



What's New in R:BASE X.5 and R:BASE X.5 Enterprise (Version 10.5)

by R:BASE Technologies, Inc.

Welcome to R:BASE X.5 (Version 10.5)!

R:BASE X.5 (Version 10.5) is the innovative release from R:BASE Technologies offering the latest relational database elements to create function-rich and visually appealing applications.

The must-have powerful and flexible features give users an extended range of dashboard controls encompassing simplicity without sacrificing elegance.

Providing crucial data protection, that is also reliable and secure, R:BASE X.5 delivers a versatile environment for building robust systems for real time data analysis and essential business management.

What's New in R:BASE X.5 (Version 10.5)

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First Edition

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1 Global Environment

The following X.5 (Version 10.5) features compliment several or all areas of the R:BASE development environment:

- Updated GUI to better match the appearance of Windows 10 operating systems
- Enhanced rendering of drop-down type menus in all designers, menus, and controls, where the object appears similar to a button
- Added disable/enable specific keys on the R:BASE On-Screen Keyboard (ROSK) using the PROPERTY ROSK ... command syntax

PROPERTY ROSK ENABLE_KEY <KeyName> PROPERTY ROSK DISABLE_KEY <KeyName>

Example:

PROPERTY	ROSK	SHOW TRUE	
PROPERTY	ROSK	TYPE ALPHA	
PROPERTY	ROSK	CAPTION 'Number Keys Are Disabled'	
PROPERTY	ROSK	DISABLE_KEY 1	
PROPERTY	ROSK	DISABLE_KEY 2	
PROPERTY	ROSK	DISABLE_KEY 3	
PROPERTY	ROSK	DISABLE_KEY 4	
PROPERTY	ROSK	DISABLE_KEY 5	
PROPERTY	ROSK	DISABLE_KEY 6	
PROPERTY	ROSK	DISABLE_KEY 7	
PROPERTY	ROSK	DISABLE_KEY 8	
PROPERTY	ROSK	DISABLE_KEY 9	
PROPERTY	ROSK	DISABLE_KEY 0	



- Ability to utilize the Magnifying Glass utility as detached from R:BASE. Minimizing R:BASE will not
 minimize the Magnifying Glass making it usable outside the program. The added "-M" command line
 switch allows for instances where users only want to use R:BASE as a Magnifying Glass. The magnifier
 window can also be moved, pixel by pixel, without having to drag the window with the mouse. Use
 [Shift]+Mouse Wheel to move the window up/down and [Ctrl+Shift]+Mouse Wheel to move the window
 left/right for precise centering upon an area.
- Added "Find in Data Dictionary" search (Ctrl+N) to locate text of objects within the active tab. The entry box is also a drop down where the search history is available in the drop down items. To clear the history, press the [Ctrl+R] key combination. The search history is saved in the C: \Users\<User>\RBTI\ folder within the DATADICT.RST file.

Search Text			
invoice			~
Case sensitive	Search Direction	Forward	~

- Additional formats supported for REAL number values
- Added database "Integrity Check" option under the Utilities menu
- Enhanced FEEDBACK status dialog which displays the table name where rows are being inserted, updated, or deleted

Feedba	ck	
Upda	ting rows in tConf_Invitations: 87000 rows updated	
Elaps	ed time: 00:00:01.078	

System Co atabases		Themes Columns	Printers Key/Indexes	External Forr	ns A Views	Applications	Reports	s Cor Labels	ntrol Types Functions	Database Set	-	Files	CVAI Tables
Name 🔺	Tubles		e Name	Tunubics	Tiens	Commen		Labels	- directions	Date/Time		Jacin	~
Active	X	Form	nTable			To Demo	nstrate the	use of A	ctiveX	05/11/201	2 10:13 AN	1	
Adho	Reports					Ad hoc R	eports			05/11/201	2 10:13 AN	1	
🔚 Aligne	dPanel									10/04/201	8 04:21 PN	1	
🔚 Anima	atedGIFs	Form	nTable			To Demo	nstrate the	use of Ar	nimated GIFs	08/04/201	5 02:49 PN	1	
AskSc	reenPrinter	Form	nTable			Options t	o Print Rep	ort on So	reen or Printe	r 05/11/2012	2 10:13 AN	1	
E Balloc	nTip					New Ballo	oon Tip Fea	ture		05/11/2012	2 10:13 AN	1	
CallNe	otesEdit	Con	tactCallNotes (Customer, Co	ntact)	Review/U	pdate Call I	Notes		10/04/201	8 04:04 PN	1	
E CallN	otesEnter	Con	tactCallNotes (Customer, Co	ntact)	Enter Call	Notes			12/28/201	7 12:14 PN	1	
🚝 Captu	ringImage	s Emp	loyee			Capturing	g Images wi	th the D	B Image Cont	05/11/2012	2 10:13 AN	1	
Collap	sePanel					New Colla	apse Panel	Control		05/11/2012	2 10:13 AN	1	
Conta	ctPhoto	Con	tact			Show Cus	tomer Con	tact Pho	to	05/11/201	2 10:13 AN	1	
E Conta	cts	Con	tact			Enter/Upd	date Conta	ct(s)		10/04/201	8 05:30 PN	1	
CueBa	nner					New Cue	Banner Fea	ture		05/11/2012	2 10:13 AN	1	
E Cust	ontAndSal	es Cust	tomer (Contact	, InvoiceHead	ler, In	Master Fo	orm to Disp	lay Custo	omer, Contact	10/03/201	8 04:50 PN	1	
E CustF	orm_Status	Bar Cust	tomer			Enter/Upd	date Custor	mer(s) - \	With Status Ba	r 05/11/201	2 10:13 AN	1	
Custo	mChkBox					Custom G	Slyphs on C	heck Bo	xes	05/11/201	2 10:13 AN	1	
Custo	merContac	ts Cust	tomer (Contact)		Customer	and Conta	icts		05/11/2012	2 10:13 AN	1	~

• Added slave tables to the Data Dictionary display under Forms and Reports tabs

• Enhanced Jump List support where program file history can be referenced when right clicking on R:BASE within the Windows taskbar. The three sections available include recent databases that were connected, recent command files launched within the R:BASE Editor, and recent External Form Files opened in the designer.

Data	abase Connection History	
R	C:\RBYW20\USERMGMTX.RX1	¥
R	C:\RBYW20\RRBYW20.RX1	
R	C:\RBRIAL\SKY.RX1	
R	C:\RBYW20\RRBYW20_OId.RX1	
Exte	rnal Form History	
R	C:\RBYW20\SplitView_Sample.rff	
R:BA	SE Editor History	
R	C:\RBYW20\SerRepl.rmd	
R	C:\RBYW20\ROSK_Keys.RMD	
R	C:\RBYW20\RRBYW20.dat	
R	RBASE X.5 Enterprise	
臣	Pin to taskbar	
×	Close window	

• Enhanced Database Versions utility with various filters to limit the search, including: file name (with wildcards), file extension, date range, sub-folder, and hidden files/folders

Folder: C:\RBTI\RBGX5E				Scan For Databases
File Name Pattern:				
*	7			Scan Hidden Files/Folders
Date Modified (From/To):	Check Struct	ure File (RB1/RX1)	Date Only	Scan In Sub-folders
			bute only	
	-			
Database Name	Extension	Version	Modified	Full Path
ConComp	RX1	XE, X5E	01/22/2019 05:46 PM	C:\RBTI\RBGX5E\Samples\ConComp\ConComp.RX1
RRBYW19	RX1	XE, X5E	10/20/2018 10:50 AM	C:\RBTI\RBGX5E\Samples\RRBYW19\RRBYW19.RX1
Entity	RX1	XE, X5E	02/11/2019 09:17 AM	C:\RBTI\RBGX5E\Samples\RRBYW20\Entity.RX1
products	RX1	XE, X5E	02/11/2019 09:16 AM	C:\RBTI\RBGX5E\Samples\RRBYW20\products.RX1
RRBYW20	RX1	XE, X5E	01/25/2019 10:14 AM	C:\RBTI\RBGX5E\Samples\RRBYW20\RRBYW20.RX1
RRBYW20_CLEAN	RX1	XE, X5E	12/18/2018 03:14 PM	C:\RBTI\RBGX5E\Samples\RRBYW20\RRBYW20_CLEAN.RX1
RRBYW20_NOCONST	RX1	XE, X5E	10/10/2018 01:17 PM	C:\RBTI\RBGX5E\Samples\RRBYW20\RRBYW20_NOCONST.RX1
TestDB	RX1	XE, X5E	10/30/2018 01:03 PM	C:\RBTI\RBGX5E\Samples\RRBYW20\TestDB.RX1
	RX1	XE, X5E	01/14/2019 03:35 PM	C:\RBTI\RBGX5E\Samples\RRBYW20\USERMGMTX.RX1
RRBYW20	RX1	XE, X5E	10/11/2018 05:06 PM	C:\RBTI\RBGX5E\Samples\X5Controls\RRBYW20.RX1
SAMPLE	RX1	XE, X5E	10/20/2018 10:50 AM	C:\RBTI\RBGX5E\Tutorial\SAMPLE.RX1
SKY	RX1	XE, X5E	02/06/2019 05:52 PM	C:\RBTI\RBGX5E\Tutorial\SKY.RX1

• Added option to create a text log file, to review all status messages and errors, when converting forms, reports, and labels from legacy DOS/Windows releases

Contactsold			
Customer			
mplist			
ixedFieldASCII			
roduct			
)salesrpt			
alesrep			
alesrpt			
alestat			
umrpt			
			Deserved Marcia Marcia
] DOS Reports 🗹 Show Conversion Errors 🗹 Crea	ate Log File 🗹 🖸	onvert " into ' in F	Report Variable

• Added CodeLock option to specify an input folder location, and file extension, followed by an output folder, to CodeLock the entire source into individual locked files

CodeLock		×
CodeLock	 Convert an ASCII Command File to a Binary Command File Add an ASCII Command File to a Procedure File Add an ASCII Screen File to a Procedure File Add an ASCII Menu File to a Procedure File Convert an ASCII Application File to a Binary Procedure File 	
·	Converts an ASCII Command File group, by extension, to Binary Procedure Files CodeLock Options Source Input Folder: File Mask (e.g. *.rmd): CodeLocked Output Folder: OK Cancel Hel	1

- A new **BOOLEAN** operating condition setting (ON/OFF) has been implemented which specifies that constants (e.g. TRUE, FALSE) in expressions will be treated as type BOOLEAN values. The default is OFF.
- Added "Apply" button to the Configuration Settings dialog, allowing setting changes to take place for individual tabs

Configuratio	n Settings						×
C:\Users\Pu	blic\RBTI\RBI	E <mark>NGIN</mark> EX5	E.CFG				
Characters	Multi-User	Format	Transaction Processing	Debug		••	-
MANY	%		SIN	GLE	_		
QUOTES	i .		SEN	ЛI	;		
PLUS	+		DEL	.IMIT	,		
BLANK			LIN	EEND	^		
NULL				UOTES	2		
Defaults	🗹 <mark>Make a B</mark>	ackup	Apply OK	Car	ncel	<u>H</u> elp	

• Updated BLOB Editor to display the OK button when a file name is provided, which simplifies the file saving process. The launched BLOB Editor tab (Image, Text, Rich Text, Unicode, or Hex) will be displayed based upon the file extension, or the DefaultTab parameter for the **RBBEDIT** command.



• Added options to the Pause Builder Plugin for the Gauge Meter, Meter, and NO_FOCUS options

• Updated Error Message Help utility, with changes to Error Messages, Areas, and Possible Reasons, for when a user encounters an error



 Enhanced Data Dictionary with the display of the ascending or descending order for indexes within the "Columns" and "Keys/Indexes" tabs

C	ontrol Typ	es	Control Types D					Files			CVAL		
Stored Proc	edures System Table		System Columns Them		Columns Themes Printers External Forms		Themes Printers External Forms		External Forms Applications		oplications Co		
Databases	Tables	Columns	Key/Ind	exes V	ariables	Views	Fo	orms	Reports	Labels	Func	tions	
Type: All		~											
ID 🔺	Туре			Table Na	me			Refer	rences			^	
P #37	Primary Key ASC		HourlyTemps (ID)										
P #39	P #39 Primary Key ASC REFERENCED		ENCED	Departments (DepartmentID)			>> Staff (DepartmentID)						
P #42 Primary Key ASC REFERENCED		Contact (ContID)			>> ContactCallNotes (ContID)))					
P #43	Primar	y Key ASC		Tasks (ID)								
P #44	Primary Key ASC			Staff (EmpNo)									
F #45	Foreig	n Key ASC		CompUsed (CompID)			<< Component (CompID)						
F #46	Foreig	n Key ASC		CompUs	CompUsed (Model) << Product (Model)		(Model)						
F #47	Foreig	n Key ASC		ProdLoc	ation (Mo	del)		<< P	roduct (Model)				
F #48	Foreig	n Key ASC		InvoiceDetail (Model)				<< Product (Model)					
F #49	Foreig	n Key ASC		InvoiceDetail (TransID)				<< InvoiceHeader (TransID)					
F #50	Foreign Key ASC			Contact	CallNotes	(EmpID)	-	<< E	mployee (Em	npID)		_	
F #51	Foreig	n Key ASC		Contact	CallNotes	(ContID)	<< 0	Contact (Cont	tID)			
F #52	Foreig	n Key ASC		Levels (N	/lodel)			<< P	roduct (Mod	el)		~	

 Added "Attach USING" option to assign the QualKey columns when attaching a foreign data source table

ttach Table(s)	×
Data Sources	
BluzVan	~
Tables	
Albums	
Artists	
Customer	
Inventory	
MasterView	
MusicType	
Orders	
SecurityTable SecurityTable	
SongList StateAbbr	
Attach As Alias	
Attach as Temporary	
Attach USING (Assign QualKeys)	
⊖ ALL	
Olumns	
- Artist_ID	M.
AUSLID	1 S
	Lances I
Attac	

2 Application Designer

The R:BASE X.5 Application Designer has been enhanced with the following features:

• Added STATUSHINTS parameter to specify if hints are displayed in the RBA application status bar

PROPERTY RBA_FORM STATUSHINTS FALSE

Added TOP and LEFT parameters to control the application window location

```
PROPERTY RBA_FORM TOP 0
PROPERTY RBA_FORM LEFT 0
```

3 Commands

The following enhancements have been made to the R:BASE X.5 command syntax:

Added password encryption for Excel spreadsheet and workbook reports generated with the **PRINT** command. The XLS, XLS2003, and XLSX formats support encrypted spreadsheet/workbook reports. Passwords are case sensitive.

```
PRINT BonusRates OPTION XLSX +
|FILENAME BonusRate.xlsx +
PASSWORD PeachCobbler
```

Enhanced **PROJECT** command allowing for a table to be projected directly from a SELECT. It is not
necessary to create a view first in order to perform PROJECT into a new table from multiple table joins.
A USING clause is not needed as all required columns are defined in the SELECT statement.

```
PROJECT StaffDepts FROM +
SELECT T2.DepartmentID,T2.Description,T2.OwnerDept,+
T1.LastName,T1.FirstName,T1.PhoneExt,T2.DeptShape +
FROM Staff T1,Departments T2 +
WHERE T1.DepartmentID = T2.DepartmentID
```

• Enhanced **GATEWAY IMPORT** command syntax and parameters to support Append/Update import processes with "key" fields that can be specified for row comparison and updated, or are otherwise appended to the table.

