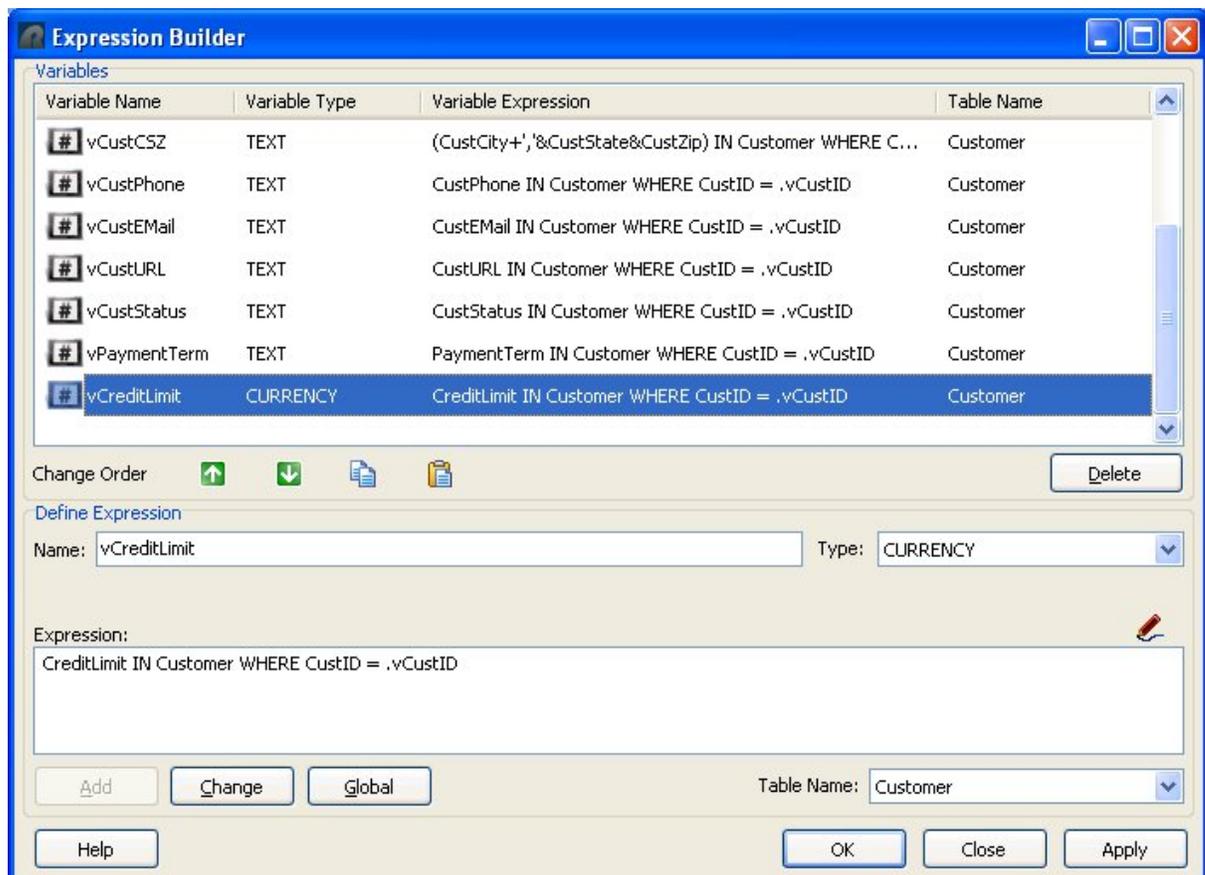
The Unicode Static Text control can also be used to place a static text object which can contain binary string data.



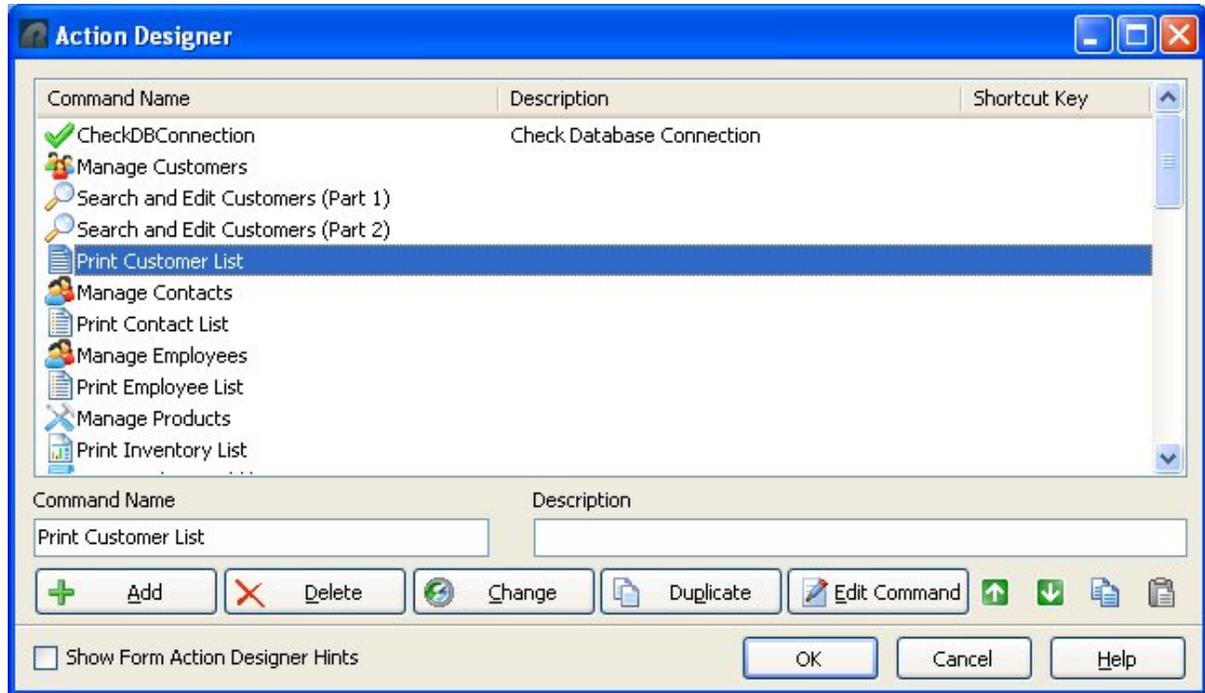
- The Form Designer has been enhanced to support the ability to launch the specific chapter within the Help documentation when viewing the object properties.
- Enhanced functionality to "Copy the SQL statement to the clipboard" for all Form Controls with Table Lookups



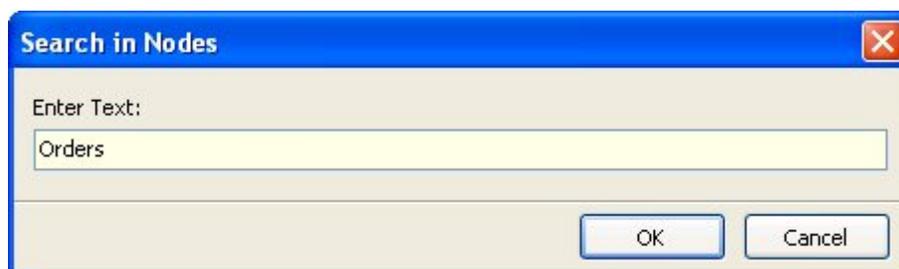
- The Object List Toolbar, for viewing and locating objects on the form, now displays a new color-coded star image if an EEP exists. The blue star is for external EEP files. The gold star is for Custom EEPs.

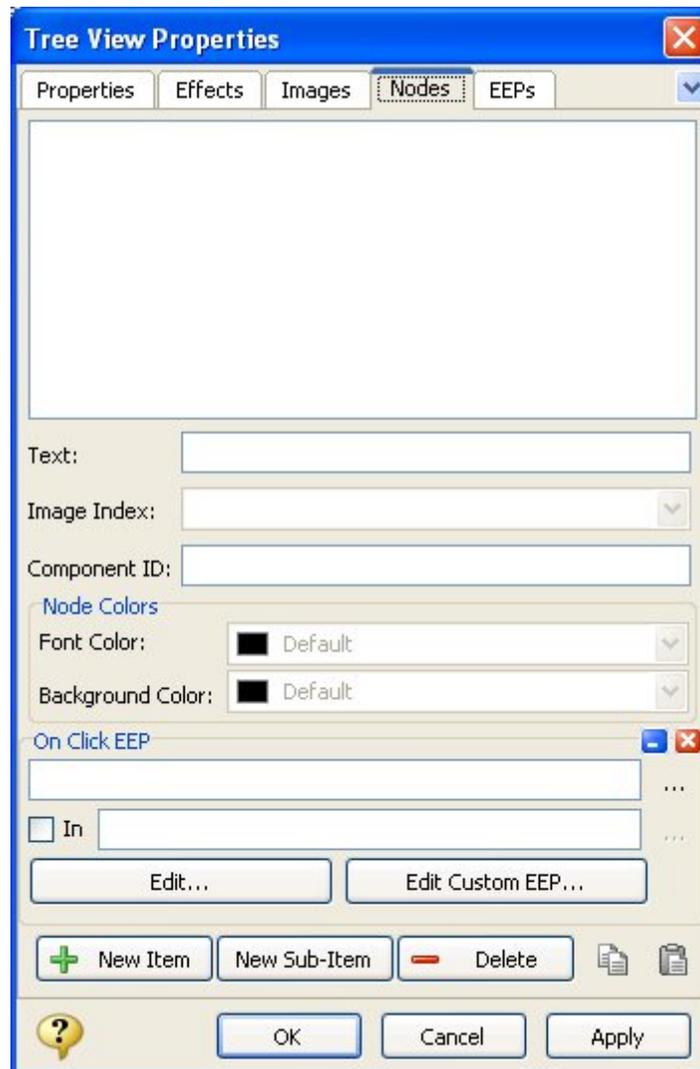


- Support to copy/paste variables from the Form Designer's Expression Builder, to copy and paste variables from one form to another.
- A new Expression Builder option is available within the Form Designer to edit the "Expression:" memo field font, which is helpful to clearly view all characters like commas, parenthesis, etc

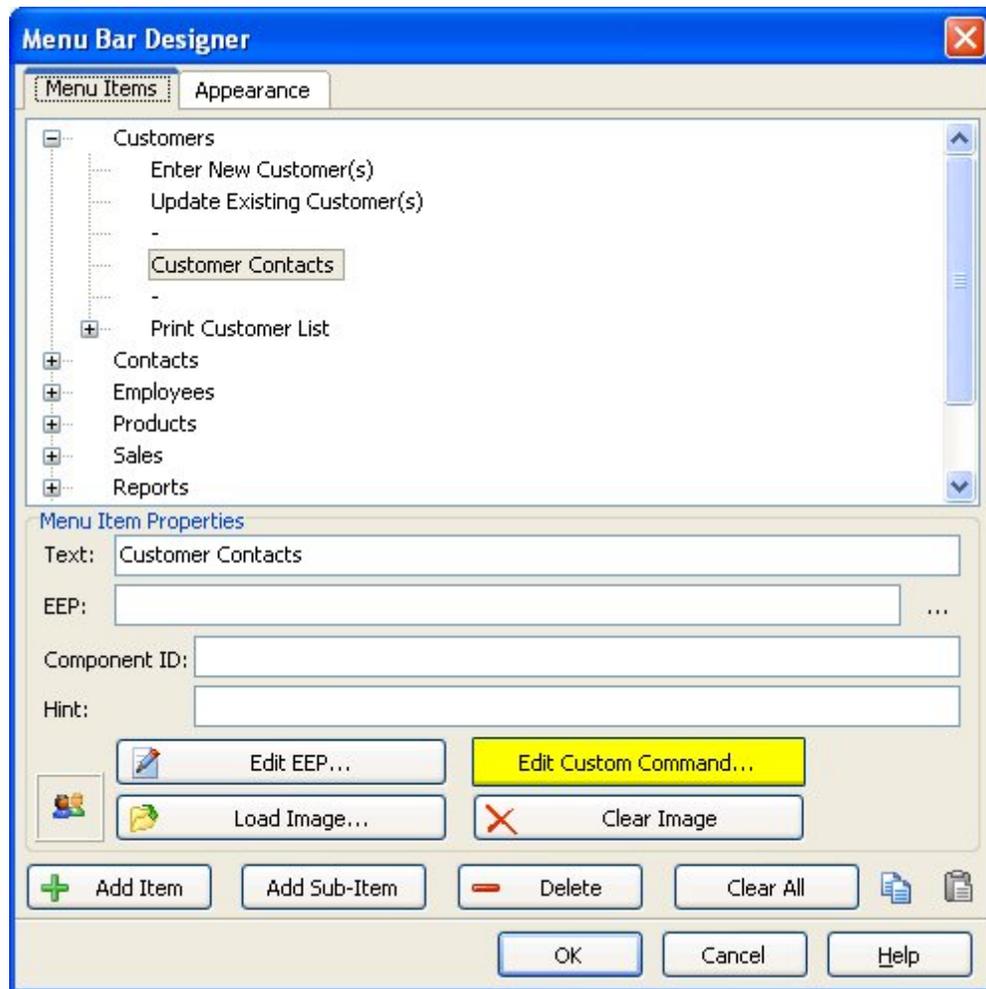


- Support to copy/paste Custom Form Actions from one form to another, and the ability to assign a keyboard shortcut for an action
- The Tree View and DB Tree View controls support the ability to search the nodes for text during runtime, using [Ctrl]+[F] , or by using the PROPERTY command FINDNODE parameter