APPEND_UPDATE – Specifies the Append/Update import mode. If the fields in the KEYS parameter exist, then the row is updated. Otherwise, the row in appended. KEYS – Specifies a comma separated list of field names used to locate a matching row.

```
GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobTitles + OPTION KEYS EmpTID
```

- Enhanced **BROWSE/EDIT** command parameters to specify the default view of the Data Browser windows:
 - GRIDVIEW displays "Grid" mode
 - ROWVIEW displays "View as Row" mode
 - TREEGRIDVIEW displays "Tree Grid" mode

BROWSE ALL FROM CustomerContact + OPTION TREEGRIDVIEW

 Added password encryption for spreadsheets exported using the GATEWAY EXPORT command. The XLS and XLSX formats support encrypted spreadsheet/workbook exports. Passwords are case sensitive. An additional PASSWORD_TO_OPEN parameter is included to allow appending to existing password protected spreadsheets files.

```
GATEWAY EXPORT XLS BonusRate2018.xls +
SELECT * FROM BonusRate OPTION PASSWORD ApplePie
```

 Enhanced **DIALOG** command to support launching of the R:BASE On-Screen Keyboard (ROSK) with a new ROSK_BUTTON parameter.

```
DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 + CAPTION ' ' OPTION ROSK_BUTTON ON
```



Enhanced LIST command to limit the results for forms, reports, and labels with wildcard support, with
option sorting of the output,

```
R>LIST FORMS SEARCH%
Form Table / View
------
SearchAndEditCust1
SearchAndEditCust2
SearchAndPrintInv FormTable
SearchCustInvoice FormTable
SearchForm_DBGrid Customer
```

R>LIST REPORT CUST% DES

```
ReportTable / ViewCustYellowPagesCustomerCustomPageInvoiceProdAliasCustomersCustomerCustomerListCustomerCustomerDirectoryCustomerCustomerContactsCustomerCustDirWithURL_VARCustomerCustOntInvoicesNewCustomer
```

Enhanced LIST DATABASES command to display associated date/time stamps for each database. The
details help users identify particular versions of database when several versions are kept in the same
directory.

R>LIST DATABASES

Databases in current directory

RRBYW20	02/21/2018	05:16	РM
RRBYW20_Test	04/20/2018	05:16	РM
TestDB	02/14/2018	11:26	AM

 Added BROWSE/EDIT command parameter to specify columns that cannot receive focus in Data Browser windows, using the NO_FOCUS_FIELDS keyword. The value for the NO_FOCUS_FIELDS parameter is a comma separated list of columns that will not receive focus.

EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContFName, ContLName

 Support to specify the QUALIFIER and SEPARATOR parameters with the GATEWAY IMPORT command to use custom delimiter and quote values. The parameters are only interpreted if the import type is CUS. If the parameters are not specified, the database DELIMIT and QUOTES values are used. In the sample below the delimiter is a pipe (encoded as double pipe) and the quote is "`".

```
GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION SEPARATOR |||QUALIFIER `
```

 Enhanced GATEWAY command for spreadsheet export processes to pass name and formula values to the Excel Name Manager. The added NAMED_NUM and NAMED_TEXT parameters can be repeated if multiple formulas are to be added. Both XLS and XLSW export formats include Names Manager support.

```
GATEWAY EXPORT XLSW DataCalculation.xlsx +
SELECT * FROM DiscountRates +
OPTION COL_NAMES ON +
|TAB_NAME SalesDiscounts +
|NAMED_NUM MinDiscount 0.01 +
|NAMED_NUM MaxDiscount 0.05 +
|NAMED_TEXT DiscountSuffix Disc
```

• Enhanced **PRINT** and **LBLPRINT** command support to append output to an existing file for rich text and report emulated text files. The RTF and ETXT output options allow for report output to be appended to an existing file using the new APPEND parameter.

```
PRINT BonusText +
OPTION ETXT +
|FILENAME BonusText.txt +
|APPEND
```

 New GETPROPERTY APPLICATION properties added to capture the color of the Windows title bar and the readable foreground color for the given background color. The captured values of the TitleBarColor and ForegroundColor properties can then be applied upon a panel, or other control, to mimic the current layout, more so for Windows 10 operating systems.

```
GETPROPERTY APPLICATION TitleBarColor vTitleBarColor
SET VAR vCmd TEXT = +
  ('GETPROPERTY APPLICATION ForegroundColor[' + .vTitleBarColor + ']
vTitleTextColor')
  &vCmd
PROPERTY HeaderPanel COLOR .vTitleBarColor
PROPERTY HeaderPanel FONT->COLOR .vTitleTextColor
```

Added MDI parameter to the RBBEDIT command to launch the BLOB Editor in a modeless window

RBBEDIT ScreenShot.jpg IMAGE MDI

- Four addition **GETPROPERTY** APPLICATION properties added to support the ability to recognize the mouse position by X,Y coordinates, for the current window, or the entire screen.
 - MOUSE_FROM_SCREEN[X]
 - MOUSE_FROM_SCREEN[Y]
 - MOUSE_FROM_WINDOW[X]
 - MOUSE_FROM_WINDOW[Y]

```
GETPROPERTY APPLICATION 'MOUSE_FROM_SCREEN[X]' 'VScreenX'
GETPROPERTY APPLICATION 'MOUSE_FROM_SCREEN[Y]' 'VScreenY'
GETPROPERTY APPLICATION 'MOUSE_FROM_WINDOW[X]' 'VFormX'
GETPROPERTY APPLICATION 'MOUSE_FROM_WINDOW[Y]' 'VFormY'
```

- Added **GETPROPERTY** functionality to capture the Component ID for an object being dragged, and the Component ID for where that dragged object is dropped.
 - DraggedCompID returns the Component ID of the dragged object, and is valid in the "On Start Drag" EEP only
 - DroppedToCompID returns the Component ID for where a dragged object is dropped, and is valid in the "On Drag Drop" EEP only

GETPROPERTY RBASE_FORM DraggedCompID vDragComponent GETPROPERTY RBASE_FORM DroppedToCompID vDroppedToComponent

- Two new analytic functions, LAG and LEAD, have been implemented for SELECT statements.
 - LAG accesses data from a previous row in the same result set. LAG provides access to a row at a given physical offset that comes before the current row. Use this analytic function in a SELECT statement to compare values in the current row with values in a previous row.
 - LEAD accesses data from a next row in the same result set. LEAD provides access to a row at a given physical offset that comes after the current row. Use this analytic function in a SELECT statement to compare values in the current row with values in a next row.

SELECT BillToCompany, TransDate, NetAmount, +
LAG(NetAmount,1,0) AS PrevAmount +
OVER (PARTITION BY BillToCompany ORDER BY TransDate) +
FROM InvoiceHeader WHERE BillToState

Added form property to select/highlight a task item in the DB Task Tracker control

PROPERTY DBTaskTracker1 SELECT_TASK vTaskID

Added **PROPERTY** APPLICATION optimization parameter to specify if "RBTI Variable" (RBTI_*)
processing is enabled in forms. If perhaps the variables are seldom used in an application, the
processing may be turned off, as the variables are assigned in nearly all forms aspects. The property
is ON by default. To take advantage of the optimization, set the value to OFF upon the application
startup. Then, turn it ON only in forms that use the RBTI_* variable values. Make sure the property is
turned OFF again when the form is closed.

PROPERTY APPLICATION CAPTURE_RBTI_FORM_VARS OFF

 Added **DIALOG** message window parameters, RIGHT and BOTTOM, for positioning the window at the right side or bottom of the display

DIALOG 'Message...' vResponse vEndKey 1 ICON INFO + OPTION MESSAGE_BOLD ON + |RIGHT 200 + |BOTTOM 200 • Enhanced **LIST FKEYS** command to display the foreign keys along with the column name for the foreign key in the table, and the column name the foreign key references

R> LIST 1	FKEYS
-----------	-------

Id	Туре	Table Name	Column Name(s)	Ref Table Name Ref	Column Name(s)
#46	FOREIGN KEY	CompUsed	Model	Product	Model
#45	FOREIGN KEY	CompUsed	CompID	Component	CompID
#47	FOREIGN KEY	ProdLocation	Model	Product	Model
#49	FOREIGN KEY	InvoiceDetail	TransID	InvoiceHeader	TransID
#48	FOREIGN KEY	InvoiceDetail	Model	Product	Model
#52	FOREIGN KEY	Levels	Model	Product	Model
#53	FOREIGN KEY	Employee	EmpTID	Titles	EmpTID
#54	FOREIGN KEY	Contact	CustID	Customer	CustID
#55	FOREIGN KEY	Staff	DepartmentID	Departments	DepartmentID
#71	FOREIGN KEY	ContactCallNot	es EmpID	Employee	EmpID
#70	FOREIGN KEY	ContactCallNote	es ContID	Contact	ContID

• Added **PROPERTY** APPLICATION AUTO_FORM_ALIAS parameter to automatically assign an alias name to forms. When ON, forms without an alias are given an alias using the form's name.

PROPERTY APPLICATION AUTO_FORM_ALIAS ON

• Extended **FEEDBACK** dialog position support for PROPERTY APPLICATION command parameters with variants for RIGHT, BOTTOM, HORIZONTALCENTER and VERTICALCENTER. Each parameters allows for the dialog position to be reset.

PROPERTY APPLICATION FEEDBACK_POSITION_VERTICAL_CENTER ' ' PROPERTY APPLICATION FEEDBACK_POSITION_RIGHT 200

PROPERTY APPLICATION FEEDBACK_POSITION_VERTICAL_CENTER RESET PROPERTY APPLICATION FEEDBACK_POSITION_RIGHT RESET

• New **GETPROPERTY** parameter, GRIDHASROWS, to return if there are valid rows in an Enhanced DB Grid control

GETPROPERTY EGrid1 GRIDHASROWS vRowsExist

• New **PROPERTY** APPLICATION parameter to specify the Internet Explorer version to emulate when displaying Web Browser controls in forms

PROPERTY APPLICATION WEB_BROWSER_EMULATION 11000

• New **GETPROPERTY** command parameter to capture the state of the current row of a table. The possible return values are: ENTER, EDIT, BROWSE.

GETPROPERTY TABLE 'TableName->STATE' VarName

New PROPERTY command parameters SET_ACTIVE_CONTROL and DELAYED_SET_ACTIVE_CONTROL
to gain focus with form controls in a more respectful way. The parameters work similar to SET_FOCUS
to move the focus to a specified control, only if parent form is not the active control, the focus switch
will happen when the parent form becomes the active form.

PROPERTY ComponentID SET_ACTIVE_CONTROL TRUE PROPERTY ComponentID DELAYED_SET_ACTIVE_CONTROL TRUE

 New FILTEREDROWCOUNT parameter for the GETPROPERTY command to return the number of rows when an Enhanced DB Grid is filtered

GETPROPERTY InvGrid FILTEREDROWCOUNT vFilterRows

 New PROPERTY command parameter to have all reports displayed in the Print Preview to include the "Find Text" option

PROPERTY REPORT FIND_TEXT_IN_PREVIEW ON OFF

 New GETPROPERTY parameter for Enhanced DB Grid controls to return TRUE or FALSE for whether the grid has a filter applied

GETPROPERTY Invoices HASFILTER vHasFilter

New PROPERTY parameter for Enhanced DB Grids to clear a filter applied to a grid

PROPERTY Invoices CLEARFILTER 'TRUE'

 New RAW_GEN parameter for exporting worksheets with the GATEWAY EXPORT command. When ON, R:BASE will be used to generate the worksheet, not Excel. This method is faster, but not native MS output.

```
GATEWAY EXPORT XLSW Employee.xlsx +
SELECT * FROM Employee +
OPTION COL_NAMES ON +
|SHEET_NAME Employees +
|SHOW_PROGRESS ON +
|RAW GEN ON
```

 New ACTIVE_INDEX parameter for exportig workbooks with the GATEWAY EXPORT command to assign the active sheet when launched

```
GATEWAY EXPORT XLSW Employee.xlsx +
SELECT * FROM Employee WHERE ActivEmp = 'A' +
OPTION COL_NAMES ON +
|SHEET_NAME Active_Employees +
|SHEET_INDEX 2 +
|ACTIVE_INDEX 1 +
|SHOW_PROGRESS ON +
|MERGE_DATA ON +
|ACTION OPENVIEW
```

• Added **PROPERTY** command SCALEBY parameter to fill the screen when scaling forms, for easier implementation with mixed screen dimensions, themes, and borders

PROPERTY RBASE FORM SCALEBY 'FILL SCREEN'

New ExtForm internal PLUGIN to capture the version of an external form file

PLUGIN ExtForm vResult ACTION GET_VERSION_NUMBER | FILE RRBYW20.RFF

New PROPERTY command parameter ATTACH_CTRL that allows changing an object's parent control at
runtime. Issuing the command will move the child control to the parent control, and maintain the same
top and left coordinates.