- Support to copy/paste Tree View nodes from one Tree View to another
- Support to copy and paste form Pop-up Menu properties :
 - Title Color
 - Title Font
 - List Color
 - List Font
 - Number of Lines
 - Show Lines



- Support to copy/paste Form Menu Bar items to move an item from one form to another
- Enhanced DB Navigator support to APPEND a record, along with INSERT
- Ability to display form name and driving table using the [Ctrl]+[Alt]+[I] key combination
- New "Expand All Items" property has been added to the Tree View control
- Support for an "On Double Click" EEP for the Web Browser control
- Support for an "On Double Click" EEP for the PDF Viewer control
- Ability to use Hot Keys for Enhanced Panel captions
- Support to change the background and font color for Tree View nodes
- A "read only" font and background color properties can be assigned when several fields are selected, and the right click mouse button is pressed
- The text header for Variable Lookup List Views can be increased with the new "Header Height" property
- Support to validate a data type value when exiting Variable Edit, Variable Memo, and Variable Rich Edit controls
- Support for CC, BCC, and Message Body fields for the DB Email Label and Variable Email Label controls
- Ability to change Enhanced DB Grid column properties of "Titles Clickable" for several selected columns
- In the Form Settings, the properties for "Don't Show Save Dialog" and "Don't Show Delete Dialog" are now available
- The ability to set the focus/cursor directly in a filter field for an Enhanced DB Grid has been added with the FocusOnFilterBar parameter
- When editing variables within the Form Designer Expression Builder, the selected variable is highlighted in the canvas background for easier recognition
- 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

- The Enhanced DB Navigator control supports the ability for the buttons to be resized automatically
- 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.
- 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
- A "Pop-up Menus" tab has been added to the Default Form Settings to assign a default values for all new pop-up menus added to forms
- Ability to capture an Enhanced DB Grid Filter as a WHERE Clause with the GETPROPERTY command
- The Enhanced DB Grid supports a new setting to skip/tab over the read only columns
- A new "On Document Complete" EEP has been added to the Web Browser control
- The Variable Spin Edit and DB Spin Edit controls include "On Increment" and "On Decrement" EEPs
- The Variable Spinner and DB Spinner controls include "On Increment" and "On Decrement" EEPs
- Two additional Character Case options have been added to DB and Variable Edit Controls; Title Case and Sentence Case
- Support to display a different justification for the Enhanced DB Grid column footer, to allow a different justification from the column
- Additional "Distinct" Footer Type option for the Enhanced DB Grid footer properties
- New "Selected Row Background and Font Color" options are available for the DB Lookup List View and Variable Lookup List View controls
- The "Show Accelerator Character" setting has been added to the Push Button, Bit Button, Speed Button, Office Button, Drop-Down Menu Button, Enhanced Speed Button, and Enhanced Tab 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
- New Bidirectional Mode support has been added for Check Box, Radio Button, and Radio Group controls, which adjusts the text appearance and behavior when the application runs in a locale that reads from right to left instead of left to right
- Two additional RBTI System Variable have been implemented for when a form is open in the Form Designer, RBTI_FORM_DSGN and RBTI_FORM_EXT_DSGN
- A new "Stretch DXF" property is supported for displaying DXF images in DB and Variable Image (Form) controls
- A new "Show Row Numbers" attribute is available for the DB Lookup List View and Variable Lookup List View controls to add a separate row number column at the far left within the list
- New PROPERTY command support for an Enhanced DB Grid to capture the column name when the header has been clicked upon
- New PROPERTY command support for an Enhanced DB Grid to capture the sort order of the displayed records
- A new "On Key Press" Form EEP has been implemented, which executes when the user presses an alphanumeric/printable key
- A new "On Key Down" Form EEP has been implemented, which executes when the user presses a key
- A new "On Key Up" Form EEP has been implemented, which executes when the user releases a key
- A PROPERTY command parameter FILTERTYPE is now supported to toggle the filter type of an Enhanced DB Grid
- The Enhanced DB Grid has been updated to include the "On DB Grid Filter Change" EEP
- The Advanced Variable Rich Edit Control has been added to forms
- A new form RBTI System Variable, RBTI_FORM_CLICKED, has been implemented where if a control is CLICKED, this variable is set to the clicked control's Component ID
- A new form RBTI System Variable RBTI_FORM_DBLCLKED has been implemented where if a control is DOUBLE CLICKED, this variable is set to the clicked control's Component ID
- A new form RBTI System Variable RBTI_FORM_CTRLTEXT has been implemented if a control is CLICKED this variable is set to the clicked control's 'Caption' or 'Text' property
- A new Count Down Timer Control has been added to forms
- A "Reset Hints" button has been added to the Enhanced DB Navigator, allowing the default values to be restored
- Check Box Support in DB Lookup List View, Variable Lookup List View, and List View controls
- Enhanced Menu Bar Designer allowing customized fonts and colors
- A new RESET property is supported for List View controls to clear the current sort and refresh the list view
- A new EXCLUSIVEMODE property is supported for the Tree View control to only open one node at time
- Check boxes are now supported in all form List Box controls
- Relational operators and additional data type support for Background Color Mapping within Enhanced DB Grids
- New drop-down status EEPs for Date/Time Picker Controls
- Added Tree View properties to expand nodes and find a specific node
- New Column-Level Filter Types for Enhanced DB Grids

- New Create Backup Copy option for external form files
- Enhanced DATETIME data type support for DB/Variable Edit controls, with the display of a date/time editor
- Additional Tree View and DB Tree View EEPs to fire if a node is expanded or collapsed

10 Functions

The following enhancements have been made to the R:BASE Functions:

- A new **RNDDOWN** function is available to return a number rounded down to a specified number of digits
- A new CVAL function (CVAL('GUID')) is available to generate a globally unique identifier value
- A new CVAL Function (CVAL('WINAUTH')) is available to check if WINAUTH is on. WINAUTH toggles the support for Integrated Windows Authentication when connecting to R:BASE databases
- New **SLOCI** function to return the number of instances a string appears in a TEXT, NOTE, or VARCHAR value
- A new (CVAL('NETGROUP')) function has been added to retrieve a list of global groups to which a specified user belongs
- A new (CVAL('NETLOCALGROUP')) function has been added to retrieve a list of local groups to which a specified user belongs
- An additional **IFLE** logical function has been added to evaluate if a value is less than or equal to another value. (IFLE(arg1,arg2,arg3,arg4))
- An additional **IFGE** logical function has been added to evaluate if a value is greater than or equal to another value. (IFGE(arg1,arg2,arg3,arg4))
- An additional **IFNE** logical function has been added to evaluate if a value is not equal to another value. (IFNE(arg1,arg2,arg3,arg4))
- A new **IFF** logical function has been added to handle working with conditions to return a value
- New CVAL('OUTPUT') function to capture the current output value (SCREEN, PRINTER, file)
- Support for different week counting methods with the **IWOY** function

11 Help Documentation

- Enhanced Help documentation:
 - Internal reference linking vastly improved
 - New glossary for word lookup
 - Productivity Tools topics including
 - Data Dictionary
 - Find in Files
 - Magnifying Glass
 - R:BASE Blob Editor
 - R> Prompt
 - Themes
 - Trace Debugger
 - User Privileges
 - Watch Variables
 - WHERE Builder
 - Several New and Improved Reference Topics including:
 - Indexes
 - Environment Optimization
 - Using the DLCALL Function
 - Foreign Data Sources and ODBC
 - Startup Files
 - Hot Keys
 - System Variables
 - Entry/Exit Procedures (EEPs)
 - Stored Procedures & Triggers
 - File Extensions
 - Temporary Tables and Views
 - Table Joins
 - International Characters
 - Binary Large Objects (BLOB)

12 Query Builder

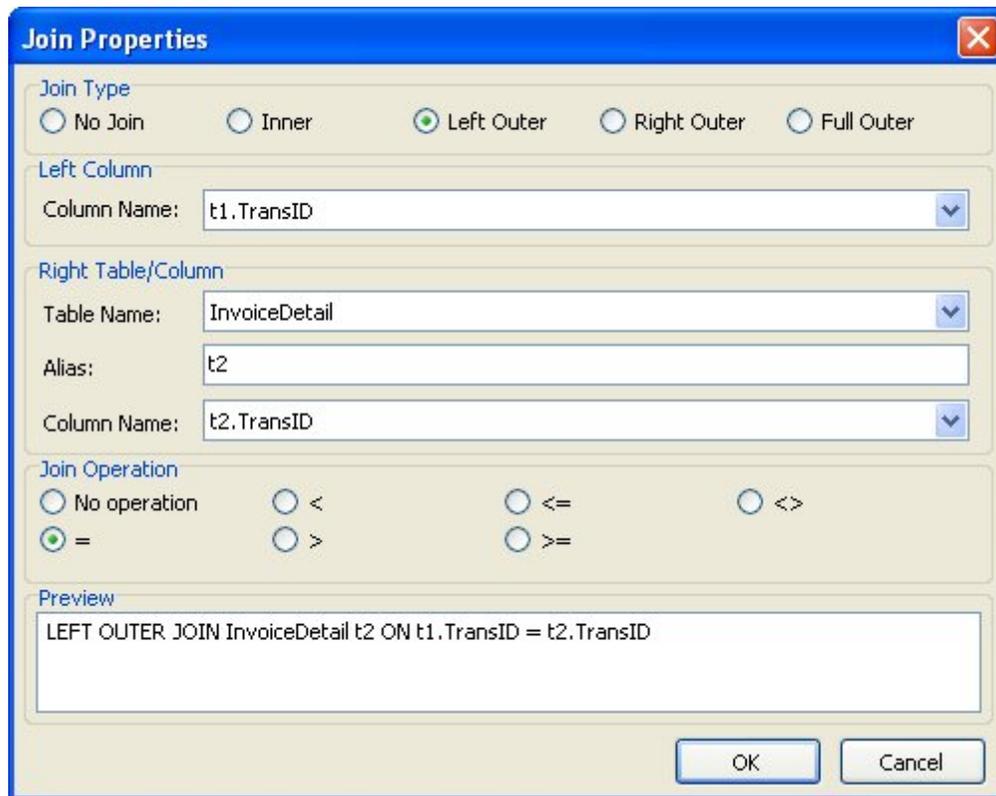
The R:BASE eXtreme Query Builder (QBE) has been modernized for efficient query building. The new SQL building Query Builder and Query Wizard boast the following features:

- Enhanced screen panels that can be adjusted, and are saved for each user
- Support for drag-n-drop of tables/views in the Query Builder
- Enhanced support to display SELECT ... UNION SQL syntax

```
(TranNum,Total)
SELECT t2.TransID,SUM (t3.Price)
FROM InvoiceHeader t2, InvoiceDetail t3
WHERE t3.TransID = t2.TransID
GROUP BY t2.TransID
UNION SELECT t1.TransID,$0.00
FROM InvoiceHeader t1
WHERE NOT EXISTS (SELECT TransID FROM InvoiceDetail WHERE InvoiceDetail.TransID = t1.TransID)
```

- Enhanced support to display SELECT ... JOIN SQL syntax

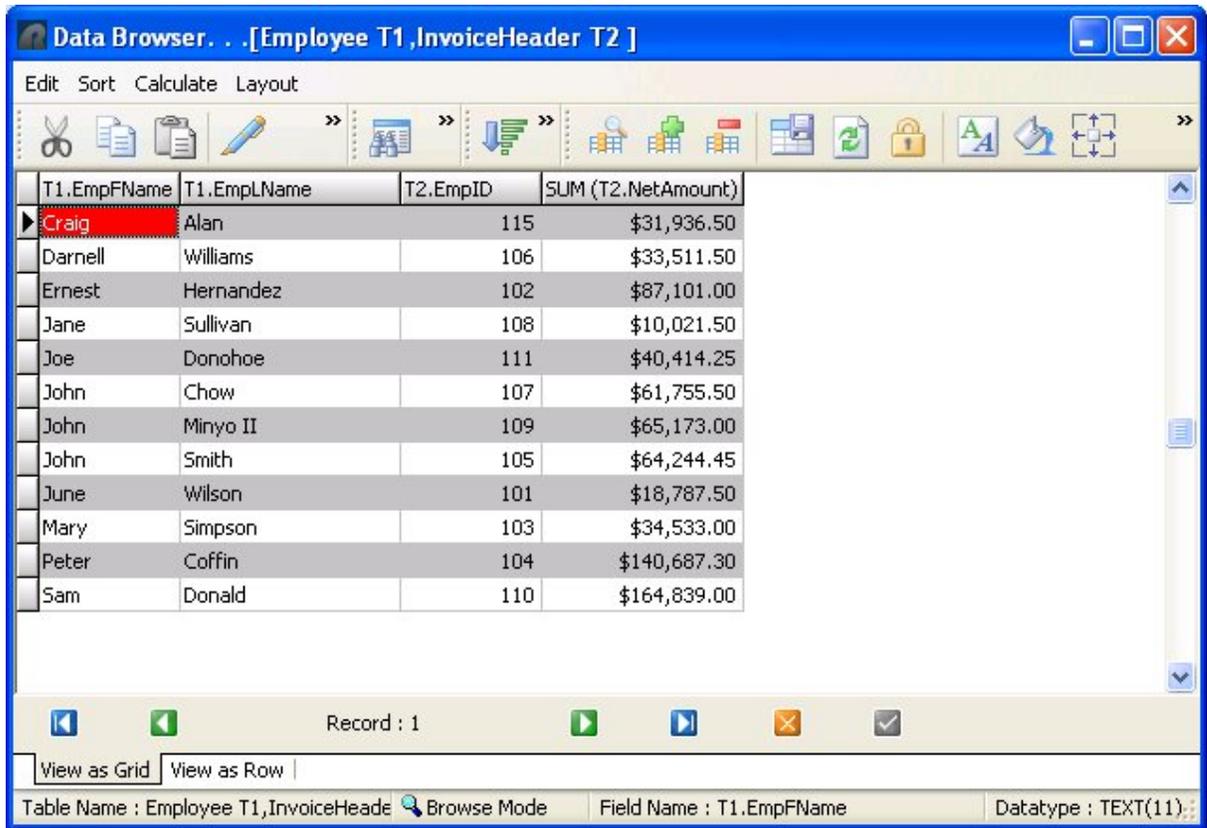
```
SELECT t2.TransID,SUM (t3.Price)
FROM InvoiceHeader t2 LEFT OUTER JOIN InvoiceDetail t3
WHERE t3.TransID = t2.TransID
GROUP BY t2.TransID
```



- New Join Properties dialog to join tables



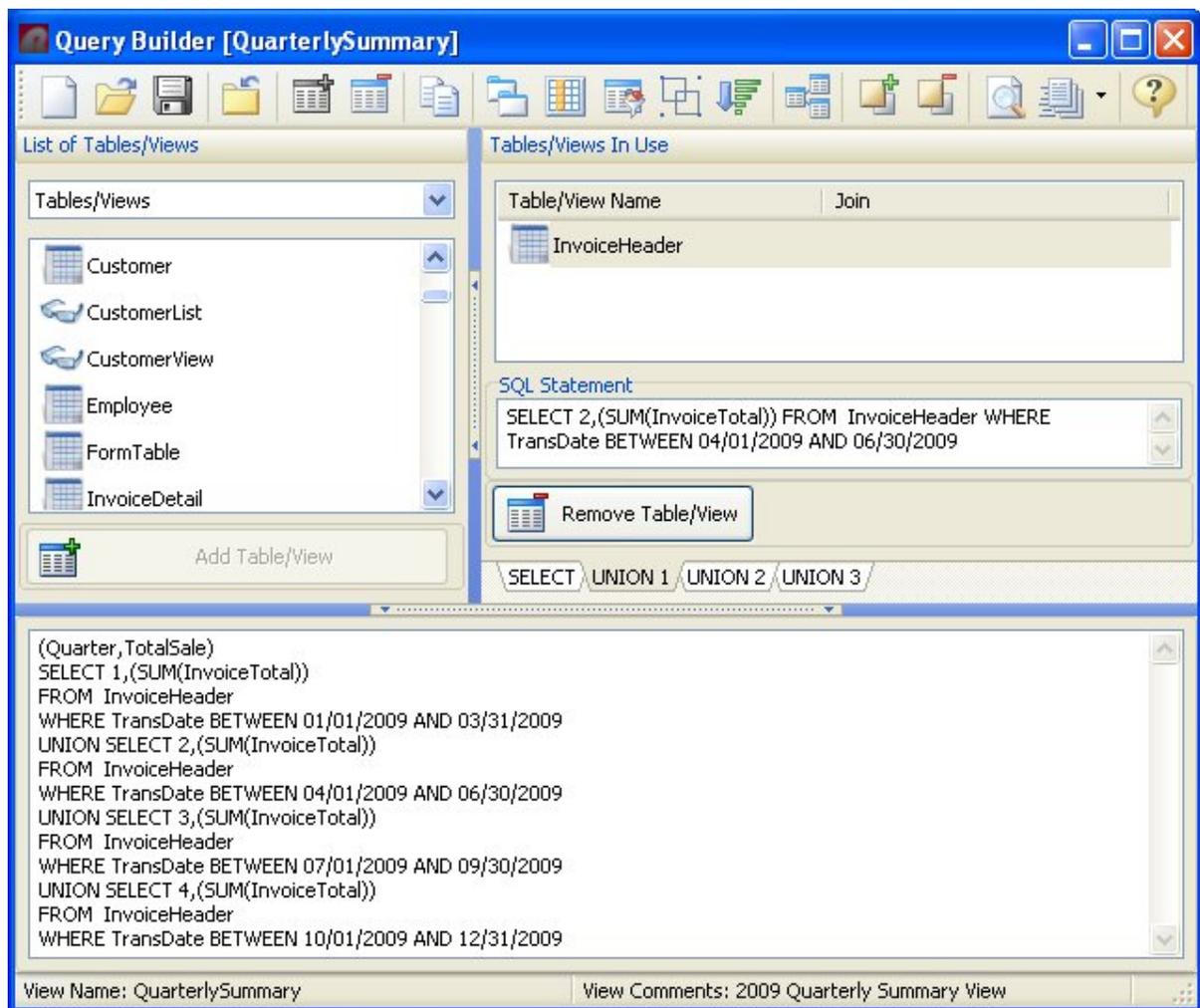
- New Print Data options for Query Builder and Query Wizard to include: Printer, Text File, PDF File, and Clipboard



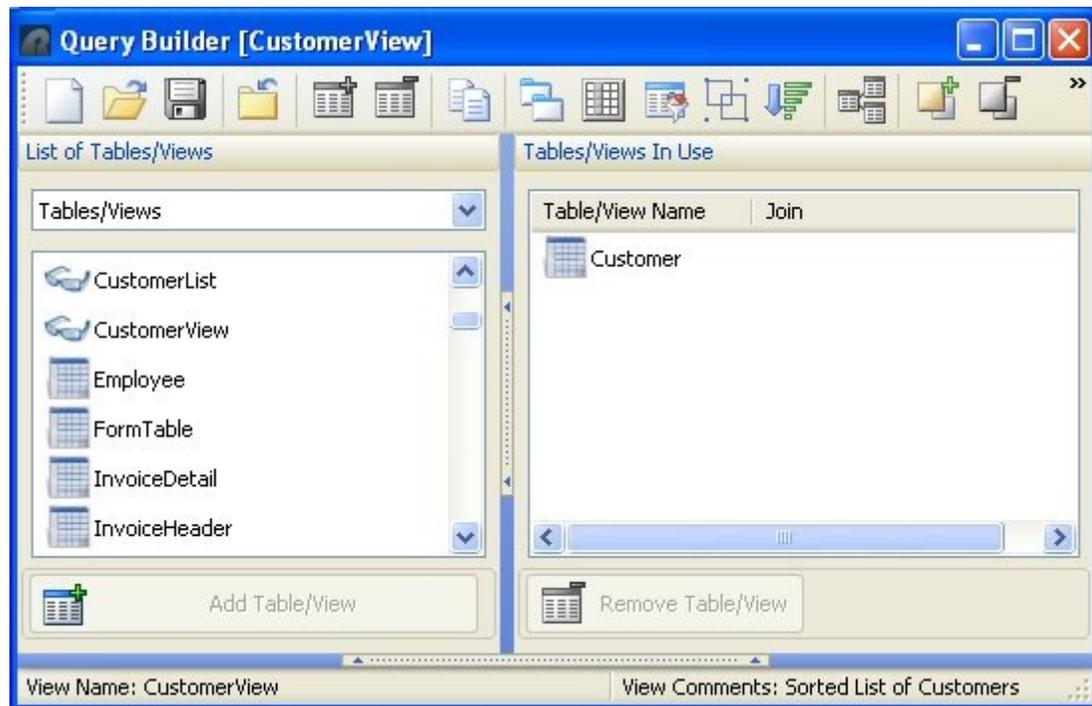
- Browsing query results for the Query Builder and Query Wizard is displayed in the Data Browser



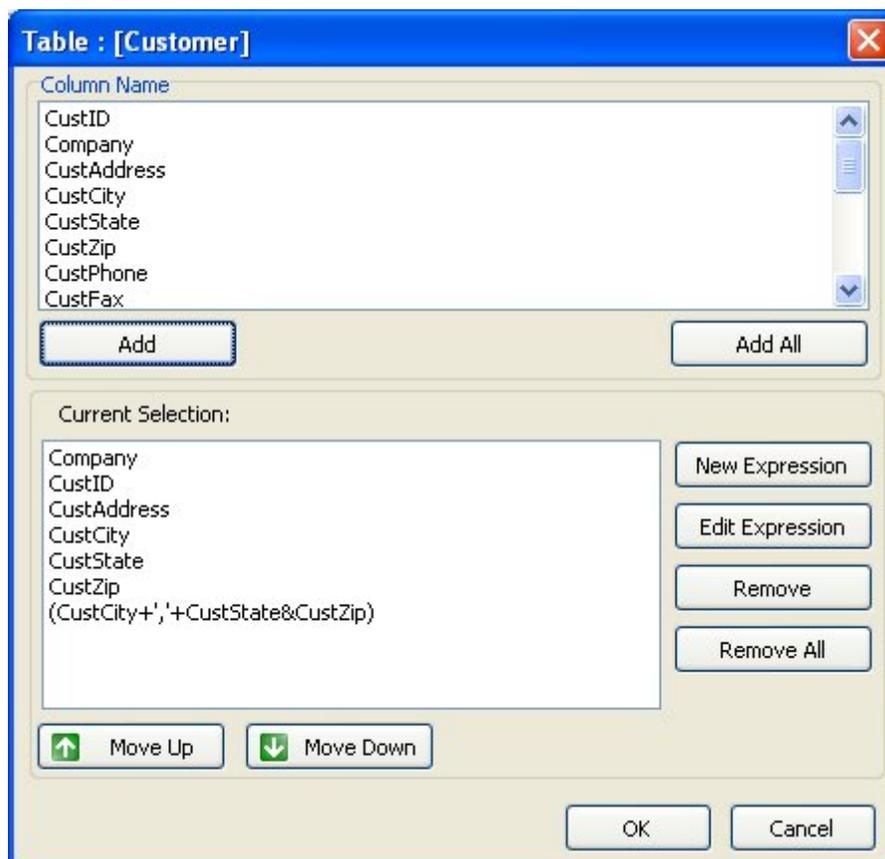
- New Floating toolbar



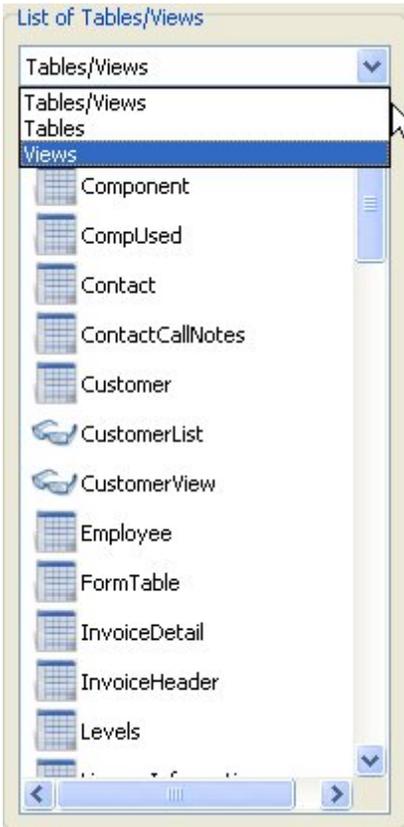
- Enhanced support to create SELECT UNION queries