PROPERTY ParentCompID ATTACH_CTRL ChildCompID

New OVERWRITE_SHEET parameter added to the GATEWAY EXPORT XLSW format to specify that an
existing sheet with the same name will be overwritten with the new dataset

GATEWAY EXPORT XLSW NewData.xlsx + SELECT ALL FROM CustData + OPTION OVERWRITE_SHEET ON • Enhanced **ALTER TABLE** command to duplicate the definition of a column that already exists in another table. The enhanced syntax uses "DUPLICATE" as a keyword followed by the table and column name for which the column definition is to be duplicated. The enhancement is for the **CREATE TABLE** command as well.

ALTER TABLE TSALES_ORDERS + ADD COLUMN CUST_DESC + DUPLICATE CUSTOMERS.CUST_DESC

 Enhanced **PROPERTY** COPYTOCLIPBOARD parameter to support rich text controls and data, in addition to Edit, Image, and Memo controls. The parameter also includes an additional SELECTED value, which only copies the highlighted text. Otherwise, if TRUE is passed as the value, all text in the control is copied.

PROPERTY CompID COPYTOCLIPBOARD TRUE SELECTED

• Added **CODELOCK** 6 option to specify an input folder location, and file extension, followed by an output folder, to codelock the entire source into individual locked files

CODELOCK 6 D:\CmpSource*.rmd D:\CmpLocked

 Added GATEWAY IMPORT parameter for the XLS format, PERCENT_MODE, to handle percentages stored in cells

```
GATEWAY IMPORT XLS +
Jan2020-City-Rates.xlsx REPLACE +
tTaxTableImport +
OPTION SHEET_INDEX 0 +
|FIRST_ROW 5 +
|SHOW_PROGRESS ON +
|PERCENT_MODE RAW
```

• Enhanced **AUTOCHK** command to check database indexes. A specific index or all indexes may be checked.

AUTOCHK INDEX Specifies to have all the indexes checked

AUTOCHK INDEX indexname Specifies an index to check, which is displayed with the LIST INDEX command

An error is reported if:

- The pointer from the index does not point to a valid location in the 2 file
- The pointer from the index points to a valid location in the 2 file, but the row that lives there has been deleted
- The row count from walking the entire index does not match the row count for the table as stored in file $1 \$
- Enhanced LIST command show additional letters for the type of lock detected on tables
 - (L) for a local lock
 - (R) for a remote lock
 - (C) for a cursor lock
 - \circ (r) for a row lock

• A new internal TreeBuilder plugin was created to create a "tree table", with all necessary information to build a tree like presentation in reports.

Syntax:

```
PLUGIN TreeBuilder vResult +
|TABLE <TableName> +
|ID <IDColumn> +
|PARENT <ParentColumn> +
|ORDER <OrderColumn> +
|TREE_TABLE <TreeTableName>
```

Parameters:

- . TABLE source table
- . ID ID field in the source table
- . PARENT parent field in the source table
- . ORDER field that controls sorting (optional)
- . TREE_TABLE output table
- Added PROPERTY APPLICATION COLUMN_COMMENT_AS_CTRL_HINT parameter to specify that (table and field) form controls with a hint will automatically be assigned the field's comment as the hint (at runtime). If a control has an existing hint, the hint will not be updated. The default is OFF.

PROPERTY APPLICATION COLUMN_COMMENT_AS_CTRL_HINT ON

 Added BROWSE/EDIT command option to display the column comments from the table definition (when present) to the right of the data, when ROWVIEW mode is specified

BROWSE ALL FROM BONUSRATE OPTION ROWVIEW ROW_VIEW_DESCRIPTIONS ON

 Added ability for **DIALOG** command prompts to increase the button size height. The added BUTTON_HEIGHT parameter specifies the height of the [OK/Cancel] or [Yes/No] buttons.

```
DIALOG 'Do you wish to continue?' vYesNo vEndKey No +
CAPTION ' ' +
ICON QUESTION +
OPTION MESSAGE_FONT_NAME Tahoma +
|MESSAGE_FONT_SIZE 12 +
|BUTTON_YES_FONT_SIZE 11 +
|BUTTON_YES_FONT_BOLD ON +
|BUTTON_NO_FONT_NAME Tahoma +
|BUTTON_NO_FONT_SIZE 11 +
|BUTTON_NO_FONT_BOLD ON +
|BUTTON_NO_FONT_BOLD ON +
|BUTTON_NO_WIDTH 85 +
|BUTTON_HEIGHT 35
```



• The DATE, TIME, and DATETIME popup menus available with the **DIALOG** command have been enhanced to display the font settings based on the input field parameters: INPUT_FONT_NAME, INPUT_FONT_COLOR, INPUT_FONT_SIZE, to customize the font type and size for the calendar/clock controls and buttons.

```
DIALOG 'Enter Date and Time:' vDateTime vEndKey 1 +
CAPTION 'Enter Date' ICON APP +
OPTION DIALOG_EDIT_HINT 'Double-Click for Calendar/Clock' +
|POPUP_ENABLED TRUE +
|POPUP_DIALOG_TYPE DATETIME +
|INPUT_FONT_NAME Tahoma +
|INPUT_FONT_SIZE 11
```

11 ¹² 1
10 2 9 3 8 7 6 5 0 AM • PM

• Added WRAP_TEXT parameter to XLS and XLSW export formats for the **GATEWAY** command, which specifies to wrap long text values within the output of the spreadsheet/workbook

```
GATEWAY EXPORT XLS D:\DataStore\Contacts.XLS +
SELECT * FROM Contacts +
OPTION BLANK_IF_ZERO ON +
|COL_NAMES ON +
|MESSAGES OFF +
|WRAP_TEXT ON
```

 Added CHOOSE command OPTION parameters to customize the button color, height, and width. The text on the buttons can be altered to use a specified font and style. The CHOOSE Builder Plugin was also updated.

```
o BUTTONS_COLOR <color>
O BUTTONS HEIGHT <n>
O BUTTONS_WIDTH <n>
o BUTTONS_FONT_NAME <name>
O BUTTONS_FONT_BOLD <ON OFF>
o BUTTONS_FONT_ITALIC <ON|OFF>
o BUTTONS_FONT_UNDERLINE <ON|OFF>
O BUTTONS_FONT_STRIKEOUT <ON | OFF>
CHOOSE vCustIDTxt FROM #VALUES FOR +
Company, CustID FROM Customer ORDER BY Company +
CHKBOX 1 TITLE 'Company Name' +
CAPTION 'CHOOSE Buttons' LINES 20 FORMATTED +
OPTION BUTTONS_BACK_COLOR 16185078 +
BUTTONS_COLOR SILVER +
BUTTONS_HEIGHT 50+
BUTTONS_FONT_BOLD ON
```

```
Larger CHOOSE Buttons
                                    ×
             Company Name
 Barton and Associa<u>tes</u>
 Blue Ridge Technologies, Inc.
 Bytes & Words
 Compdat Computer Consulting
 Compumasters Computer Supply
 Computer Medical Ctr.
Computer Mountain Inc.,
 Computer Warehouse - I
 Data Solutions
 Datacrafters Infosystems
 Industrial Computers, Inc.
 Industrial Concepts, Inc.
 Johnson Technologies
 Lanufacturers Discount Computers
Microcomputer Distribution
 Microtech University - I
Microtech University - II
Midtown Computer Co.
MIS by Design
Modular Software, Inc.
                                    v
                     OK
                               Cancel
```

New capability to specify a WHERE Clause with the **DELETE DUPLICATES** command

DELETE DUPLICATES FROM TransMaster + USING TransID, EmpID + WHERE TransDate > 01/01/2020) • Improved confirmation for "all row" table deletions with **DELETE** command, where the word "delete" must be entered in order to continue. The DELETE command prompt would only pertain to R> Prompt command entries, not when a command file is running.

Delete	Rows		×
0	To confirm de	eletion, type "de	elete" in the field.
		ОК	Cancel

- Enhanced **UNLOAD** STRUCTURE output which now includes stored procedure data, right before triggers, allowing the file output from subsequent UNLOAD STRUCTURE and UNLOAD DATA processes to be utilized for database rebuilds. With this change, stored procedure data is not unloaded as part of the data unload.
- Enhanced UNLOAD command to allow partial unloading for all database areas, to better evaluate the rebuild process. The UNLOAD STRUCTURE FOR DATABASE command was implemented to unload the character settings and the CREATE SCHEMA command. The UNLOAD DATA NOSCHEMA command was implemented to remove character setting portions commands before unloading the data. A new example within the UNLOAD chapter of the help demonstrates the use.
- Added DATASET_FIELD_ORDER parameter for **GATEWAY** Exports to define SELECT column order with Specification Files

GATEWAY EXPORT XLS StaffList.xls + SELECT DepartmentID,HireDate,LastName FROM Staff + ORDER BY DepartmentID ASC, LastName ASC + OPTION TAB_NAME Staff + |SPECIFICATION_FILE_NAME StaffExp.rgw + |DATASET_FIELD_ORDER_ON

- Enhanced **FEEDBACK** setting which now displays status information for the **UNLOAD** command, which is helpful with long running UNLOAD processes
- Improved **TRACE** command where a file-open dialog will display if the command is entered without a file name or parameters, allowing the user to choose a file to be traced
- Added INPUT_LANGUAGE **PROPERTY/GETPROPERTY** command support to reset the Input Language layout to the default value, and to also capture the current language

PROPERTY APPLICATION INPUT_LANGUAGE DEFAULT

GETPROPERTY APPLICATION INPUT_LANGUAGE VarName

 Added **PROPERTY** command APPLICATION setting to control the new "keep alive" logic method to limit situations where the Windows operating system will tag R:BASE applications as "Not Responding". In very long processes, the "keep alive" feature may add processing time to routines. To allow users and developers the ability to control the keep alive logic, the KEEP_ALIVE setting has been implemented.

PROPERTY APPLICATION KEEP_ALIVE ON | OFF

The default is ON as it is ideal to avoid the "Not Responding" scenario. With the setting toggled to OFF the R:BASE frontend will no longer check with Windows if there are pending messages to be processed. When performing long running tasks that do not need the feature, it can be set to OFF, then set back to ON afterward.

- Support has been implemented to ATTACH dBASE files when STATICDB is enabled. When STATICDB is ON, which activates a read-only schema mode, and a dBASE file is attached, the file is added as a temporary dBASE table. The LIST TABLE command will display the temporary dBASE table name with a "(T)" next to the name. The temporary table will be dropped when disconnected from the database, or if the DETACH command is used.
- Added **PROPERTY** command parameters to display the "Live Variables" toolbar within the Trace Debugger, which automatically populates with variables without having to add/remove watch variables. When ON, the "Live Variables" panel will be displayed. When a variable is changed, the variable is pushed up in the list. When a variable is cleared, it is deleted from the list.

```
PROPERTY APPLICATION LIVE_VARS ON OFF
```

The LIVE_VARS_COUNT property limits the number of variables displayed in the list. The default value is 0, which display all variables.

PROPERTY APPLICATION LIVE_VARS_COUNT n

 New **TimeZone** plugin implemented to determines the current time zone and daylight saving time settings for the computer. If the computer is configured for daylight saving time, the plugin returns date and local time when the transition from standard time to daylight saving time, and vice versa, occurs on the operating system.

PLUGIN TimeZone vResult ACTION GET_INFO

 Added REC_SEP parameter to the GATEWAY IMPORT command to specify custom record separator values. The common value is CRLF (carriage return + line feed), which moves the parser down to the next line and then to the beginning of the line. A custom record separator can also be specified. Available Parameters: CRLF / CR / LF / <Custom>

GATEWAY IMPORT CSV Titles.csv REPLACE Titles OPTION REC_SEP CR

- Updated LIST TABLE and LIST COLUMNS commands to also include the next autonumber value and increment when listing an autonumbered column. These attributes are already displayed with the LIST AUTONUM command.
- Updated **LIST DATABASES** command to display the actual name of the current directory, rather than the "Databases in current directory" header.
- New APPLICATION property to return a safe string value that cannot be a valid file/folder name. When ON, the result for empty selection is <Esc>. When OFF, the result for empty selection is [Esc]. Default is OFF. The USE_SAFE_FILE_AND_FOLDER_EMPTY_STR property affects the LoadFileName, LoadFileNamePlus, and LoadDirectoryName plugins.

PROPERTY APPLICATION USE SAFE FILE AND FOLDER EMPTY STR ON

 New SPEECH parameter for the **PROPERTY** command added. The speak functionality can be implemented in forms, application menus, the Data Browser, R> Prompt, etc. The text portion of the command can accept text or a variable. If the text contains a single quote (apostrophe), the single quote must be doubled for the command to be accepted. For forms, an added "Speak Control Value on Exit" option was added to form properties, to allow audible confirmation of any newly-entered content when exiting form controls.

```
PROPERTY SPEECH SPEAK 'Hello world!'
PROPERTY SPEECH STOP ' '
PROPERTY SPEECH SPEAK AND WAIT 'Hello world!'
```

The below parameters are available to mute and un-mute the speak functionality in applications:

PROPERTY SPEECH MUTE ' ' PROPERTY SPEECH UNMUTE ' '

- Enhanced **PROJECT** command which now transfers default column definitions to the newly created table. If you want to change the projected default column definition, define the desired default column definition with the ALTER TABLE command.
- Added BLANK_IF_NULL parameter to the GATEWAY EXPORT command to assign NULL values as a blank. The parameter is different from the existing BLANK_IF_ZERO parameter, which will assign a blank for zero values.

```
GATEWAY EXPORT XLSW C:\Temp\CustomerContacts.xlsx +
SELECT ALL FROM CustomerContacts +
OPTION COL_NAMES ON +
|BLANK_IF_ZERO OFF +
|BLANK_IF_NULL ON +
|SHOW_PROGRESS ON
```

• New APPLICATION property to allow custom fonts with the **OUTPUT** PDF command. When OUTPUT_PDF_USE_PRINTER_FONT is ON the "Default Printer Font" settings will be recognize for the PDF output. The default is OFF.