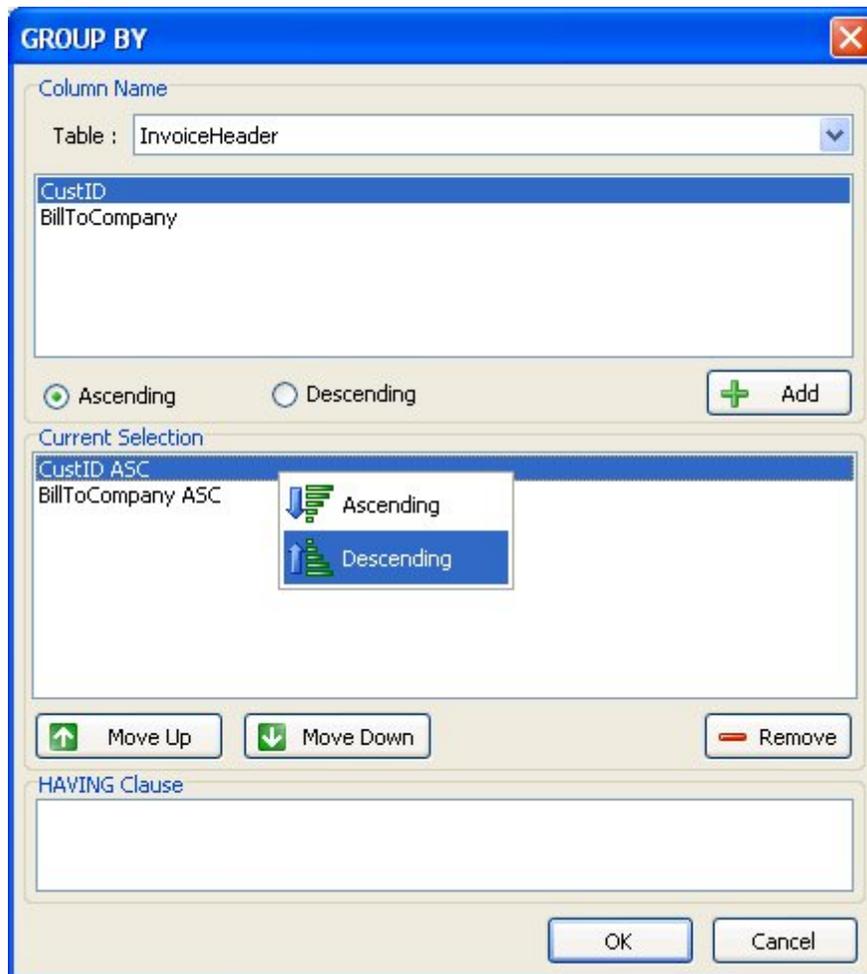
- Smart "Add/Remove Table" buttons



- New "Remove All" button when adding/removing columns to a query/view



- Enhanced Tables/Views list, to limit the displayed result to just tables or views

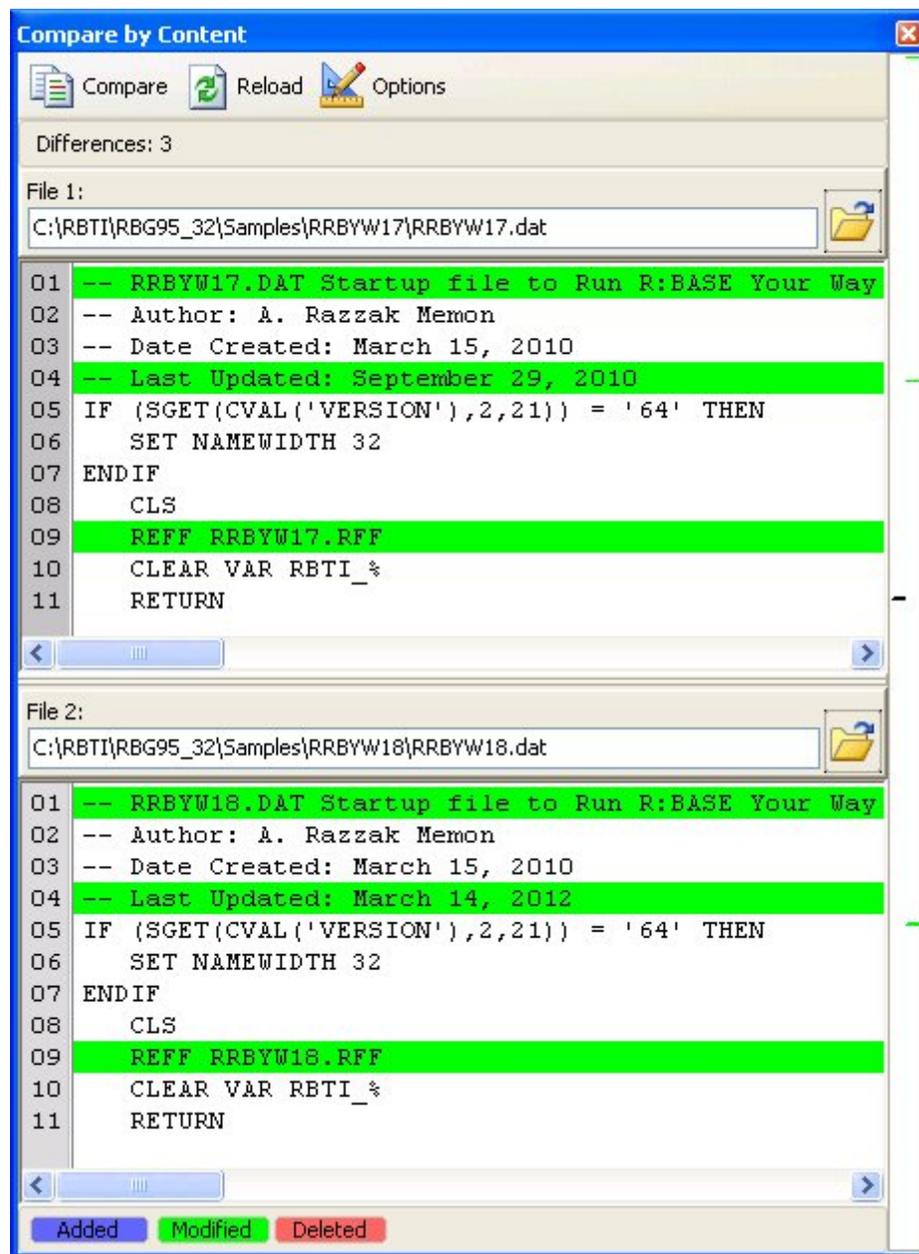


- Ability to change the sorting order (ascending/descending) for a column within the GROUP BY and ORDER BY dialog, without having to delete and resort the column
- New RBTI_QBE_NAME System Variable to capture view name used in the Query Builder

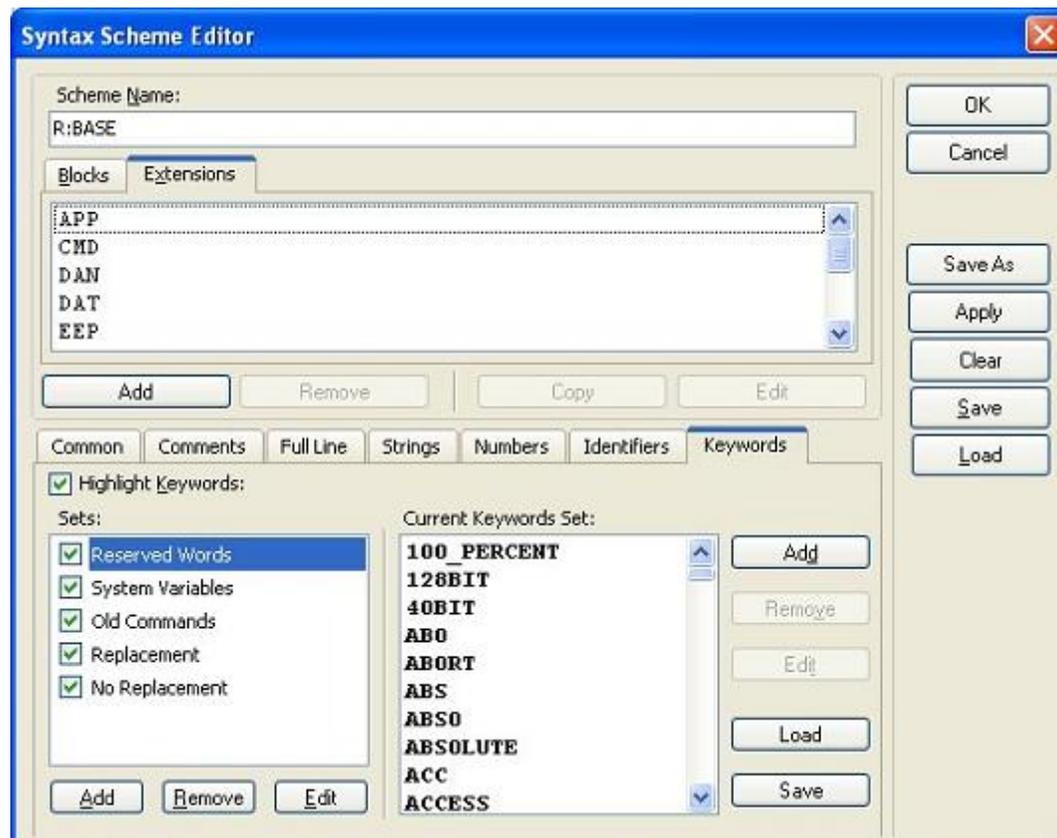
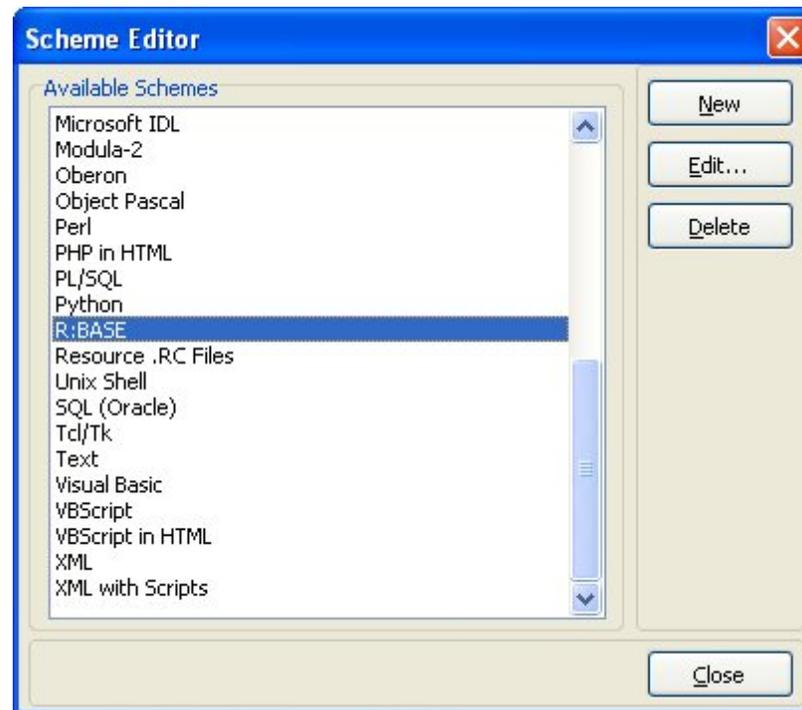
13 R:BASE Editor

The R:BASE eXtreme text editor provides more power and flexibility for working with R:BASE command files. The updated editor offers these special features:

- Dockable/Floating toolbars for custom display



- New "Compare by Content" Toolbar to compare the text within two files



- Editable and customizable "Syntax Schemes" for multiple programming languages

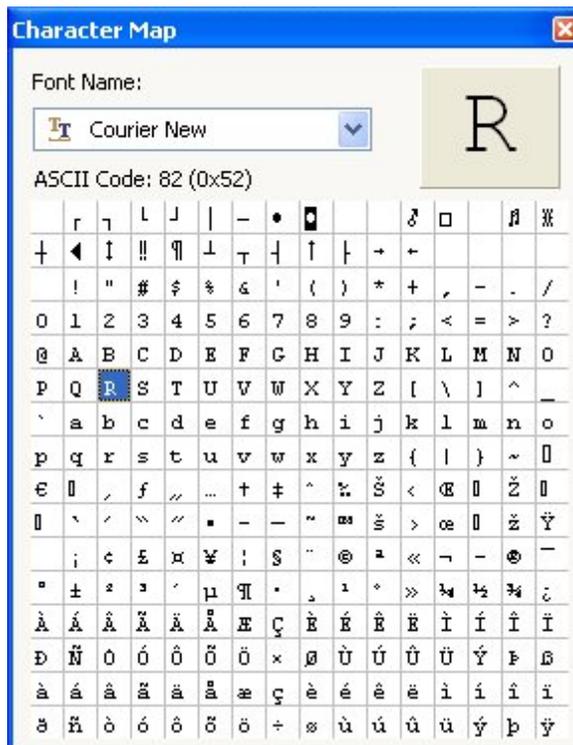
```

1 CREATE VIEW `TransAmounts` +
2 (TranNum, Total) AS +
3 SELECT t2.TransID,SUM (t3.Price) +
4 FROM InvoiceHeader t2,InvoiceDetail t3 +
5 WHERE t3.TransID = t2.TransID +
6 GROUP BY t2.TransID +
7 UNION SELECT t1.TransID,$0.00 +
8 FROM InvoiceHeader t1 +
9 WHERE NOT EXISTS +
10 (SELECT TransID FROM InvoiceDetail +
11 WHERE InvoiceDetail.TransID = t1.TransID)
12 RETURN

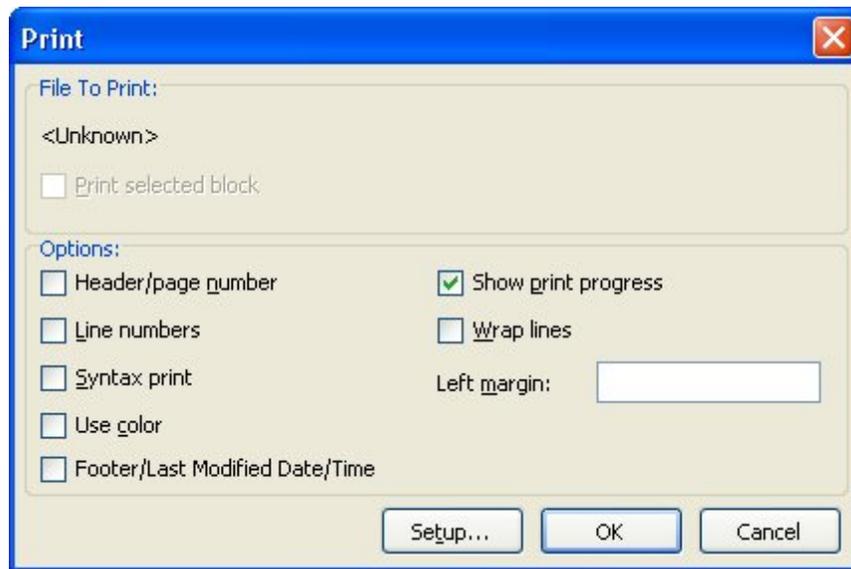
```

The screenshot shows the R:BASE Editor interface with a toolbar at the top and a status bar at the bottom. The main window displays a SQL script for creating a view named 'TransAmounts'. Line 8, 'FROM InvoiceHeader t1 +', is highlighted in yellow and circled in red. The status bar shows the cursor is at line 8, column 24.