PROPERTY APPLICATION OUTPUT_PDF_USE_PRINTER_FONT ON

- New APPLICATION properties for the **PROPERTY** command to specify the hint type (Modern, Balloon, Regular), a maximum hint message width, and color options for the Modern hint style
 - HINT_MAX_WIDTH maximum width for the hint message
 - HINT_TYPE hint message type (Modern, Balloon, Regular)
 - HINT_MODERN_ARROW_COLOR color of the modern hint's arrow in the thick border
 - $_{\odot}~$ HINT_MODERN_BACK_COLOR color of the modern hint's text background

```
PROPERTY APPLICATION HINT_TYPE 'MODERN'
PROPERTY APPLICATION HINT_MAX_WIDTH 175
PROPERTY APPLICATION HINT_BACK_COLOR '[R13,G120,B181]'
PROPERTY APPLICATION HINT_FONT_COLOR '[R03,G110,B171]'
PROPERTY APPLICATION HINT_MODERN_ARROW_COLOR 'WHITE'
PROPERTY APPLICATION HINT_MODERN_BACK_COLOR 'WHITE'
```

- Enhanced **PACK PASSWORDS** command now performs a "PACK TABLE SYS_PASSWORDS" to internally remove deleted rows. The PACK operation will also set the system table row count to match the actual row count after performing the PACK.
- New APPLICATION parameter for the GETPROPERTY command to return the operating system name

GETPROPERTY APPLICATION PLATFORM vPlatform

 New GETPROPERTY command parameters (NETWORKCONNECTIONTYPE and NETWORKCONNECTIONTYPEEX) to detect the network connection type, and adapter.
 NETWORKCONNECTIONTYPE returns network connection type, with possible values being: Ethernet, Wi-Fi, Bluetooth, Unknown. NETWORKCONNECTIONTYPEEX is an expanded implementation of the property which considers the network adapter's metrics and returns the network connection type and name of the adapter, with possible return values being: Ethernet, Wi-Fi, Bluetooth.

GETPROPERTY APPLICATION NETWORKCONNECTIONTYPE vContype GETPROPERTY APPLICATION NETWORKCONNECTIONTYPEEX vContypeEx

 New PROPERTY command parameter for reports, to auto-rotate images (from file) using EXIF information. The DB Image and Variable Image objects in reports will check the AUTO_ROTATE_IMAGE value. The default value is OFF.

PROPERTY APPLICATION AUTO_ROTATE_IMAGE ON OFF

• Added **PROPERTY** command parameters to specify the default font for the BLOB Editor "Text" tab:

PROPERTY BLOB_EDITOR DEFAULT_TEXT_FONT_NAME 'Courier New' PROPERTY BLOB_EDITOR DEFAULT_TEXT_FONT_SIZE 10 PROPERTY BLOB_EDITOR DEFAULT_TEXT_FONT_BOLD OFF PROPERTY BLOB_EDITOR DEFAULT_TEXT_FONT_ITALIC OFF PROPERTY BLOB_EDITOR DEFAULT_TEXT_FONT_UNDERLINE OFF PROPERTY BLOB_EDITOR DEFAULT_TEXT_FONT_STRIKEOUT OFF PROPERTY BLOB_EDITOR DEFAULT_TEXT_FONT_NORMAL ' '

 Support added for the GATEWAY EXPORT command to specify NONE as a valid value for the QUALIFIER parameter, for CSV, TAB, and SQL file formats

GATEWAY EXPORT CSV StorageUnits.csv SELECT * FROM SUnits + OPTION BLANK_IF_ZERO OFF|SHOW_PROGRESS ON|QUALIFIER NONE

• Enhanced **FCONVERT** command for UTF-8 without BOM file encoding. The NONE keyword at the end of the command will specify to the UTF-8 only file encoding.

FCONVERT ANSI CloudLog.csv TO UTF8 CloudLog_UTF8.csv NONE

 Enhanced GATEWAY IMPORT support for the JSON format to use the NODE_PATH parameter to set the node path to the root with a backslash character (meaning the root). The change is applicable to JSON files where only the data row items are in the file.

GATEWAY IMPORT JSON CustResponse.json REPLACE CustResponse OPTION FIRST_ROW 1 \mid NODE PATH \setminus

• Enhanced SATTACH command to allow a WHERE clause to be specified

SATTACH Artists AS tArtists WHERE ALastName = 'Ford'

• Enhanced **GATEWAY EXPORT** formula detection support for Excel formats to dismiss equal characters that exist in table values, which are not actual formulas. The default is ON.

GATEWAY EXPORT XLS DataCalculation.XLS + SELECT * FROM DataRates + OPTION COL_NAMES ON |DETECT_FORMULA OFF

 Enhanced ExtForm plugin to include a SET_VERSION_NUMBER parameter, where the version number for an external form can be adjusted/reset

PLUGIN EXTFORM vResult | FILE TileMenu.rff + | ACTION SET_VERSION_NUMBER | VERSION 101

- Enhanced **FEEDBACK** setting where **AUTONUM** is added to the list of command which will show feedback
- Enhanced GATEWAY IMPORT support for the XML format to flatten the structure and process attribute
 options for improved loading of data nodes

GATEWAY IMPORT XML ShipmentLoad.XML REPLACE Shipments + OPTION NODE_PATH \FILE + |PROCESS_ATTRIBUTES ON + |FLATTEN_STRUCTURE ON

4 Data Browser/Editor

The Data Browser/Editor is a powerful yet simple interface to browse and edit data in R:BASE tables and views. The following new features are available:

- New Tree Grid support in the Data Browser, enabling an extremely powerful data viewing and manipulation inside applications including:
 - Dynamic grouping (tree support) by dragging columns to the top panel
 - Drag-and-drop column selection, allowing end-user to easily customize the columns visible on the screen
 - $_{\odot}\,$ Column data filtering (basic and advanced) to quickly limit the displayed results
 - Column rearranging and sorting

	Browser,[Custor t <u>C</u> alculate <u>L</u> ayo								-	- 🗆	×
% 🕻	à 🛍 🖉 🗸	토 +톤 +톤 🗙 📝		a, il i	¢ 🔒	🗋 📕 🛃 🙆 🔒	A 👌	臣 🗯	토 훈 훈	₽₽	
CustState	e 🛆										
CustID	Company	1		CustAddress		CustCity	CustSta 🛆	CustZip	CustPhone	CustFax	1
E Cust	State : CA										
	104 Industrial	Concepts Inc.		5602 Silverdale W	/ay	Livermore	CA	94550	415-878-5600	415-878-9999	
	105 PC Consu	Iltation And Design	-	7823 Foothills Ro	ad	Palo Alto	CA	94321	415-892-6745	415-892-9999	7
	116 Compum	asters Computer Supply		11033 Webster Bl	lvd	Concord	CA	94521	613-226-7171	613-226-9999	
	118 Open Sys	tems I/O		8365 Park Place		Laguna Beach	CA	92652	714-763-9923	714-763-9999	
	126 Johnson T	Technologies		30021 Grant Blvd		Sunnyvale	CA	94089	408-234-8654	408-234-9999	
Cust	State : CO										1
	102 Industrial	Computers Inc.		5200 Empire Way	t.	Denver	CO	80214	303-239-7823	303-239-9999	
	103 Compute	r Mountain Inc.,		14792 15th Ave. E	E.	Denver	CO	80214	303-271-1500	303-271-9999	7
	120 Lanufactu	urers Discount Computers		2341 Meridian N	W	Englewood	со	80112	303-426-8442	303-426-9999	
🗆 Cust	State : FL										
	109 Compdat	Computer		1208 Occidental	Rd	Miami	FL	33128	305-767-4309	305-767-9999	
	112 Compute	r Medical Ctr.		4311 Beach Dr		Ft Lauderdale	FL	33309	305-365-7803	305-365-9999	7
	122 Microcon	nputer Distribution		12287 112th S		Plantation	FL	33317	305-746-2302	305-746-9999	
E Cust	State : IL										
E Cust	State : IN										
E Cust	State : MA										
E Cust	State : NC										
E Cust	State : NV										
<										2	>
		Record : 18			\checkmark						
View as	Grid View as Row	View as Tree Grid									
	me : Customer	Rrowse Mode	_	Name : CustCity		Datatype : TEXT(20)	T Zoologi	mer City			

• Data Browser Settings allows review of saved layouts with their attributes, and to delete those known to be obsolete. Double clicking a layout in the Data Browser setting will execute the query so users can see the layout in the Data Browser.

	Data Browser Settings			×		
	General Options Additional Opt	ions Saved Layo	uts			
	Layouts					
	Query	De	tails			
	BRO ALL FROM ProdLocation	5 F	ield(s), Zebra			
	More Details <u>Delete</u>	SE	T LAYOUT 0	N ~		
		OK Car	cel <u>I</u>	<u>H</u> elp		
yout Details						
dows User Name:	John Minyo II					
iputer Name:	CORE8-WIN10					
ra Stripe:						
umn Description In Row						
ry:	BRO ALL FROM ContactCallNo	tes				
ımns:						
ld Name	Font	Color	Visible	Width	Alignment	Format
ntID	Segoe Ul, 9, Normal, WindowText		Yes		Right	ronnat
oID	Segoe Ul, 9, Normal, WindowText		Yes	75		
Date	Segoe UI, 9, Normal, WindowText		Yes		Left	
Time	Segoe UI, 9, Normal, WindowText		Yes		Left	
INotes	Segoe UI, 9, Normal, WindowText	Window	Yes	250	Left	
						1/20
						Close

• New smart Layout handling in the Data Browser where layouts are preserved if only the WHERE Clause is modified. Saving/Updating the layout will overwrite a currently saved layout but the most recent query will be used.

00 HE WE / PH	팀 +등 +등 🗙	(I 👫 I	ş 🎼 🐐	🕯 📠 🛛	E	🔁 🔒 🗛 🦄 🔂	
CustAddress	CustCity	Cust		CustZip	CustPhone	CustFax		ModLevel LastUpdateDa	and a second second
24700 Industrial Parkway	Boston	MA		02162	617-423-8921	617-423-	9999	2 06/05/2010	09:10
5200 Empire Way	Denver	CO		80214	303-239-7823	303-239-	9999	4 06/05/2010	09:10
14792 15th Ave. E.	Denver	со		Calculate		•	999	3 06/05/2010	09:10
5602 Silverdale Way	Livermore	CA		Filter			4	Using Selected Value	09:10
7823 Foothills Road	Palo Alto	CA							09:10
14600 Eastgate Way	Bloomington	IN	00	Cut		Ctrl+X	-	Excluding Selected Value	09:10
2800 N.E. 47th	Chicago	IL	P	Сору		Ctrl+C			09:10
1623 North	Two Dot	IL	_	Paste		Ctrl+V		Update Query	09:10
1208 Occidental Rd	Miami	FL		Paste		Ctri+v	999	2 06/05/2010	09:10
18539 45th NE	Mercer Island	WA		Hide Colum	10		999	2 06/05/2010	09:10
5672 SW Graham	Appleton	WI		Hide Colum	in .		999	3 06/05/2010	09:10
4311 Beach Dr	Ft Lauderdale	FL		Change Col	umn Background	Color	999	1 06/05/2010	09:10
1002 S Pacific Avenue	Bedford	MA		Change Col	umn Font		999	2 06/05/2010	09:10
600 W Central Blvd	Newton	MA					999	3 06/05/2010	09:10
62 Main St	Lynnwood	WA	=	Left			999	1 06/05/2010	09:10
11033 Webster Blvd	Concord	CA	-	8			999	4 06/05/2010	09:10
3923 Pleasant Hill Dr	Olympia	WA	Ē	Center			999	2 06/05/2010	09:10
8365 Park Place	Laguna Beach	CA		Right			999	3 06/05/2010	09:10
3682 11th Ave S	Las Vegas	NV		89104	702-649-9551	702-649-	9999	1 06/05/2010	09:10
5200 Empire Way	Denver	00		80214	202-220-7922	202-220-	0000	4 06/05/2010	00.10

 Added right-click "Filter" option to minimize the Data Browser results "using" or "excluding" the selected value in a selected cell Added "Export Results As" list includes an R:BASE option, with a submenu to choose between Data, and Data with Structure

it Sort Calculate Layo	out					
Cut	Ctrl+X	K 🛃 🔊 🗚	, i i i i		🔒 🖪 🧄 E	
Сору	Ctrl+C		CustAddress		CustCity	
Paste	Ctrl+V		24700 Indust	rial Parkway	Boston	
			5200 Empire	Way	Denver	
Insert Row	F2		14792 15th A	ve. E.	Denver	
Duplicate Row	Ctrl+F2		5602 Silverda	le Way	Livermore	
	Ctri+F2		7823 Foothill	s Road	Palo Alto	
Edit Mode	F4		14600 Eastga	te Way	Bloomington	
Delete Row	F9		2800 N.E. 47t	h	Chicago	
			1623 North A	venue	Two Dot	
Delete Value		ng	1208 Occider	ntal Rd	Miami	
1		-	18539 45th N	IE	Mercer Island	
Replace All Column Values			5672 SW Gra	5672 SW Graham		
Delete All Rows			4311 Beach D	Dr	Appleton Ft Lauderdale	
			1002 S Pacifi	c Avenue	Bedford	
Include SQL Statemer	t in Printout		600 W Centra	al Blvd	Newton	
Page Setup			62 Main St		Lynnwood	
		pply	11033 Webst	er Blvd	Concord	
Print Data			2022 Dioscan	+ Hill Dr	Olympia	
Export Results to		R:BASE		Data (*.tbl)	Beach	
Save Result As		Paradox (*.db)		Structure and D	ata (*.tbl) od	
		dBASE (*.dbf)			Ogden	
Search	Shift+Ctrl+F7				Plantation	
Search Again	Ctrl+F7	Comma-Separat	ed Values (*.csv)	: E	Austin	
	and a second sec	HTML (*.htm)		Ave N	Stony Brook	
Update Query	Ctrl+Q	MS Excel Spread	cheet (* vlc)		Snoqualmie	
120 Johnson Te	chnologies	wis excer spread	sicer (.xis)		Sunnyvale	
127 RAM Data S	ystems, Inc.	MS Excel Workbo	MS Excel Workbook (*.xlsx)		Murrysville	



• The Data Browser Layouts have been enhanced to apply display formats to numeric, date, and time values.