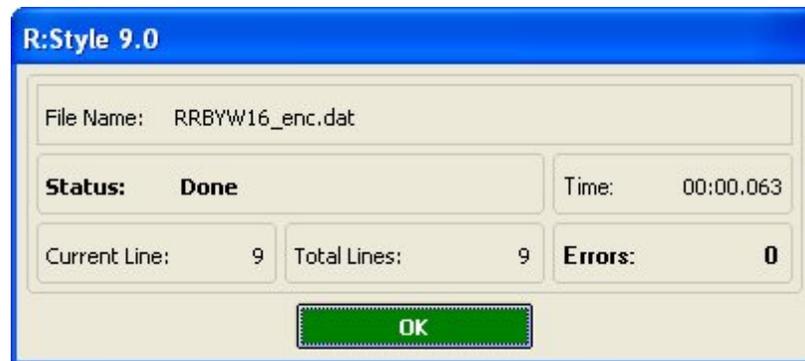
- Added "Line Highlight" display to easily locate your cursor



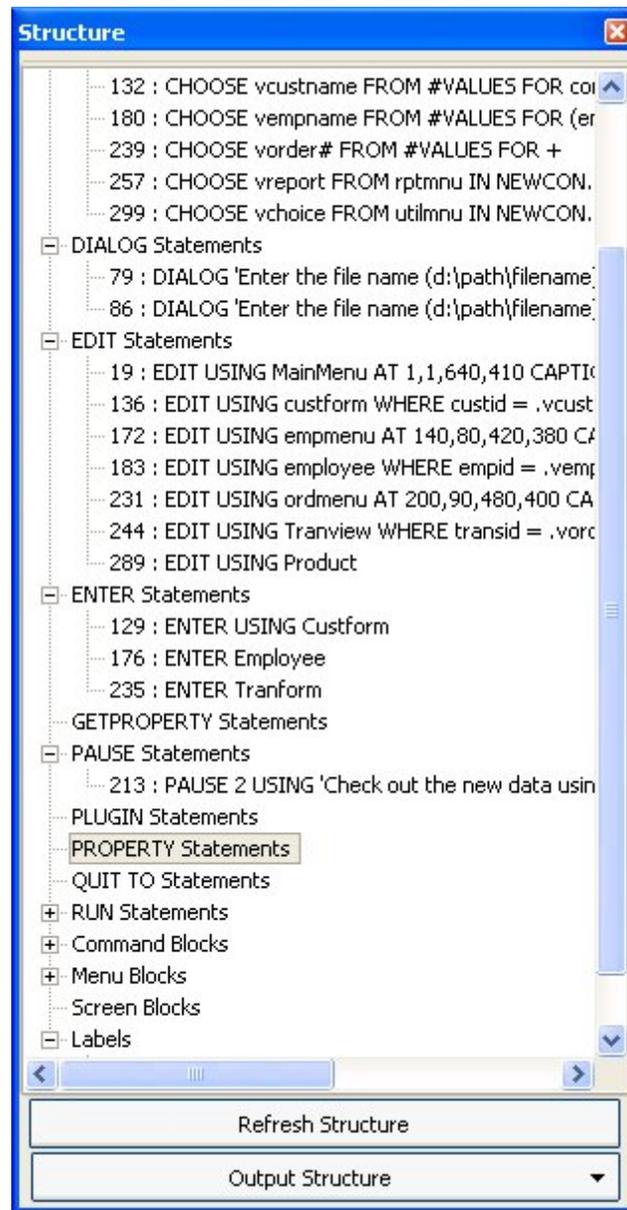
- New "Character Map" toolbar



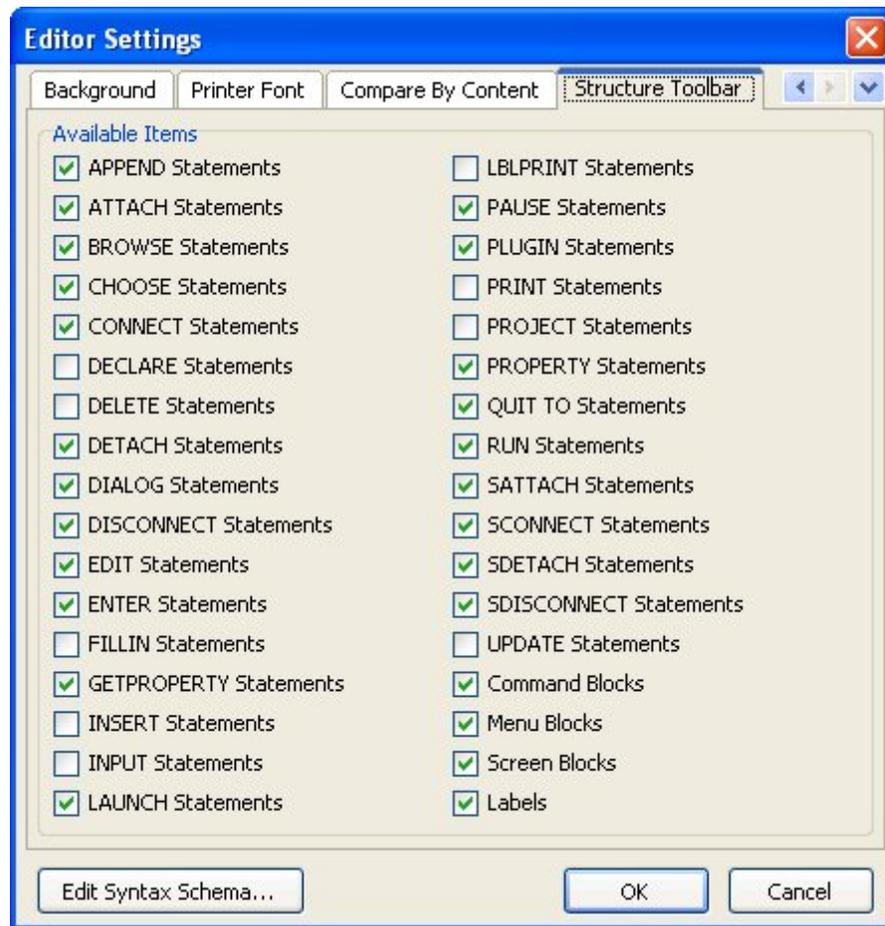
- Addition command file print options to include a Footer with the last modified date and time



- Enhanced R:Style results, with an easier to read dialog and improved location finders for errors



- Improved Structure Toolbar to include PRINT, LBLPRINT, EDIT, ENTER, BROWSE, INSERT, DELETE, PROJECT, CHOOSE, DIALOG, PAUSE, FILLIN, DECLARE, PLUGIN, PROPERTY, GETPROPERTY, APPEND, LAUNCH, CONNECT, DISCONNECT, SCONNECT, SDISCONNECT, ATTACH, SATTACH, DETACH, and SDETACH
- Output options for the Structure Toolbar now include: Printer, Text File, PDF, or Clipboard

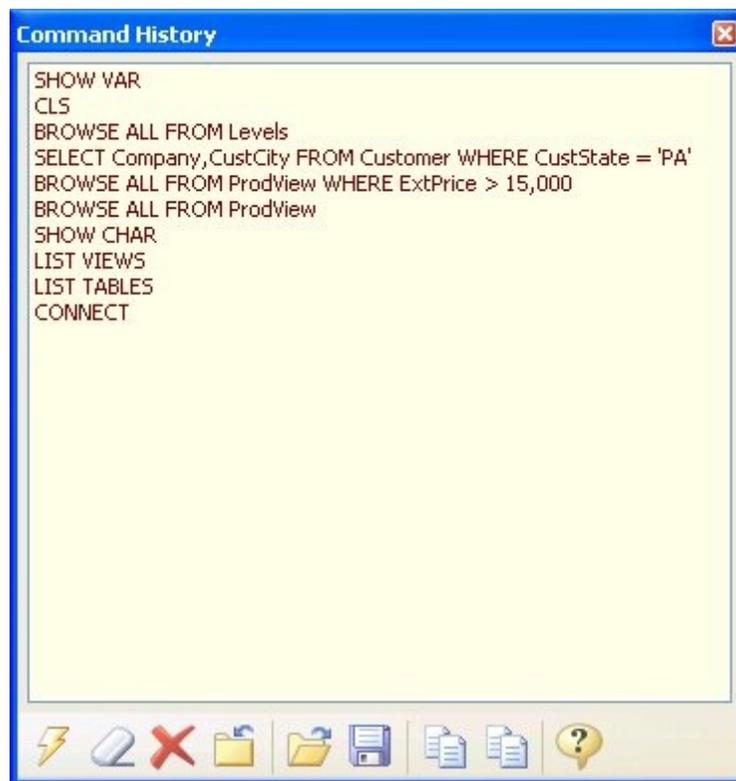


- Enhanced settings to control what statements are displayed in the Structure Toolbar
- Command files tabs now include a small "x" to easily close the file
- Added "Reload" button within the Compare by Content toolbar, to easily refresh the files displayed after changes to the command files were made
- In the Compare by Content "Options" menu, a setting is available to split the file comparison vertically or horizontally
- Enhanced response information for the Compare by Content toolbar is enabled when comparing the same or identical files
- Added hot key navigation to move to the next tab [Ctrl+Alt+N] and previous tab [Ctrl+Alt+P]
- New "Merge" option to merge the custom schema from a previous R:BASE Editor environment, into a new R:BASE Editor installation

14 R> Prompt

While maintaining the powerful R:BASE R> Prompt, we have added several useful features:

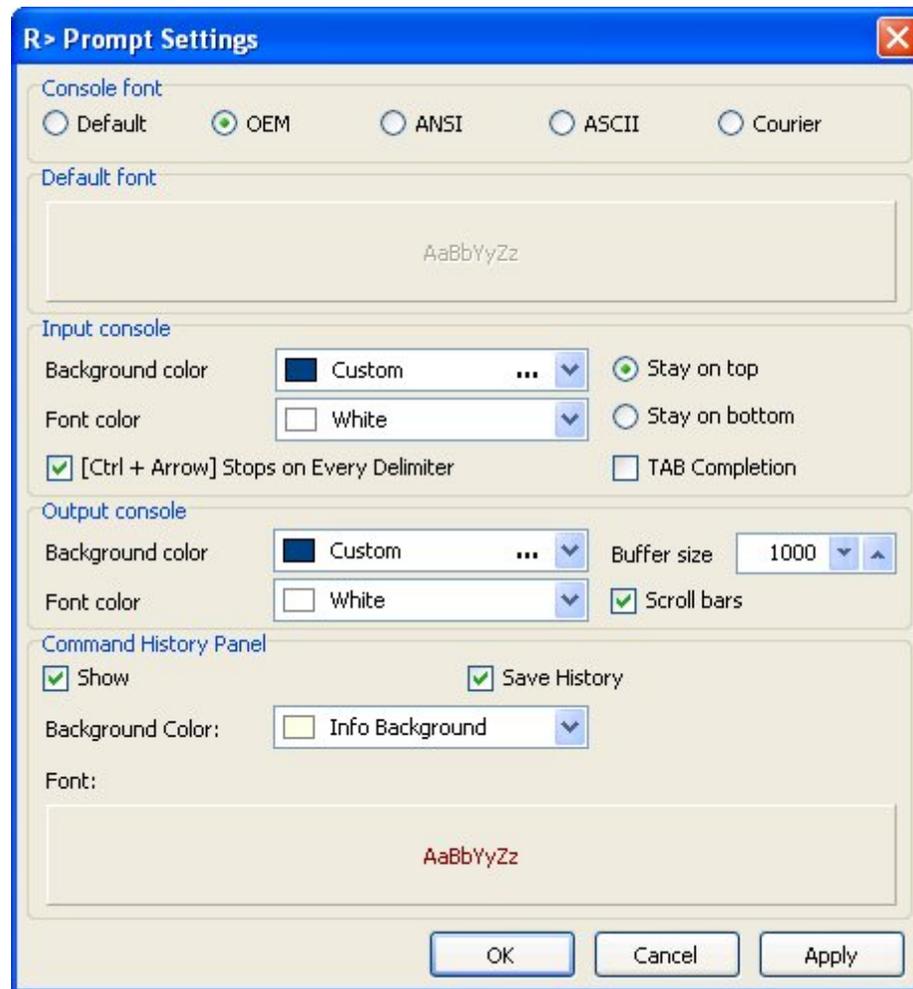
- Added buttons to the Command History panel
- With files added to the Windows clipboard, the file names can be pasted to R> Prompt
- Increased speed for the Output console
- Enhanced Command History which includes recognizes mouse clicks for faster command execution
- Added "TAB Completion" option to complete the syntax for a command when the [Tab] key is pressed
- Dockable Command History panel for easy display and running of previously entered commands



- Revised Command History panel



- Right click speed menu options to run a selected command, clear the history, and close the panel
- Right click speed menu option to copy the command history to the clipboard
- Right click speed menu option to copy the selected command to the clipboard



- Additional Setting for easier Input Console navigation
- Ability to save and display the history after R:BASE is restarted

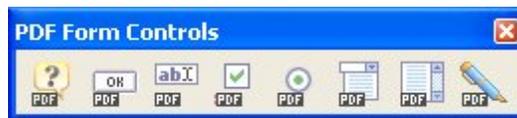
15 Report/Label Designer

The R:BASE eXtreme Report/Label Designer is one of the most powerful object oriented report designers available. It combines the power and flexibility of a GUI to provide virtually infinite options in design. New features include:

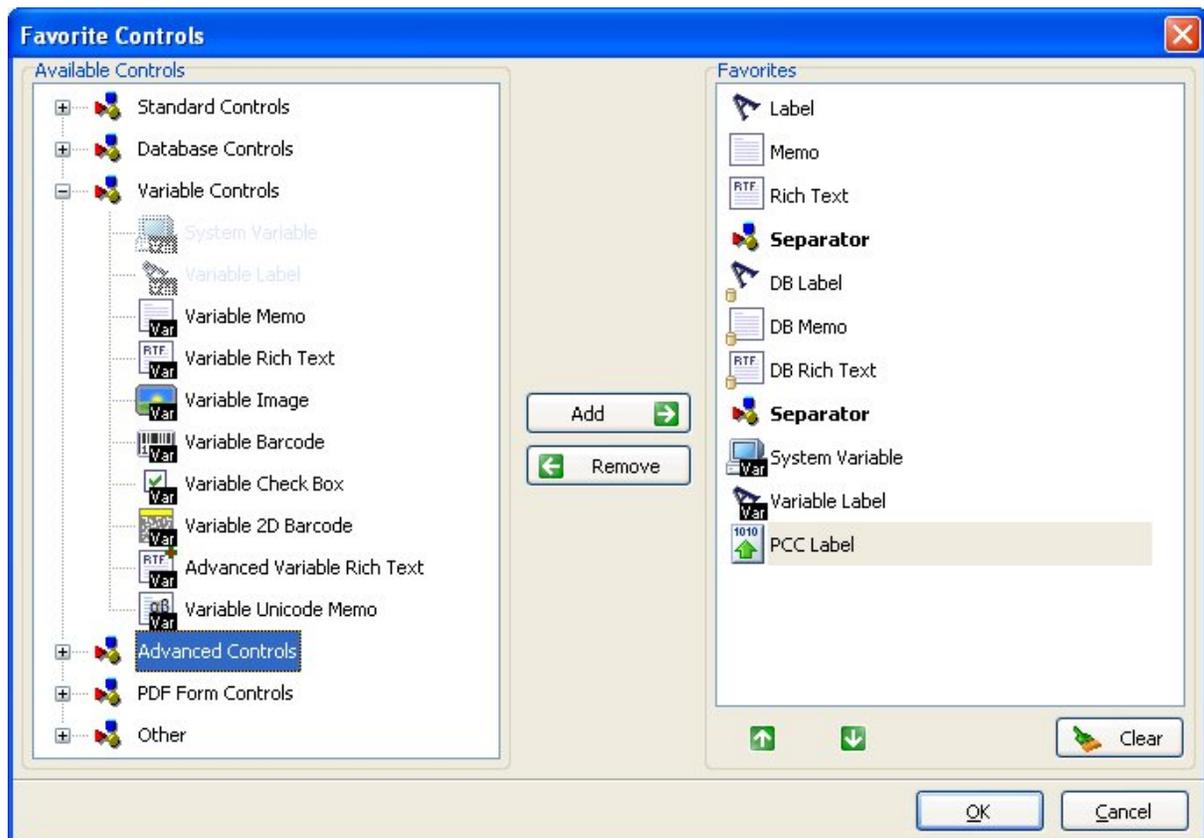
- Available Consolidate Control Palette for better screen use



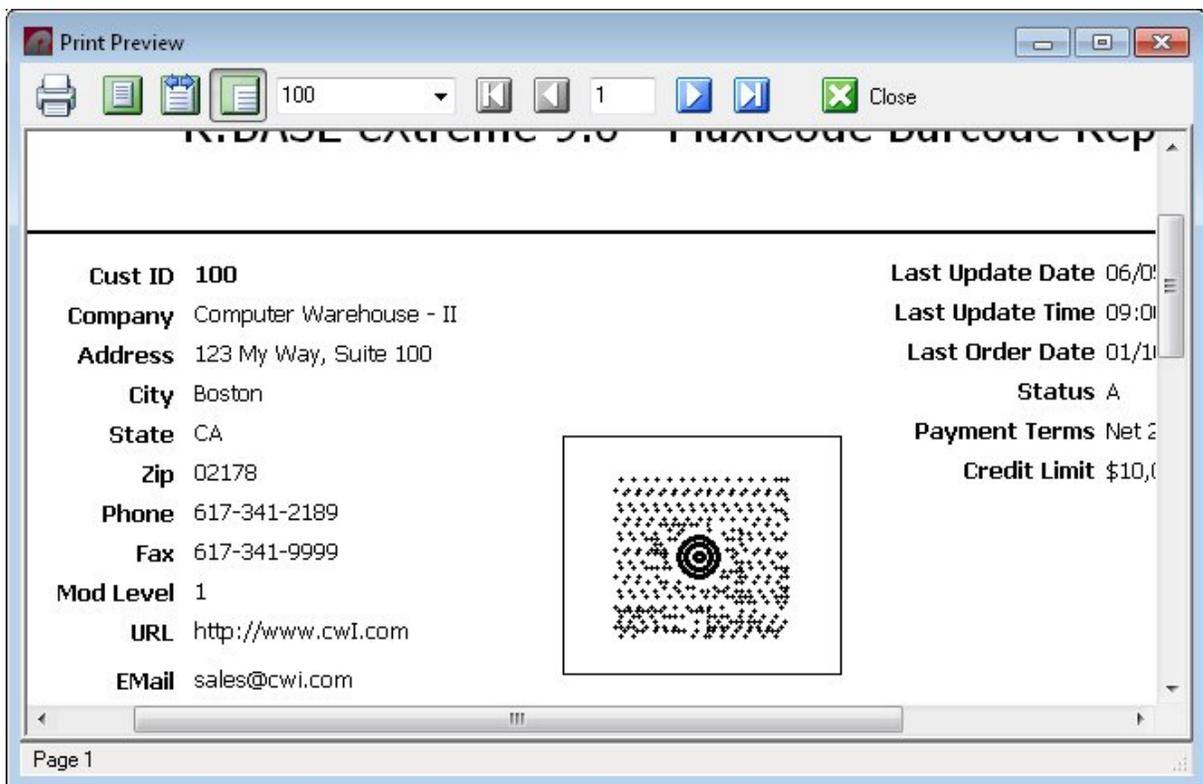
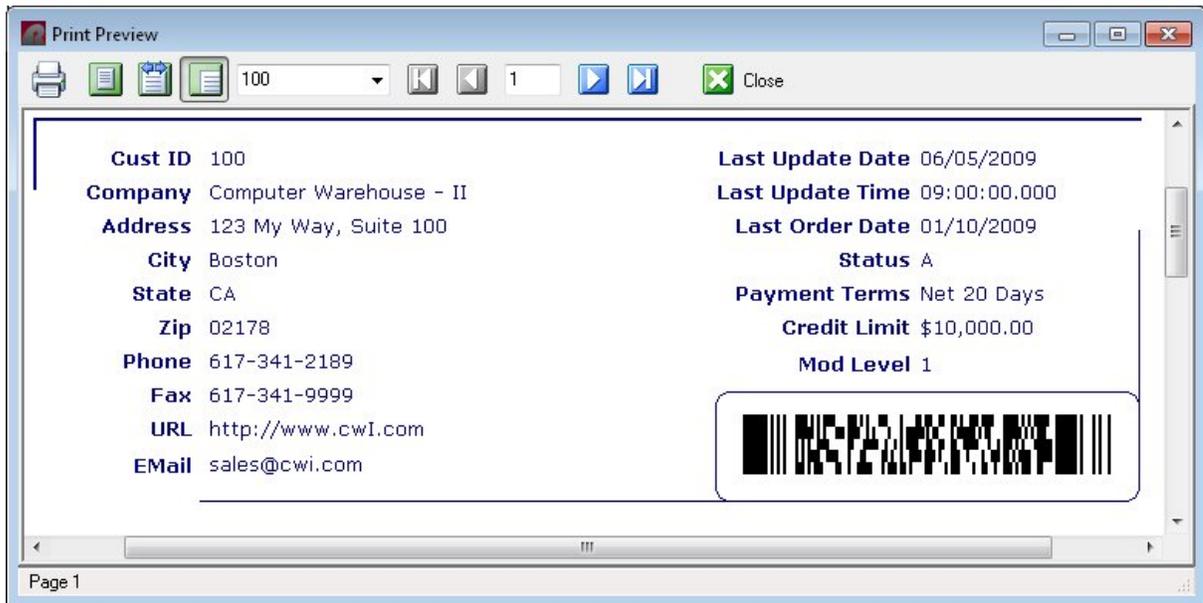
- New PDF Form Controls to allow for PDF output to be provided to others, so data can be inserted into fields. There are eight different form controls. Each tool is used to create the respective field type.



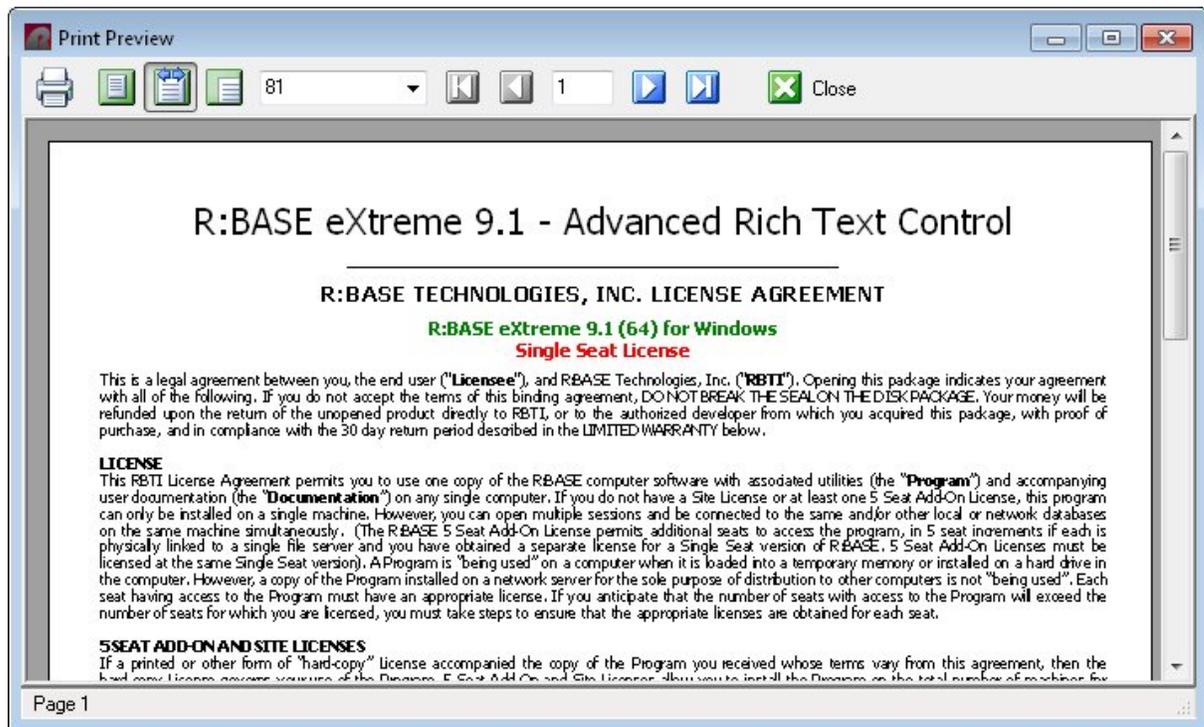
- PDF Annotation
 - PDF Push Button
 - PDF Text Field
 - PDF Check Box
 - PDF Radio Button
 - PDF Combo Box
 - PDF List Box
 - PDF Signature Field
- A new "Favorites Toolbar" is available for users to customize their favorite controls onto a single toolbar that lists their commonly used items



- The Report Designer has been enhanced to support the ability to launch the specific chapter within the Help documentation when right clicking on a selected object or control
- Character Case support for Variable Memo, DB Memo, and Memo objects to force the text display to lower case or upper case
- Two additional Character Case options have been added to DB Label, Variable Label, and Label Controls, as well as the DB Memo, Variable Memo, and Memo Controls; Title Case and Sentence Case
- New 2D Barcode/DB 2D Barcode/Variable 2D Barcode controls to support PDF417 and MaxiCode bar codes

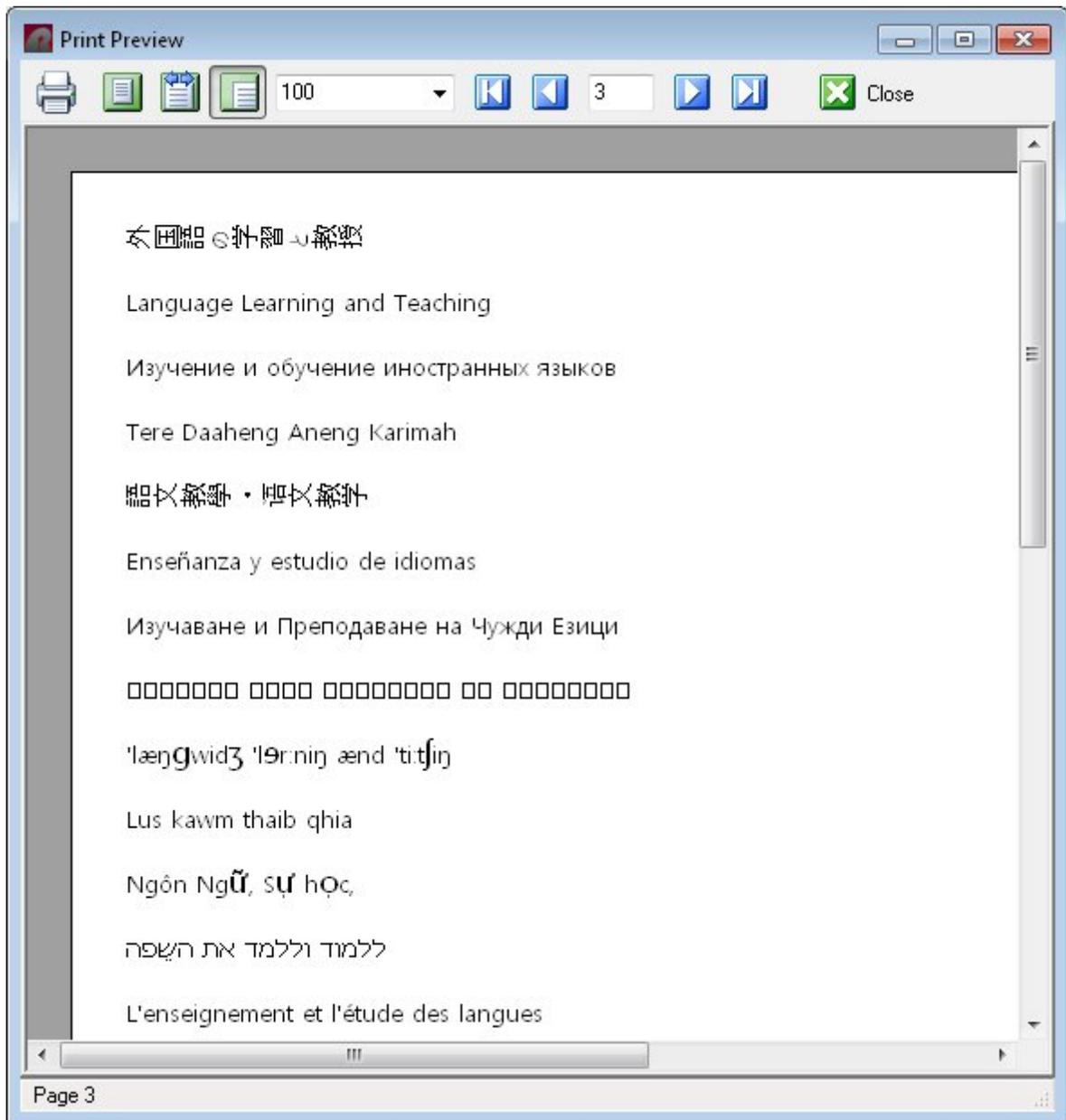


- New Advanced Rich Text control (for Standard, DB, and Variables) for extended Rich Text property display



Unicode and binary string data can be included in reports with the new Unicode Memo controls; DB Unicode Memo, Variable Unicode Memo, and standard Unicode Memo. These controls are only available in R:BASE eXtreme 9.1 (64).

The Unicode Label control can also be used to place a static binary string text object.



The screenshot shows the 'Breaks' dialog box with the following configuration:

- Breaks:** A dropdown menu showing 'Customer.CustState'. Below it is a list box containing 'Break(0): Customer.CustState'.
- Buttons:** 'Add', 'Insert', 'Delete', and 'Reset Vars' are located to the right of the list box.
- Break On:** Radio buttons for 'Data Field' (selected), 'Custom Field', and 'Variable'.
- Sort Direction:** Radio buttons for 'Ascending' (selected) and 'Descending'.
- On Page Break:** A 'Reset Vars' button.
- On Break Change:**
 - Start new page
 - Reset page number
 - New page when less than:
 - Keep break together
 - Reprint break headers on subsequent pages
- Bottom Buttons:** 'OK' and 'Cancel'.

- Enhanced Breaks to support ascending and descending sorting



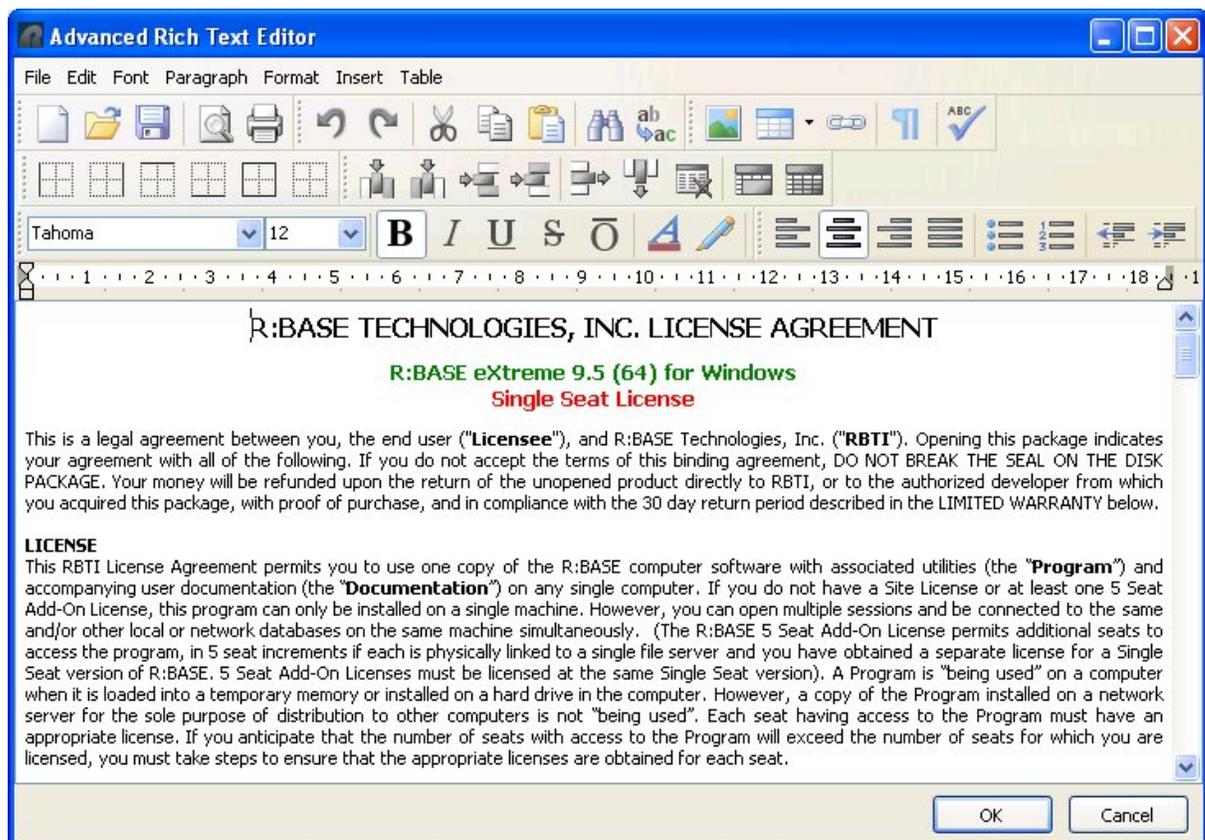
- Integrated Object Inspector Toolbar for "under the hood" manipulation of report/label objects
- Ability to specify a Component ID to Report Bands
- Support to set a design password is available to protect access to a report in the designer. Once the design password is set, R:BASE will prompt for a password the next time the report is opened in the designer.



- Support to set a print password is available to protect the display of a report. Before the report is printed, R:BASE will prompt for a password.



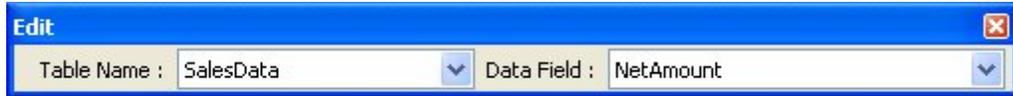
- Additional Report System Variable options:
 - R:BASE User
 - Windows User
 - Computer Name
 - Database Name
 - Default Printer
 - Current Printer
 - Version
 - Build
 - Version Build
 - Current Folder



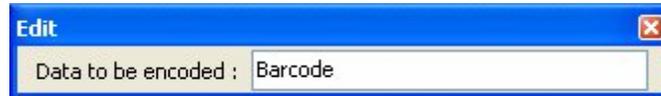
- New Advanced Rich Text graphic user interface
- Support to add external content (text, rich text, images) directly into the Report/Label Designer from

the Windows clipboard

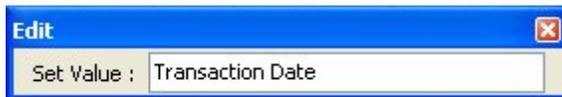
- Enhanced speed menu caption descriptions
- Enhanced handlebars for selected report controls
- Scrollable Designer window when using the mouse scroll button



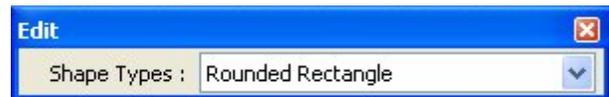
An 'Edit' dialog box with a blue title bar and a close button. It contains two dropdown menus: 'Table Name' with 'SalesData' selected and 'Data Field' with 'NetAmount' selected.



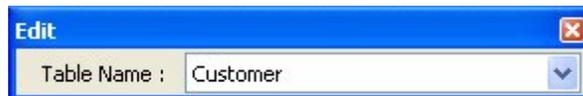
An 'Edit' dialog box with a blue title bar and a close button. It contains a text field labeled 'Data to be encoded' with the value 'Barcode'.



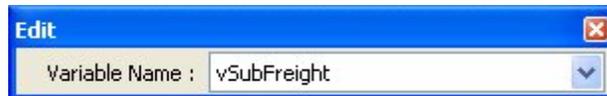
An 'Edit' dialog box with a blue title bar and a close button. It contains a text field labeled 'Set Value' with the value 'Transaction Date'.



An 'Edit' dialog box with a blue title bar and a close button. It contains a dropdown menu labeled 'Shape Types' with 'Rounded Rectangle' selected.