The display format is available for review in the Layout Details, within the Data Browser settings.

ebra Stipe:						
Duery: BRO ALL FROM Prod	Location					
olumns:						
Field Name Font		Color	Visible	Width	Alignment	Format
Model Segoe UI, 9,	Normal, WindowText	Window	Yes	65	Left	
Location Segoe UI, 9,	Normal, WindowText	Window	Yes	65	Left	
OnHand Segoe UI, 9,	Normal, WindowText	Window	Yes	73	Right	
Cost Segoe UI, 9,	B, WindowText	64,128,128	Yes	101	Right	\$#,0;-\$#,0
ReOrderPt Segoe UI, 9,	Normal, WindowText	Window	Yes	73	Right	

	nal Options	Saved Layouts	
Default View			
Grid			~
Grid			
Row Tree Grid			
Window	V	AUDUTYEL	7
Draw Column Titles w		White	
Start Color:			~
End Color:		Silver	~
Show Row Number			
Open Maximized			
Column Lines			
Column Lines	n		
Column Lines	n		
Column Lines Row Lines Grid Focus Navigation Hultiline Titles	n		
Column Lines Grow Lines Grid Focus Navigation Multiline Titles Show Title Ellipsis			
Column Lines Row Lines Grid Focus Navigation Hultiline Titles	6		

• Added option to select the "Default View" (Grid, Row, or Tree Grid) in the Data Browser Settings

- Enhanced status bar to display the character count for NOTE data types, when a character count is defined
- Added workbook export generation control sub-menu option within Export Results to > MS Excel Workbook
- Added "Column Descriptions in Row View" menu option, under Layout, to display the column comments from the table definition (when present) to the right of the data

🗽 Data Browser.	[Contact]				- □ >
Edit Sort Calcul	ate Layout				
🔏 🖻 🛅	🗡 📑 📲 📲 🔍	🛃 🙀 🙀		# 📕 🖻 🖻 🔒	🌆 🕭 🔁 🧮 🗮 🗮 🚎 🌄 🎱 🥰
Field Name	Value		Descrip	tion	
CustID	117		Custon	ner Identification Number	
ContID	1033		Contac	t Automated ID	
ContFName	Mary		Custon	ner Contact First Name	
ContLName	Jones		Custon	ner Contact Last Name	
ContPhone	206-123-4567		Custon	ner Contact Phone Number	
ContFax	206-123-4568		Custon	ner Contact Fax Number	
ContCell	206-123-4577		Custon	ner Contact Cellular Number	
ContPager	206-123-4544		Custon	ner Contact Pager Number	
ContEMail			Custon	ner Contact E-Mail Address	
Continfo	Very happy with the last order.		Custon	ner Contact Notes	
ContPhoto	(BLOB)		Custon	ner Contact Photo	
LastContactDate	07/10/2018		Last Co	ntact Date	
20	70				
	Record : 5		×		
View as Grid View	ew as Row View as Tree Grid				
Table Name : Cont	tact 🖉 Edit Mode	Field Name : Con	tCell	Datatype : TEXT(14)	Customer Contact Cellular Number

• Added "Show VarChar Preview" setting to specify whether VarChar data is displayed in the Data Browser as an icon or as raw rich text characters. The icon display is the new default.

	Saved Layouts	
Default View		
Grid		~
Background Color and Font		
Color:	AaBbYyZz	
□ Window ~		
Draw Column Titles with Gradien	t	
Start Color:	White	~
End Color:	Money Green	~
 Open Maximized Column Lines Row Lines Grid Focus Navigation Multiline Titles Show Title Ellipsis Show Column Ellipsis Include SQL Statement in Printon 	ut	
Show VarChar Preview		

• Improved confirmation with the "Delete All Rows" menu option, where the word "delete" must be entered in order to continue

Delete	Rows		×
0	To confirm o	leletion, type "d	elete" in the field.
		ОК	Cancel

 New "Blank if NULL" Data Browser setting for exports performed at the table level to assign NULL values as a blank

Data Browser Settings		×
General Options Additiona	Options Saved Layouts	
Cell Hint Options Background Color: Info Background	∼ AaBbYyZz	
Selected Row Background	and Font Color	
Background Color:	Highlight	~
Font Color:	Highlight Text	~
Zebra Stripe		
Even Color:	Window	×
Odd Color:	Scroll Bar	×
Multiline Rows Lines per Row:	1	•
Export Options Open After Export		
Blank If Zero		
Blank If Null		

• New RBTI_EXPORT_FOLDER system variable to define a default folder location for Data Browser exports. The RBTI_EXPORT_FOLDER system variable can be declared to define a valid folder path where the "Data Browser Export" dialog will initially start. If the variable does not exist or contains a non-valid folder path, all export dialogs will launch within the current folder.

SET VAR RBTI_EXPORT_FOLDER TEXT = 'D:\DataExports'

• Independent NOTE and Image hint Layout toolbar options for BLOB data. It is now possible to enable image hints without the NOTE hints, as the NOTE hints can be disruptive.



Added .xlsx file extension option for exports to Spreadsheets, similar to what is currently offered for Workbooks
5 Database Explorer

The Database Explorer is the central interface in R:BASE X.5. New features include:

• Added "Open Table As" option to view a table as a Grid, Row, or Tree Grid. Under views, "Open View As" is also available.

T Database Explorer		
Database Explorer	Table Name 📥	Comment
TABLES	1. BonusRate 2. CCallNotes	Rates for Bonuses Contact Call Notes
New Table	3. Component	Component Identification Number and Descripti
🧮 🗁 Open Table	4. CompUsed	Components Used in a Model
Open Table As	5. Contact	Customer Contact Information
Design Table	6. ContactCallNotes	Contact Call Notes
Copy Table	New Table	Customer Information
ABCI Rename Table	🚽 🦳 Open Table	Departments Employee Information
Delete Table(s)	Open Table As 🕨	Grid ummy Table for Forms
📧 📄 Export Data	Design Table Copy Table	Row mperature Data for Gauge
Unload	ABC Rename Table	Ilyoice Header Information
Change Comment	Delete Table(s)	Pricing Level Per Model by Percent Running R:BASE Your Way (Part 20) - Customer L
🖼 🔊 Refresh	Export Data	Payment Terms
P Help	Unload 🔸	Print Options
	Change Comment	Product Location, Quantity on Hand, and Cost Model Information, Including List Price
	Defeet FE	L' CAL A THE DTI

• Enhanced Database Explorer Property Bar including the "Find in Database Explorer" button





• Updated Database Explorer sidebar, with active tabs made more prominent

• Enhanced dialog when running forms and printing reports/labels at the Database Explorer, where a "WHERE History" button is now displayed

lun Form Customers			×
Form Table: Customer			
Form Comment			
Enter/Update Custom	er(s)		
WHERE Clause			
1		WHERE History	5/ 1
Run Mode			-
⊖ <u>E</u> nter	● E <u>d</u> it	O B <u>r</u> owse	
WHERE Builder	<u>M</u> DI <u>U</u> pdate Comma	nd History <u>O</u> K <u>C</u> ancel	

 Added "search history" support for the Find in Database Explorer utility. The entry box is now a drop down where the search history is available in the drop down items. To clear the history, press Ctrl+R. The search history is saved in the C:\Users\<User>\RBTI\ folder as DBEXP.RST, DATADICT.RST, and RPROMPT.RST.

Search Text		
Invoice		
Search		
Emp		
Grid		

• Added "search history" support for the Find in Custom EEP, Control Property, and Expression searches

~
Cancer

• Added "In Property Names" option for Control Property searches to locate text for the actual property (e. g. Read Only, AutoSize, Show Hint, etc.) in use for objects

Find in Form Control Properties		×
Enter text to find:		
CustState		~
Case Sensitive Whole Word In Property Names	ОК	Cancel

- New "Show Hidden Items" setting, to toggle the display of files, based upon the hidden file attribute. Hidden files may include databases, external form files, applications, and command files.
- Added workbook export generation control option in Tables > Export Data > MS Excel Workbook

Export Options		×
WHERE Claus	e	
h	WHERE Builder	
File Name		
Departments.	xlsx	1
Use Microso	oft Excel	Cancel



• Additional Split View and Tile Menu menu control types added as options for application conversions

• Enhanced display appearance with legacy application to external form file conversions

ONCOMP	
	Р
⊡- Consolidated Computer	
- Sales representatives	
Customer records	
Product records	
Transactions	
Exit	
Transactions	
- Enter transactions	
- Print reports	
- List transactions	
Exit	

• Enhanced "Find in Control Properties" [Ctrl-L] searches to include the Tree View and Drop-Down Menu Button "EEP File" properties

• Added "File Comment" option for the Commands Files area, where braces {...} in the first line will be interpreted. R:BASE will only look for the first 1024 characters of the file. The setting must be enabled by selecting Settings > Database Explorer > Show File Comment

ile Name	Extension	Date/Time 💌	Size (bytes)	File Comment
1. Insert_ErrorTest	.rmd	06/26/2020 10:45:56	254	ON AFTER ERROR RUN INSERT Test
2. ErrorPause	.rmd	06/26/2020 10:45:31	84	Error Pause
3. Loop_Break	.rmd	06/26/2020 10:45:08	183	Loop Break with ESCAPE
4. UpdateBio	.rmd	06/26/2020 10:44:02	305	Update Employee Bio
5. ShowVersion	.RMD	06/26/2020 10:43:42	628	Show Version and Build
6. ScannerLogging	.rmd	06/26/2020 10:43:42	2,585	Tell Scanner to Log Transactions
7. LMAX_Test	.rmd	06/26/2020 10:43:42	272	LMAX Function Test
8. TreeBuilder_RRBYW20	.rmd	06/26/2020 10:43:42	661	TreeBuilder Plugin Example
9. RMail_HTML3	.rmd	06/26/2020 10:43:37	1,023	RMail Plugin - HTML Test
10. TextArt	.rmd	06/26/2020 10:42:11	434	TextArt Plugin Example
11. ColumnDecrypt	.rmd	06/26/2020 10:40:32	505	Opens the Contacts table in the Data Browser with nar
12. Contact_EmailLaunch	.rmd	06/26/2020 10:40:11	514	Opens the Contacts table in the Data Browser with na
13. EncryptTable	.rmd	06/26/2020 10:39:40	929	Encrypt Contact Table Data
14. DecryptTable	.rmd	06/26/2020 10:36:17	963	Decrypts Contact Table Data
15. RRBYW20_Form_EnhancedDBGrid_LUE	.frm	04/29/2020 11:37:35	926	
16. RRBYW20_Table_FormTable_Data_Structure	.tbl	04/17/2020 14:53:22	1,051	
17. RRBYW20_Reports	.rpt	04/17/2020 14:50:05	1,084	
Mask: *.DAT;*.RMD;*.CMD;*.APP;*.EEP;*.VIE;*.PR	O;*.FRM;*.RPT	r;*.LBL;*.STR;*.ALL;*.LST;*.T	BL	Арр

• Added version number to the output file name when unloading forms, reports and labels, to allow easier tracking for unloaded items. The unloaded file name includes the database name, the item type, (Form/Report/Label), the form/report/label name, and the version number.

🗽 Unload Rep	ort(s)				×
Save in:	RRBYW20		~ 6) 🏚 📂 🖽 🗸	
Quick access Desktop Libraries This PC	Name	Reports.rpt	Date modified 4/17/2020 2:50 PI 7/2/2020 10:15 A		
	File name: Save as type:	RRBYW20_Re R:BASE Repor	port_DepartmentTrie_v	19.mpt ~	> Save Cancel

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• Updated Database Properties option to allow the dialog to be launched for all available database version flags. A help button was also added, so that version flag values and other database information may be reviewed.

General Information	Tables	Colum	ns	Indexes	
/ersion Flag : -1101		Owner :	N	ONE	
		2: 2,523			
		3: 247,8			
	File	4: 9,96	1,47	72 bytes	
First F	ree Bloc	k: 7,02	4,64	40	
Last F	ree Bloc	k: 2,02	7,52	20	
Free Blo	ck Coun	t: 56			
Free Blo	ck Statu	s: 0			
Total Number	of Table	es: 102			
Number of Used Tables:		es: 87			
Total Number of Columns:		is: 496			
Number of Used Columns:					
Total Number of Indexes:		es: 75			
Number of Used Indexes:		es: 57			
Number of Users C Mirror Path:	onnecte	d: 1			

• Added "Update Command History" check box for when running external forms

Run External Form		×
	External Form List	
R: SASS External Form	CONCOMP_SplitView	^
Provide and a second seco	CONCOMP_TileMenu	
R:BASE External Form	CONCOMP_TreeView	
	CONCOMP_TreeView_Old	_
	FileListBoxwithMask	
	MessageDialogRichText	
	OFFICE	
	OFFICE_TreeView	
	SplitView_Sample	
	TestColors	
2 × 3	TextArtPlugin	
	TileMenu_Sample	
6	TreeView_Sample	~
MDI Update Command History	Browse Current Folder: C:\RBTI\RBGX5E\Samples\RRBYW20 OK Cancel	<u>H</u> elp

- STORED PROCEDURES

 New Stored Procedure...

 Run Stored Procedure...

 Edit Stored Procedure...

 Copy Stored Procedure...

 Copy Stored Procedure...

 Rename Stored Procedure...

 Delete Stored Procedure(s)...

 Unload Stored Procedure...

 Change Comment ...

 Reset Version Number ...

 Find in Stored Procedures...
- Added option to reset a stored procedure version number

• Added Database Explorer setting where users can toggle sending deleted files to the Recycle Bin or not. The default is enabled. File-based objects (external form files (.rff), application files (.rba), and command files) are already sent to the Recycle Bin. With this change, database files are now also sent to the Recycle Bin.

	Database Path In Title Bar
1	Indicator For Compressed Forms/Reports/Labels
1:2	Show Row Numbers
F	Right Align Row Numbers
A	Show Hidden Items
53	Move Deleted Files to Recycle Bin
9	Double Click Open Designer
	Use Dialog to Open Table/View

6 Data Designer

The R:BASE X.5 Data Designer allows for table design to be easy and efficient. The newest features include:

• Increased field sizes when creating new keys/indexes and rules, to better display long column names

<u> New Key/Index</u>				<u>443</u> 4		×
Type Primary Key Unique Key Index Foreign Key	Referenced Table: Customer (Customer Information) Referenced Key: #32	Column CustlD	n(s): (Customer Identification Number)			
Cannot insert - value o	Foreign Key value not in the referenced table: loes not exist in Customer					
	a Foreign Key value to one not in the referenced table: does not exist in Customer					
Table: Contact Colum	n(s): CustID		ОК	Cancel] <u>H</u>	ŧlp

• Enhanced "New Rule" creation, which includes the possible rule violation error message on the initial screen. A button is available to manually set the message from the default values.

New Rule	×
Rule Type	
Require a value	~
Rule Rule Column:	CustEMail (Customer E-Mail Address) V
Message (default messa	ge will be used if left empty):
	OK Cancel <u>H</u> elp

- Enhanced column definition interface to inform users if a reserved word is specified as a column name
- Added descriptions for non-common data types within the Columns area

umber	Keys	Column Name	Data Type	Length
1	PK	EmpID	INTEGER	
2	FK	EmpTID	INTEGER	
3		EmpFName	TEXT	10
4		EmpLName	INTEGER	16
5		EmpAddress	REAL	30
6		EmpCity	TEXT	20
7		EmpState	TIME	2
8		EmpZip	CURRENCY	10
9		EmpPhone	DOUBLE NOTE (Memo)	12
10		EmpExt	NUMERIC (Number)	
11		HireDate	DATETIME (Date/Time)	
12		EntryDate	VARCHAR (Large Memo)	
13		ActivEmp	BIT (Binary) BITNOTE (Binary)	
14		WebAddress	VARBIT (Image)	50
15		EMailAddress	BIGNUM (Big Number)	0
	e Order		BSTR (Binary String) GUID (Text ID) BIGINT (Big Integer) SMALLINT (Small Integer) BOOLEAN (True/False) WIDETEXT (Unicode Text) WIDENOTE (Unicode Memo)	
Des	cription:	Employee first nan	ne	
) N <u>o</u> (Calculatio	on () A <u>u</u> toNum () C <u>o</u> mpute	

7 File Gateway

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

• Added password encryption for spreadsheets exported using the File Gateway interface. The XLS and XLSX formats support encrypted spreadsheet/workbook exports. Passwords are case sensitive.

File Gateway				×
	Import Export			
BBASETallye	Select Table/View:	BonusRate (Rates for	Bonuses)	~
File Gateway	Select Format:	ormat: MS Excel Spreadsheet (*.xls)		~
	Password:	FirstDay	Show Password	
	File Name: WHERE Clause	C:\RBTI\RBGX5E\Sam	ples\RRBYW20\BonusRate_45841.xls	
	 ✓ Show the Anima ✓ NULL Values Exp ✓ APPEND Data to ✓ Launch After Exp ✓ No Unicode To A ✓ Add UTF-8 BOM 	ort as Blanks Existing File port ANSI Conversion	WHERE Builder Password To Open: ******* Start	Help

• Additional "Password To Open" option when appending to existing password protected spreadsheets

 New export generation control for Excel Workbooks, to specify whether R:BASE or Excel will be used to generate the output

File Gateway				×
	Import Export			
BillikSE Table	Select Table/View:	Employee (Employee	Information)	~
File Gateway	Select Format:	MS Excel Workbook (*	*.xlsx;*.xls)	~
	Password:	******	Show Password	Use Microsoft Excel
	File Name:	C:\RBTI\RBGX5E\Sam	ples\RRBYW20\Employee_0857.x	ls 🤌
	WHERE Clause			
			WHERE Builder	
	Show the Anima			
	NULL Values Exp APPEND Data to		Password To Open:	
	Launch After Exp		Password to open.	
	No Unicode To A	ANSI Conversion		
	Add UTF-8 BOM	When Applicable		
			Start	Close <u>H</u> elp
			Start	<u>Ciose</u> <u>H</u> eip

	That's all of the information the wizard needs to export your data.	
	Export to a File:	
	CUSTOMER.XLSX	
	Password: Records per each file Action after exporting None Open for File View	
Specifications	Use Microsoft Excel to generate the workbook	Execute

• Ability to specify the precision and scale for NUMERIC and BIGNUM data types when importing a new table

Available Tables OAT2 Available Fields A B Field Settings Field Name: Tempratures Field Type: NUMERIC Field Size: 12,12 Row Range First Row: 1 • Last Row: 1982 • •	port Options	for XLS	>
Available Fields A A A A A A A A A A A A A A A A A A A	vailable Table	8	
A A B Field Settings Field Name: Tempratures Field Type: Field Size: 12,12 Apply Field Change Row Range	DAT2		~
Field Settings Field Name: Tempratures Field Type: NUMERIC Field Size: 12,12 Row Range Apply Field Change	vailable Field	s	
Field Settings Field Name: Tempratures Field Type: NUMERIC Field Size: 12,12 Apply Field Change Row Range			
Field Name: Tempratures Field Type: NUMERIC Field Size: 12,12 Apply Field Change Row Range	N B		
Field Name: Tempratures Field Type: NUMERIC Field Size: 12,12 Apply Field Change Row Range			
Field Name: Tempratures Field Type: NUMERIC Field Size: 12,12 Apply Field Change Row Range			
Field Name: Tempratures Field Type: NUMERIC Field Size: 12,12 Apply Field Change Row Range			
Field Name: Tempratures Field Type: NUMERIC Field Size: 12,12 Apply Field Change Row Range			_
Field Type: NUMERIC Field Size: 12,12 Apply Field Change Row Range	ield Settings		
Field Size: 12,12 Apply Field Change Row Range	eld Name:	Tempratures	
Field Size: 12,12 Apply Field Change Row Range	eld Type:	NUMERIC	~
Row Range		12.12 Apply Field Chapter	2
	elu size.	Apply Held Change	>
First Row: 1 × A Last Row: 1982 × A	ow Range		
	rst Row:	1 - Last Row: 1982 - 1	
	L		
First Row Contains Column Headings OK Cancel	First Row C	ontains Column Headings OK Cancel	

• The File Gateway Import has been enhanced to support the .accdb format for MS Access files

File Gateway	Import Export C Existing Table New Table		×
	Enter New Table Name:	Transactions	
	Select Import Format:	MS Access Database (*.mdb; *.accdb)	~
	Enter File Name:	C:\RBTI\RBGX5E\Samples\RRBYW20\Transactions.accdb	0
	Password:	äble	
	Show the Animated S	tatus Dialog	
		Start Close	<u>H</u> elp

• A new "Load From File" button is available within the Specifications" dialog to load a specification file that is not located in the current folder

pecifications	
Customer	Load Selected
CustomerImportXLSX States	Delete Selected
TransExport	Save To Selected
	Save As New
	Load From File.
	Close

• Added "Wrap Text" option to the File Gateway utility for the MS Excel Spreadsheet/Workbook formats, which specifies to wrap long text values within the output

File Gateway				×
	Import Export			
BBASE Lalva	Select Table/View:	Customer (Customer	r Information)	~
File Gateway	Select Format:	MS Excel Workbook ((*.xlsx;*.xls)	~
	Password:	****	Show Password	🗹 Wrap Text 🔲 Use Excel
	File Name:	C:\RBTI\RBGX5E\Sam	ples\RRBYW20\Customers.xlsx	· Ø
	WHERE Clause			
			= 'A' ORDER BY Company AS	
	Show the Anima			
	APPEND Data to		Password To Open:	
	Launch After Exp	port		
	No Unicode To A	NSI Conversion		
	Add UTF-8 BOM	When Applicable		
			Start	Close <u>H</u> elp

• Enhanced Import/Export Wizard utilities, where the loaded Specification File displays the path and file name

Export Wizard			×
	This wizard allows you to specify detail format would you like? Table type	s of how to export your data. Which export	
	O Paradox (*.db)	○ QuattroPro (*.wq1)	
	O dBASE (*.dbf)	O SQL Script (*.sql)	
	O Text (*.txt)	O XML (*.xml)	
	O HTML (*.htm)	O MS Windows clipboard	
	O MS Excel Spreadsheet (*.xls)	O Rich Text Format (*.rtf)	
	MS Excel Workbook(*.xlsx;*.xls)	○ SPSS Format (*.sav)	
	O MS Word (*.doc)	Adobe Acrobat Document (*.pdf)	
	O SYLK Symbolic Link (*.slk)	O LDAP Data Interchange Format (*.Idif)	
	O DIF Data Interchange Format (*.dif)	 JSON JavaScript Object Notation (*,json) 	
	O Lotus 1-2-3 (*.wk1)		
C:\RBTI\RBGX5E\Samples	\RRBYW20\TransExport.rgw		
Specifications		< Back: <u>N</u> ext > <u>C</u> ancel	

• Enhanced Export Wizard allowing field reordering (drag-n-drop) for the column list

CustID Company CustAddress CustCity CustState CustZip CustZip	Title Caption: Alignment: Background: Font:	Right ~
CustPhone CustFax ModLevel LastUpdateDate LastUpdateTime LastOrderDate V	Data Alignment: Background: Font:	
Check All Uncheck All Toggle Width: 10 Characters	No Unicode To A	

• Updated Import Wizard to optionally specify custom "Record separator" and "Text qualifier" values. The drop-down menus will accept a custom entry by typing in a value.

Import Wizard			×
	Select the appropriate delimiter used to separa © <u>D</u> elimited - Characters such as comma or tak O Fixed <u>W</u> idth - Fields are aligned in columns v	o that separate each field	
	Field delimiter Tab Semicolon (;) Comma (,) Space None Other symbol:	Record separator: CRLF v Text qualifier: "	

• Added "NULL Values Export as Blanks" option for the Export menu. The Export Wizard also includes a new "Blank if Null" option for the desired output.

File Gateway			×
	Import Export		
REASE Table	Select Table/View:	Customer (Customer Inf	formation) 🗸
File Gateway	Select Format:	MS Excel Workbook (*.xl	sx;*.xls) ~
	Password:	****	Show Password 🗹 Wrap Text 🗌 Use Excel
	File Name: WHERE Clause	C:\RBTI\RBGX5E\Samples	s\RRBYW20\Customer.xlsx
	WHERE CustState	= 'PA' AND CustStatus =	'A' ORDER BY Company ASC
		W	HERE Builder
	Show the Anima	ted Status Dialog	
	Zero Values Expo		✓ Null Values Export as Blanks
	APPEND Data to	and the second	Password To Open:

 Enhanced XML import support to flatten the structure and process attribute options for improved loading of data nodes

<mark>xml</mark>	
E. File	
- Shipments	
⊟- Shipment	
CrossDock	
ShipDate	
ShipTime SCAC	
BOLNumber Trailer	
ModeOfTransportation ConsolidatorID	
CustomerID	
LoadCode	
Name	
- Address1	
City	
PostalCode	
CountryCode	
- Orders	
- Order	
OrderNumber	

8 Forms

The R:BASE X.5 Form Designer has been enhanced to provide more powerful data-driven form controls for increased productivity!

• New DB Tree Grid control to display an expandable tree structure within a grid

		✓ Find Clear	r		
mpany 🛆					
ansaction ID	Date	NetAmount	Freight	Тах	Total
		Click here to	define a filter		
Company : Barton and Ass	ociates				
Count: 7	Last 11/25/2011	\$ 29,254.5	D		\$ 31,916.68
Company : Blue Ridge Te	chnologies, Inc.				
Count 6	Last: 12/21/2011	\$ 32,573.5	0		\$ 35,537.71
Company : Bytes & Words					
Count 8	Last 12/01/2011	\$ 85,952.8	D		\$ 93,774.52
Company : Compdat Com	puter				
1041	Oct 03, 2011	\$19,755.0	0 \$197.55	1600.16	\$21,552.71
1005	Feb 01, 2011	\$16,155.0	0 \$161.55	1308.56	\$17,625.11
1060	Apr 25, 2011	\$5,206.5	0 \$52.07	421.73	\$5,680.30
1036	Sep 27, 2011	\$16,155.0	0 \$161.55	1308.56	\$17,625.11
Count: 4	Last: 10/03/2011	\$ 57,271.5	D		\$ 62,483.23
Company : Compumaster	s Computer Supply				
Count: 7	Last 12/22/2011	\$ 50,098.0	D		\$ 54,656.94
Company : Computer Med	ical Ctr.				
Count: 1	Last: 03/01/2011	\$ 7,024.0	D		\$ 7,663.18
Count: 95		\$ 719,053.5			\$ 784,487.58

The DB Tree Grid is an advanced grid, tree list, and data editor control which provides a visually stunning interface with powerful and flexible features for R:BASE applications. Customizations can include designs with standard two-dimensional tables to runtime grouping and column reorganizing. Appearance options include elegant theme and style controls to alter the display of the visual elements, which make up the grid (headers, group panel, odd/even/detail rows, footers, etc.).

Features include:

- \circ Master/Detail grid with integrated data grouping in tabular form
- o Incremental search for each column, allowing users to instantly locate any information
- o Fast data loading, with speedy responses upon groups and sorts
- Automatic data grouping, enabling an extremely powerful data viewing and manipulation metaphor inside applications
- o Instant summaries for grouped nodes, eliminating the need to write complex banded reports
- o Instant footer summaries, generating grid displays that provide compelling data-analysis results
- Drag-and-drop column selection, allowing end-users to easily customize the columns visible on the screen
- Multiple view types for grid columns
- $_{\odot}\,$ Column data filtering to quickly limit the displayed results
- Customizable style for all visual elements which make up the tree grid (headers, group panel, odd/even/detail rows, footers, etc.)
- Banded columns to maximize the number of columns visible, when screen real estate is at a premium

 $_{\odot}\,$ Custom row height for displaying larger row data $_{\odot}\,$ Fixed bands and columns to lock columns and bands to the left or right side of the grid



• New DB Task Tracker control to provide display a table-driven task and scheduling module

The DB Task Tracker is an advanced task scheduling tool to build scheduling applications for R:BASE databases. Features include:

- Six View Types for tasks:
 - 1. Days
 - 2. Week
 - 3. Multi-Week
 - 4. Year
 - 5. Gantt
 - 6. Time Grid
- Task Tree Powerful tree-base display grid with filtering and drag-and-drop support
- Multiple Resources Display The multiple resources display enables your end users to browse several plans (for any entity such as an individual or office location, etc) simultaneously.
- Date Navigator The DB Task Tracker's built-in date navigator offers extremely intuitive access to desired time frames. It doesn't matter whether you need to select a particular day, a range of days, a week or multiple weeks - everything is done with a single mouse operation.
- Advanced Appearance Settings Themes and many other visual options apply artistic and professional representations over events

- New Split View control offering a collection of user interface command groups, containing a list of clickable items.
 - R:BASE X.5 Split View Sample 22 Customers 0 Products Reports Maintenance ? About Logout

Note: The Split View is both a menu control and a container. Users can merge custom design with the built-in menu functionality for an even more powerful control.