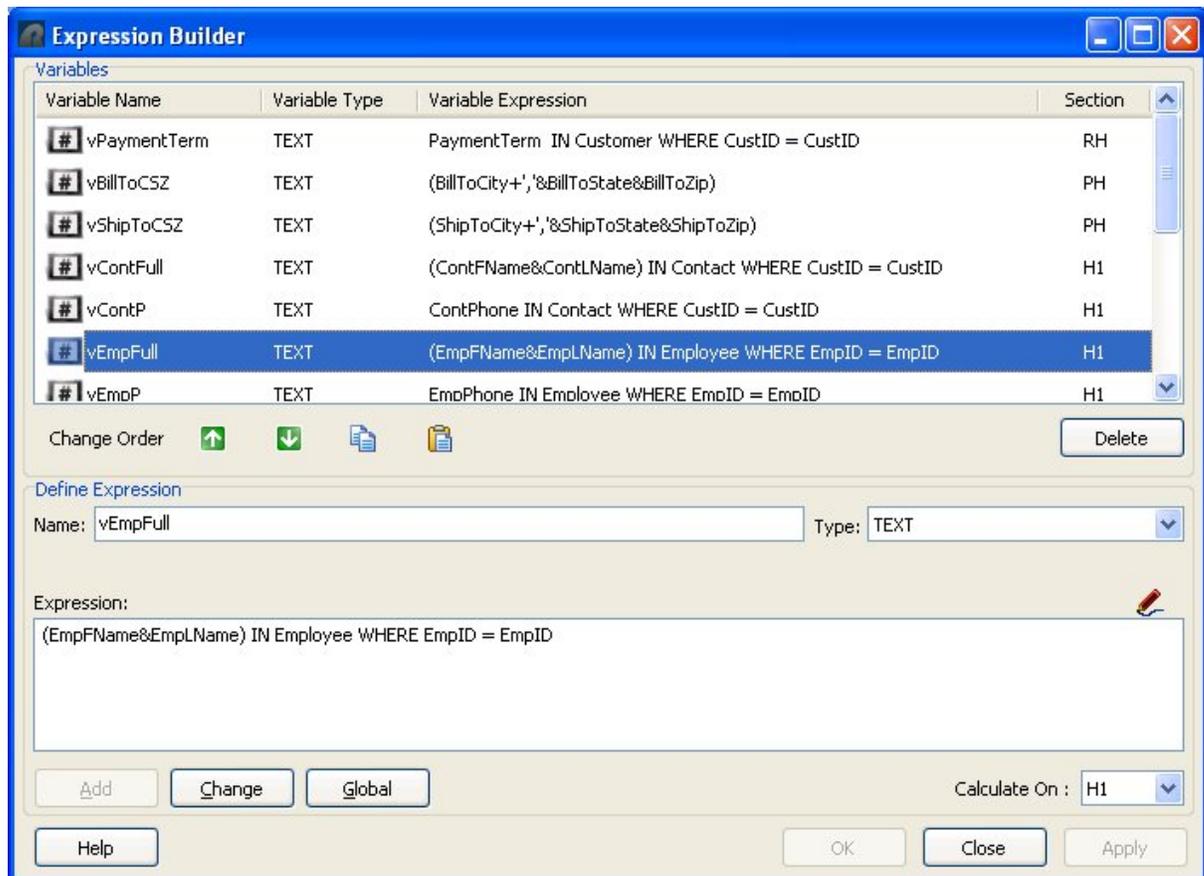


An 'Edit' dialog box with a blue title bar and a close button. It contains a dropdown menu labeled 'Table Name' with 'Customer' selected.



An 'Edit' dialog box with a blue title bar and a close button. It contains a dropdown menu labeled 'Variable Name' with 'vSubFreight' selected.

- Enhanced Edit Toolbar to show current state for the selected control



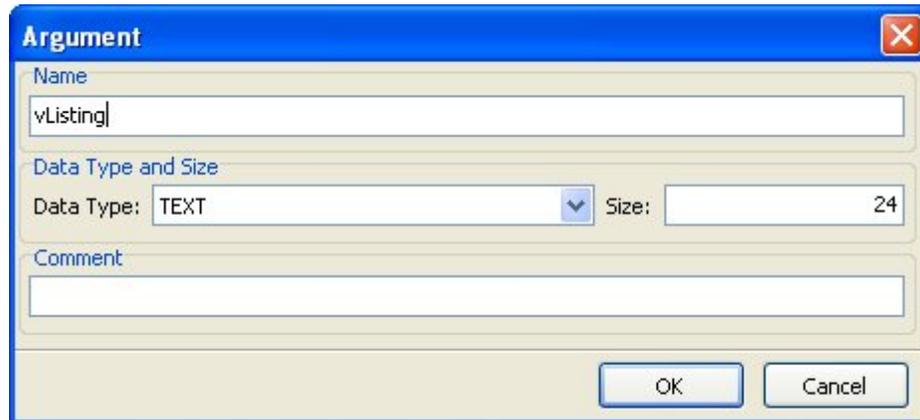
- Support to copy/paste variables from the Report Designer's Expression Builder, to copy and paste variables from one report to another
- A new Expression Builder option is available within the Form Designer to edit the "Expression:" memo field font, which is helpful to clearly view all characters like commas, parenthesis, etc
- Ability to autosave the report/label when previewed
- Ability to sets the current folder or a defined location for print output
- When printing reports/labels to the screen, a "Maximize" check box is available display a maximized window
- Self-adjusted font support for Memo/DB Memo/Var Memo report controls for PDF & Screen output
- When editing variables within the Report/Label Designer Expression Builder, the selected variable is highlighted in the canvas background for easier recognition
- 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
- A new "Stretch DXF" property is supported for displaying DXF images in DB Image, Variable Image, and Image controls
- The Print Preview screen has been enhanced to allow users to move from page to page using the [Shift]+Scroll action
- Support to specify a NULL Format when multiple objects are selected
- "Blank When Zero" and "NULL Format" properties have been added to the Variable Memo and DB Memo controls

16 Stored Procedures

R:BASE eXtreme Stored Procedures has been updated to make new stored procedure definition easier. The newest features include:

- Creation of the stored procedure help file

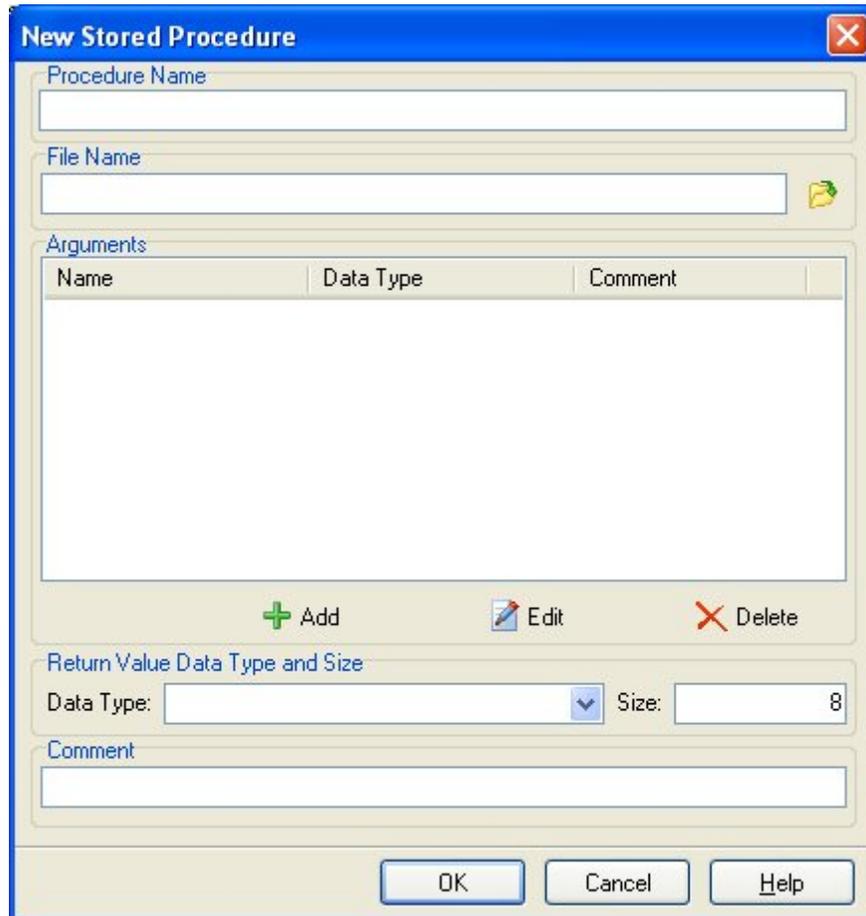
- Support to recognize the full path and file name string using more than 52 characters



The 'Argument' dialog box is shown with the following details:

- Name:** vListing
- Data Type:** TEXT
- Size:** 24
- Buttons:** OK, Cancel

- Ability to define a length for text data type arguments in graphic interface



The 'New Stored Procedure' dialog box is shown with the following details:

- Procedure Name:** [Empty]
- File Name:** [Empty]
- Arguments Table:**

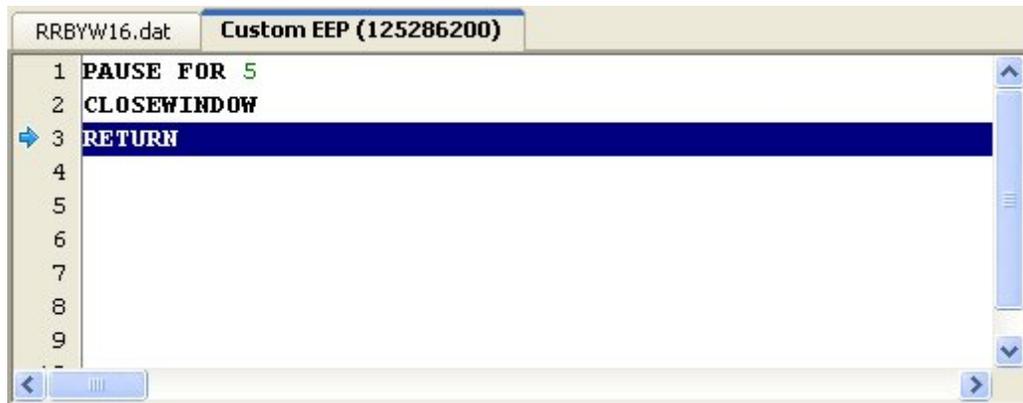
Name	Data Type	Comment
------	-----------	---------
- Return Value Data Type and Size:** Data Type: [Empty], Size: 8
- Buttons:** + Add, Edit, Delete, OK, Cancel, Help

- Ability to define a length for text data type return variables in graphic interface

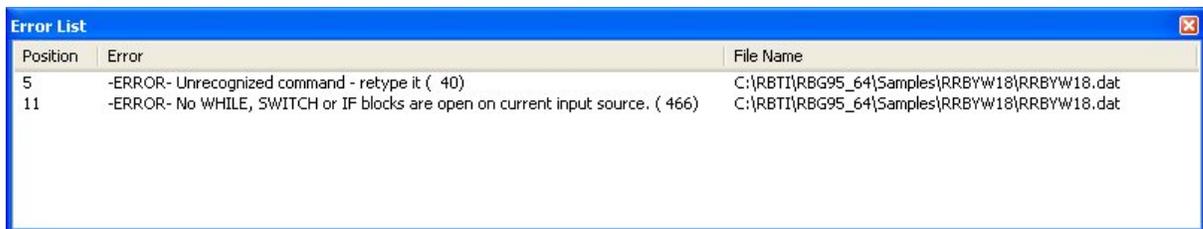
17 Trace Debugger

The R:BASE eXtreme Trace Debugger has been updated with the following new features:

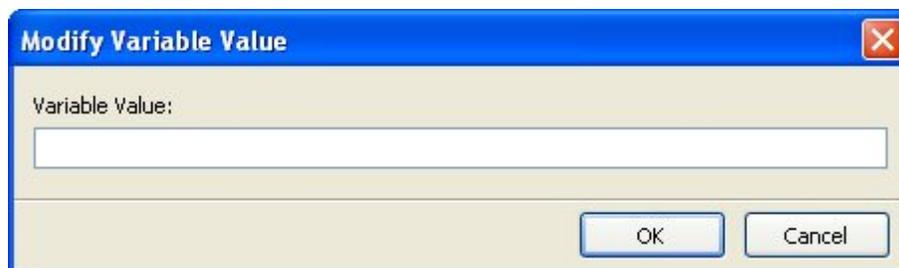
- New option to clear the Error List Toolbar
- Added popup menu to right click and add watch variables and toggle breakpoints
- New option to save the Error List to a file
- The Trace Debugger Watch Variable list can be sorted alphabetically, to easier to find a specific variable
- Dockable/Floating toolbars for custom display



- Bold text is displayed within the "tab" for the file that is currently being debugged



- Enhanced Error List Toolbar to support jumping directly to the line where an error occurs



- Increased size for the "Modify Watch Variable" dialog field to display long variables



- Added "Clear Error List" and "Save Error List" options to the Trace Toolbar

Notes