The Split View presents a list of initial menu options, which is then expanded when the mouse cursor hovers over the list.

Company Structure				Address					Employment		
First Name Last Name /			Active	Address 1	Address 2	City	State	Zip	Hire Date	Entry Date	
e	June	Wilson	Γ	3278 Summit Drive	Apartment 220	Seattle	WA	98115	07/11/2018	07/11/2018	
	Staff: 3										
1	Jane	Sullivan	V	3935 Old William Penn Highway		Murrysville	PA	15668-1854	07/11/2018	07/11/2018	
	Darnell	Williams	V	8806 88th Street	Apartment 1600	Seattle	WA	98103	07/11/2018	07/11/2018	
	John	Smith	V	733 Summit Ave E.		Seattle	WA	98102	07/11/2018	07/11/2018	
	Staff: 1										
	John	Smith	2	3935 Old William Penn Highway		Murrysville	PA	15668-1854	07/11/2018	07/11/2018	
	John	Chow	V	5001 Main Street		Woodinville	WA	98072	07/11/2018	07/11/2018	
	Staff: 1										
	Staff: 4										
-	Joe	Donohoe	R	3935 Old William Penn Highway		Murrysville	PA	15668-1854	07/11/2018	07/11/2018	
	Sam	Donald	7	1715 School Road		Murrysville	PA	15668-1854	07/11/2018	07/11/2018	
	Craig	Alan		3935 Old William Penn Highway		Murrysville	PA	15668-1854	07/11/2018	07/11/2018	
	Staff: 2										

• New DB Tree List control providing a list of data organized into a tree structure to display table data

The DB Tree List is a powerful control that can display information as a tree, a grid, or a combination of both – in bound, unbound, or virtual mode. This unique synergy between a traditional grid and a traditional tree view control allows users to create cutting-edge and visually appealing application interfaces for end-users. With the DB Tree List, you can create function-rich and responsive applications without having to write a single line of code.

The DB Tree List control supports the use of a Customization Form to provide runtime customization of the DB Tree List forms, where end-users can hide and show rows using drag and drop.

n	
Columns	



• New DB Card View control which uses a card layout format to display table data

The DB Card View control displays rows using a card display method where each row is shown in a separate block within the view (a card). When in its regular layout, a row within a card is drawn vertically, so more space is available for detail data. The DB Card View introduces a more compact method of presenting data visually.

The DB Card View control supports the use of a Customization Form to provide runtime customization of the DB Card Views, where end-users can hide and show rows using drag and drop.

Rows	
Fax	
Pager	

 New DB Vertical Grid control that displays and edits table data in a new non-traditional method that can be considered as an inverted grid, as the data fields are represented as row headers, while the data records are represented as columns

Cont	tacts (DB Ve	rtical Grid	l Sample)				2		-	- 0	×
Keys											
ID		1	001		1002		1003		1004		
Name											
			K	9			C			Ð	
Firs	t La	st Ji	ill	Baileys	Shelley	Watts	Andy	Chin	Bill	Jones	
Conta	ct										
Pho	ne	4	15-878-5600		415-878-5642		415-892-6745		812-701-1002		
Cell		4	15-878-5666		415-878-5644		415-892-6799		812-701-1000		
Fax	Pag	er 4	15-878-5601	415-878-5677	415-878-5643	415-878-5600	415-892-6746	415-892-6766	812-701-1003	812-701-18	88
Ema	ail	jb	ailey@ici.com		swatts@ici.com	÷.	andychin@pccd.	.com	bjones@jones.	com	
Misc											
accou			C needs for smaller Has doubled her hthe last	Supplies system control. Sometim interface hardwa	ies needs special	One man shop. Counts on us to ship parts quickly.		Chain retail. Wants the best pri not the latest and greatest. Alw check with him when inventory		vay	
Las	t Contact D	ate 0	7/10/2018		07/10/2018		07/10/2018		07/10/2018		
COLUMN STREET	1 of 35		+ - • / ×	○ * * ▼	<						

With the DB Vertical Grid it is important to emphasize the use of the "row" instead of "column" for the control. What used to be a "column" in context of grids is now called a "row" because data is presented vertically.

Features include:

- Data in the DB Vertical Grid control can be represented using one of three layout styles, which determine the number of records visible on screen within the control at one time, and the way fields and field values are arranged.
 - 1. Bands
 - 2. Single Record
 - 3. Multiple Records
- The DB Vertical Grid supports Category Rows used to group regular rows into categories.
 Separating rows into categories improves the control's usability, as an end-user can now quickly find the required row. A Category Row displays a descriptive caption and expand button, which allows the end-user to collapse, and then restore the group.
- Provides the expanded editing capabilities. Multiple editors (text, combo box, image, BLOB, spin edit, date time, etc.) can be used for in-place editing within cells. Users can easily assign a specific editor to a row, and it will be used to edit all cells within this row.
- \circ Multi-Editor Rows, to display multiple editors within a single row
- $_{\odot}\,$ Nested Rows, which allows data to be organized into tree-like structures
- Advanced Appearance Options and Style Scheme Settings themes and appearance settings (background and foreground colors, font settings, etc) and many visual options apply artistic and professional representations over the control
- Support for runtime layout customization. End users are able to resize columns, resize and rearrange rows, temporarily hide rows to the Customization Form and then restore them. By default, the DB Vertical Grid only permits row and column sizing, and prohibits other customization.

 New DB Gauge and Variable Gauge controls to graphically display table data. The DB Gauge applications can imitate both simple as well as complex multi-functional dashboards, consisting of several seamlessly blended scales. All scales that imitate analog measuring instruments support various value transition animation effects for even more resemblance to real devices, such as speedometers, tachometers, thermometers, and more.







• New **DB Pivot Grid** control is a grid element displaying table data which offers end-users the ability to adjust the display and evaluate the information

Total Net	Date /		1											
Company / Trans	Grand Total	Net	January Total	Net	February Total	Net	March Total	Net	April Total	Net				
+ Barton and Associates	\$31,917	\$29,255	\$21,209	\$19,440	, orda		rotar		Total					
± Blue Ridge Technologies, Inc.	\$35,538	\$32,574			2		9			1				
+ Bytes & Words	\$93,775	\$85,953	\$19,158	\$17,560	\$1,824	\$1,672			\$26,381	\$24,180				
+ Compdat Computer	\$62,483	\$57,272			\$17,625	\$16,155			\$5,680	\$5,207				
+ Compumasters Computer Supply	\$54,657	\$50,098	\$8,483	\$7,775			\$3,360	\$3,080						
+ Computer Medical Ctr.	\$7,663	\$7,024					\$7,663	\$7,024						
+ Computer Mountain Inc.,	\$4,536	\$4,158					\$4,536	\$4,158						
+ Computer Warehouse - I	\$5,371	\$4,923					\$2,347	\$2,151						
1 Data Solutions	\$6,049	\$5,544							\$6,049	\$5,544				
+ Datacrafters Infosystems	\$6,299	\$5,774							\$6,299	\$5,774				
1 Industrial Computers Inc.	\$6,603	\$6,053												
+ Industrial Concepts Inc.	\$4,885	\$4,478												
± Johnson Technologies	\$2,052	\$1,881												
+ Lanufacturers Discount Computers	\$1,856	\$1,701												
+ MIS by Design	\$1,512	\$1,386												
+ Microcomputer Distribution	\$8,910	\$8,166												
1 Microtech University - I	\$1,856	\$1,701												
+ Microtech University - II	\$2,062	\$1,890								Ú.				
+ Midtown Computer Co	\$3,024	\$2,772												
🛨 Modular Software, Inc.	\$5,283	\$4,842												
1 Nordan Distributors, Inc.	\$6,157	\$5,643												
+ Olympic Sales	\$32,879	\$30,137												
± Open Systems I/O	\$2,607	\$2,390			0									

With the drag-and-drop functionality, the DB Pivot Grid control allows for end-users to rearrange fields dynamically, without having to change the structure of the table, for analyzing data from various perspectives. Users can interchange columns and rows on the fly, filter, and sort items in different ways, and also collapse and expand data at different levels.

The DB Pivot Grid provides an ideal solution if you need to:

- Produce multi-dimensional reports on a set of an ordinary data
- $\,\circ\,$ Analyze the data that is involved in a multi-dimensional relationship
- o Instantly organize related data together
- $\circ~$ Spot trends of the data in the fastest way

Along with the above tasks, the DB Pivot Grid offers an essential functionality to succeed in business reporting by efficiently performing data analysis in the fly in a semantically consistent manner.

The DB Pivot Grid control supports the use of a Customization Form to provide runtime customization of the DB Pivot Grid, where end-users can hide and show rows using drag and drop.

1.5

• New **Tile Menu** control offering a tile (colored rectangles or squares) interface to create a collection of user interface command groups, containing a sliding menu list of clickable/touchable items.



The Tile Menu is both a menu control and a container, where the tile and tile group functionality can be used to create a powerful dashboard for an R:BASE application.

Tiles are arranged/parented into Groups, and can be moved to any Group. Tiles support four "Text" properties that are initially anchored on each corner of the tile. The tile information displayed can be presented in various forms, depending on how the tile is designed, ranging from simple text to an image or even a set of images.

Tiles are also designed to display information in real time, from the application they point to. For example, a weather app would be able to display the forecast without actually opening the application. Tiles can be used to click or tap upon, to launch code, or to display a hidden panel as a "Detail Control" for additional menu options.

• New **DB OrgChart** control for the display and editing of hierarchical tree data structures from table data. The DB OrgChart enables an incredibly wide number of possibilities to manage the contents and appearance of both the entire chart structure as well as each individual node.



Main features include:

- Bound and unbound mode support
- o Zooming
- o 3-Dimensional node painting
- Rotation of the structure by 90 degrees
- $\circ\,$ Full node drag and drop support
- o Chart runtime customization
- $_{\odot}\,$ Animated collapse and expansion of nodes
- $\,\circ\,$ Images for each node within the tree structure as well as their placement within each node object
- Shapes of each node object (Rectangle, Rounded Rectangle, Ellipse, or Diamond)
- o Antialiasing (smoothing) for chart elements
- Support for paint styles and themes
- o Color of individual node objects
- Width and Height of each node object
- $\circ~\mbox{Text}$ placement within each node object



• New Layout Manager control to build a comprehensive layout on a form, and maintain a consistent layout structure

The Layout Manager enables R:BASE users and developers to quickly and easily create forms that can be customized by end users. The Layout Manager helps save time by moving away from traditional pixeloriented form design, and utilizing convenient features such as automatic control resizing and alignment, as well as horizontal and vertical item alignment. Like other form controls, a form's appearance settings can be modified using themes.

Main features include:

- Comprehensive Design and Runtime Customization both developers and end users can fully customize forms via an intuitive docking system
- Auto-Management layout elements are automatically managed by the layout control. You never have to worry about pixel-by-pixel positioning.
- Unlimited Nesting layout elements can be organized in different ways, to give your application the functionality and ease of use it requires
- o Layout elements can be organized vertically, horizontally or within tabs
- The layout control supports full persistence, with layout settings that can be saved to an external layout file

- Advanced UI Control supporting functionality from the manner in which captions are displayed, to the offsets between individual elements
- New **DB Date and Time Edit** and **Variable Date and Time Edit** controls to alter DATETIME and DATE values. A drop-down can appear with both calendar and clock objects. The image below is an example of a Date And Time Edit control upon a form with a DB Gauge control.

R	- 🗆 X
	Temperature Taken On: 03/13/2018 09:52 AM 03/13/2018 09:52 AM
	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
	Now Clear OK 3 1 1 2 2 2

• Enhanced right click menu option for DB and Variable controls to "require a value" before the form may be closed. A custom error message can be specified as well. The value required restriction may also be set to display a warning that can be ignored, which is helpful during active development, by toggling the PROPERTY APPLICATION STRICT_VALUE_REQUIREMENTS OFF command. The default value is ON, where an error-type message appears and the value requirement is more strict. When OFF, a warning-type message appears with an "Ignore" button.

	Hide on Startup	
ABC	Display Format	F6
	Check Required Value on Form Close 'Required Value' Error Message	
	Component ID	
Fa	Variable Links	

A required value may be specified for DB/Variable Edit, DB/Variable Memo, DB/Variable Radio Group, DB/Variable Lookup Combo Box, DB/Variable Lookup List Box, DB/Variable User Defined Combo Box, DB/Variable User Defined List Box, and DB/Variable Lookup List View controls.

• Implemented global setting that affects all controls' Pop-up Menu location. To set the custom location execute the command in the startup code of an application.

PROPERTY APPLICATION CTRL_POPUP_POSITION Value

SCREEN_CENTER – this is the default location TOP_LEFT – popup is above the control and left aligned TOP_RIGHT – popup is above the control and right aligned BOTTOM_LEFT – popup is below the control and left aligned BOTTOM_RIGHT – popup is below the control and right aligned MOUSE_POSITION – popup is anchored on the mouse cursor position when the control was double clicked

• Added table and column descriptions to field lists within property editors and table listing dialogs, to assist when placing database driven fields (Enhanced DB Grid, DB Combo Box, DB Edit, DB Image, etc.). If desired, the comments may be turned off.

DB Edit Proj	perties				×
Properties	Effects	Pop-up Menus	Additional	EEPs	• • •
Size and C	oordinat	es			
Left:		40 -	Width:	2	.02
Top:		5	Height:		21
Align:	Nor	e			~
Hint					-
Backgroun	d Color	and Font			2
Wind		~	AaB	3bYyZz	
Text Alignr	ment				C
🖹 Left J	ustified				~
Table and	Field				-
Table Nan					
Table Man	ne Ci	ustomer (Custom	ner Informatio	n)	~
Data Field	: C	ompany (Custom	ner Company	Name)	~
Attributes	Ci	stID (Customer I	dentification	Number)	
0.000		mpany (Custom			
Read C		istAddress (Cust)	
Tab St		istCity (Custome istState (Custom			
Autosi	76	istZip (Customer	1 5 A C C C C C C C C C C C C C C C C C C		
	Autoselect CustPhone (Customer Phone Number)				
Hide S	Hide Selecti CustFax (Customer Fax Number)				
Show High ModLevel (Customer Mod Level)					
LastUpdateDate (Last Update Date)					
Compone	Component D LastUpdateTime (Last Update Time)				
DBEdit C	DBEdit_Compa CustURL (Customer WWW URL Address)				
		istEMail (Custome			
		istStatus (Custor		100 C	
		ymentTerm (Pay			
		editLimit (Credit	Limit)		
$\langle \rangle$	-	ОК	Cance		Apply

		···· 4 5	6 7 8 9 10 13 14 15 16 17
		11 12	13 14 15 16 17
		18 19	20 21 22 23 24
		60606061	
	Contractor and a second	25 26	27 28 29 30 31
	Select Sales Rep		
	and the second	2	3 4 5 6 7
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	C	i uua	y ciedi
		-Select Time	
		Select I Ime	• • • • • • • • • • • • • • • • •
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	ContactCallNotes:Co	allivotes	
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			12 .
		\sim	
		A did Manual	Discould
		Add New	Discard
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	Save		
			A REAL PROPERTY AND A REAL
		Add and Exit	Discard and Exit
	Save Save and Exit	Add and Exit	Discard and Exit
		Add and Exit	Discard and Exit

• Enhanced alignment guides when moving/dragging objects, allowing for centering controls within a parent object

 Added Sort option for DB Tree View controls to sort the nodes by the node text, or to assign no sorting

🕜 DB Tre	e View Pr	operties				×
Properties Size and C		Table and	Fields	Images	EEPs	• • •
Left:		24	Wid	dth:	12	
Top:		56 🔹 🔺	Hei	ght:	9	97 -
Align:	Non	e				~
Hint						
Backgrour		and Font		AaBl	bYyZz	
Sort None None Node Teo						~



• Added Insert/Overwrite keyboard status to the list of available keys for the Status Bar control

 Adding Title Case character case option for DB Edit and DB Memo controls, along with and Variable Edit and Variable Memo controls

DB Edit Pro	perties		5. Š.	A 9		×
Properties	Effects	Pop-up Menus	Additional	EEPs	••	•
Visible			Windows Th	heme		^
Frame Side	es					
🗹 Left	\checkmark	Тор 🗹	Bottom	Right		
Frame Sett	tings				C	3
Frame Col	lor:	Button Sha	dow		~	
Frame Ho	t Color:	Button Sha	dow		~	
Frame Ho	t Style:	Flat Bold			~	
Frame Sty	le:	Flat			~	
Input Forn	nat Mask					
					2	
Use Re	gular Exp	ression:				
	9P				3	
					9	
Display Fo	rmat For	Non-Text Values				
Default Val	lue					
Color Opti	ons					
Disabled O	Color:	Win	dow		~	
Focus Col	or:	Wir	idow		~	
Read-Only	Color:	Wir	dow		~	
Read-(Only Colo	r on Focus				
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Upper Ca Lower Ca						
Word Cas						
Sentence	and the second second					
Title Case						

R Forms Scrapbook				
Show Customization Form	ShowCustom_Button	^		
Close	Close_Button			
a ne a new a ne a se a ne ne d ne	FiveButtonPanel			
0 for 10	NineButtonPanel			
IØSSERMEE	DigitalClock			
8 - 5 8	Vertical_NineButtonPanel			
Select Show Mode Normal Masimized Minimized Hide	RadioGroup			
	DBSlider_withImage	~		

• New Scrapbook utility, which acts as repository for created and commonly used form objects

- In the Form Designer any control that is right clicked, the menu option "Add to Scrapbook..." is available. A name can be specified to assign the scrapbook entry. From the designer, the Scrapbook can be launched as a MDI window, where scrapbook entries can be added to the displayed form for easy reuse.
- Added "On Drag List Item" EEP for DB/Variable Lookup List View controls which will execute when an item is dragged within the list
- Added Enhanced DB Grid setting to specify if the vertical scroll bar is displayed
- New "Recreate Columns After Refresh" property for list view controls to specify if the columns are preserved after the control is refreshed

New Lock Size option where field settings for objects can be altered, but the size can be specifically
preserved



• Enhanced Tab Order Settings with each listed control numbered with its current tab-order numeral

🛣 Tab Order Settings			×
Containers with child controls:			
Form			
Enhanced Group Box, Caption :Customer, Left :10, Top :34, Width :856, Height :257, Enabled			
Enhanced Group Box, Caption :Pyment Terms, Left :713, Top :83, Width :110, Height :50, Enabled			
Enhanced Group Box, Caption :Invoice Header, Left :12, Top :321, Width :421, Height :168, Enabled			
Enhanced Group Box, Caption Invoice Details, Left :443, Top :321, Width :421, Height :168, Enabled		14	
Collapse Panel, Caption: Contacts, Left :419, Top :240, Width :431, Height :27, Enabled, Component ID:	CollapsePan	lell	
Child controls listed in tab order:			
1) DE Edit, Table : Customer, Field : Company, Left :497, Top :14, Width :189, Height :21, TabStop, Enab	led		
2) DE Edit, Table : Customer, Field : CustAddress, Left :497, Top :36, Width :189, Height :21, TabStop, Er	abled		
3) Va iable Edit, Variable :vCustCSZ, Left :497, Top :58, Width :189, Height :21, TabStop, Enabled			
4) DE Edit, Table : Customer, Field : CustPhone, Left :497, Top :123, Width :189, Height :21, TabStop, En			
5) DE Edit, Table : Customer, Field : CustURL, Left :497, Top :80, Width :189, Height :21, TabStop, Enable			
6) DE Edit, Table : Customer, Field : CustEMail, Left :497, Top :101, Width :189, Height :21, TabStop, Ena			
7) DE Edit, Table : Customer, Field : LastUpdateDate, Left :497, Top :145, Width :189, Height :21, TabSto 8) DE Edit, Table : Customer, Field : LastOrderDate, Left :497, Top :167, Width :189, Height :21, TabStop,			
 DE Radio Group, Table : Customer, Field : CustStatus, Left :713, Top :107, Width :109, Height :21, Tabstop, DE Radio Group, Table : Customer, Field : CustStatus, Left :713, Top :15, Width :110, Height :65, Enab 			
10) Enhanced Group Box, Caption :Pyment Terms, Left :713, Top :83, Width :110, Height :50, Enabled	ieu		
11) Enhanced Group Box, Caption : Credit Limit, Left :713, Top :141, Width :110, Height :50, Enabled			
12) DB Edit, Table : Customer, Field : CreditLimit, Left :721, Top :158, Width :92, Height :21, TabStop, En	abled		
13) DB Grid, Table :Customer, Left :9, Top :18, Width :381, Height :163, TabStop, Enabled			
Tab Order: 5 Change Order Swap Positions	ОК	Can	ncel
		Con	1997 - C

• New **Enhanced DB Grid** progress bar properties for column types, allowing for a progress value to be hidden, displayed in different positions, and a color for the progress text

Column Properties[154	×
	nt Expression Enh	anced Properties	ŀ
Band			
			~
Sort Caption			
Field Type			
Progress Bar			~
Options			
Minimum:	Maximum:	Bar Color:	_
0 -	▲ 100	Purple	\sim
Progress Value:	Position:	Font Color	
Show	Progress Ce	entei 🗸 🔲 White	~
Footer			_
Туре:	Custom	~	
Alignment:	Same as Co	olumn V	
Value:			
Text:			

- A new "Execute Node EEP On Tree View Click" property has been added to **Tree View** controls to specify the nodes EEP is fired when the Tree View is clicked. The behavior for the property is related to Tree Views where "Hide Selection" is unchecked, and the node highlighting appears to be incorrect when a form is launched in the foreground.
- New GETPROPERTY parameter, GRIDHASROWS, to return if there are valid rows in an Enhanced DB Grid control

GETPROPERTY EGrid1 GRIDHASROWS vRowsExist

• New PROPERTY APPLICATION parameter to specify the Internet Explorer version to emulate when displaying Web Browser controls in forms

PROPERTY APPLICATION WEB_BROWSER_EMULATION 11000

• Added "In Property Names" option for Control Property searches to locate text for the actual property (e. g. Read Only, AutoSize, Show Hint, etc.) in use for objects

ind in Form Control Properties		×
Enter text to find:		
CustState		~
Case Sensitive V Whole Word In Property Names	ОК	Cancel

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Additional font size options added to the DOS form conversion utility to allow the converted objects to fit accordingly

General		
Change old sing	le and double line characters	to blanks
Font		
Name:	Courier New	~
Color:	🔳 Default	~
Size:	O 8 O 9 O 10	11
Style:	🗌 Bold 🗌 Italic 🔲 U	Jnderline
Form Border and	l Color	
Border Style:	Sizeable	~
Form Color:	Button Face	~
Border Width:	• 0	•
Text and Edit Ob	jects	
Transparent Text:		
Edit Text Color:	Window Text	~

 Added "Single" option for the "Item Check Mode" property in **Tile Menu** controls, where one or zero tile items can be checked

Properties Title Items Action	Bar Style Options EEPs Variable Links				
Behavior					
Background Scroll Sync:		15			
Item Check Mode:	Single				
ltem Hot Track Highlight Color:	Custom	. ~			
ltem Hot Track Mode:	Frame Scrollbars				
Scroll Mode:					
Focus Item In Cycle:					
Group Moving:					
Hide Focus On Item Hot Track:					
Item Moving:					
Animation					
Detail Animation Interval:	5	500			
Detail Animation Mode:	Scroll	~			
Animate Items Text:					

• New "Replace Column" right-click Column option for Enhanced DB Grid/DB Grid controls, where the substitute column retains all column-level custom settings



- Added MAKECLICK property support to the Office Button, Push Button, Bit Button, Speed Button, Enhanced Speed Button, and Shape Button controls. The MAKECLICK property simulates a mouse click on the button.
- New FILTEREDROWCOUNT parameter for the GETPROPERTY command to return the number of rows when an Enhanced DB Grid is filtered
- New GETPROPERTY parameter for Enhanced DB Grid controls to return whether the grid has a filter applied
- New PROPERTY parameter for Enhanced DB Grids to clear a filter applied to a grid

 Added "Expand Direction" property for Collapse Panel controls for the panel to expand "up" for panels placed on the lower portion of a form

Collapse Pa	nel Properties						×
Properties	Caption Settings	Settings	Border	Grid	•	•	•
Size and C	oordinates						
Left:	32 🔹 🔺	Wie	:th:	1	85	-	•
Top:	40 🔹 🔺	Hei	ight:	8	41	•	•
Align:	None					2	~
Caption							
Carling A	r						1
Caption A	lignment: 🔤 🤇	Centered				~	
Hint							
	100						
Expand Dir	rection						
Expand	Down						
O Expand	Up						
Backgroun	d Color and Font						
Butto	n Face	~	AaBI	bYyZz			
Attributes							
Animat	tion						
	ed						
Show H							

• Enhanced form conversion to automatically replace double quotes with single quotes

Select Form(s) to Convert	×
Client CortInfo NewCase	
DOS Forms 🗹 Show Conversion I	irrors 🗌 Convert " into ' in Form Variables
Properties	OK Cancel

Tile Menu Properties Properties Title Items	Action Bar Style Options EEPs Variable Links					
Static Items Dynamic Ite Field Mapping Table Name: WHERE Clause:						
Groups Tiles Tile Gly	ph					
Tile Template:	Installation and Configuration $$					
Tile ID: Size:	MainMenulD					
Row Count:						
Border Color:	~					
Gradient Style:	~					
Gadient Color Start:	MainMenuColorFrom ~					
Gadient Color End:	MainMenuColorTo \sim					
Text 1 Text 2 Text 3	Text 4					
Caption:	MainMenuCaption \checkmark					
Caption Format:						
Font Name:	~					
Font Size:	MainMenuCaptionSize \lor					
Font Color:	MainMenuCaptionColor ~					
Font Style:	~					
2	OK Cancel Apply					

• Support for dynamic font properties for the Tile Menu control tile captions

• Added PROPERTY command SCALEBY parameter to fill the screen when scaling forms, for easier implementation with mixed screen dimensions, themes, and borders

PROPERTY RBASE_FORM SCALEBY 'FILL_SCREEN'

Current Fie Properties				
Attributes	Joccurrigs	LLFS	Valiable Links	
Autosi	ze			
Blinkin	9			
Transp	arent			
Show I	Hint			
Show E	Extended In	nforma	tion	
Colors				
Flat Color	.	B	utton Shadow	~
Fill Color:		B	utton Face	~
Blinking O	ptions			
Blink Colo	or:	H	lighlight	~
Blink Inter	val On:	<u>) </u>		5 ms
Blink Inter	val Off:	<u>) </u>		505 ms
Frame Sty	le			
Flat				~
		0	K Cancel	Apply

• Enhanced field type and length details added to the Status Bar "Current Field" pane

• Enhanced Form Wizard with increased field widths to preview the full value for long column names, and added Help button, where newly added chapter help is available for reference

Form Wizard					×
	To add fields to the form, click eav section, and then click the ">" bu To use all available fields, click the Available Fields: CustID ContFax ContPager	tton.	Ordered 3 ContID ContFNa ContENa ContPho ContCel ContEM ContInfo ContPho	Selected Fields: ame one I ail	lable Fields"
Help			<back< td=""><td>Next>></td><td>Cancel</td></back<>	Next>>	Cancel

 New "Duplicate" tile and "Edit Custom EEP" buttons for the **Tile Menu** control, as time-saving features when tile items have many custom values and to directly modify the tile "On Click" EEP

roperties	Title	ltems	Action Bar	Style	Options	EEPs	Varia	ble Links	
Static Iter	ns Dy	namic Ite	ms						
Groups									
# Ca	ption								
1 Cu	stomers								
2 Co	ntacts								
3 Em	ployees								
4 Pro	ducts								
5 Sal									
6 Rep	ports								
+ New		A Edit	<u> </u>	elete	1				V
Tiles					4				
Group Fi	lter:	1: Custor	mers						-
# Gro	oup #	Text 1	Text 2	Te	ct 3	Text 4	F	rames	
1 1		Manage		Pri	nt	Search	0		
								0	

• The tile properties for **Tile Menu** form controls may now be altered by the Tile ID value. The functionality allows for tiles to be manipulated with the PROPERTY and GETPROPERTY commands similar to Property ID values. The command below will disable the tile, assuming the Tile ID is equal to DBMaint.

PROPERTY DBMaint ENABLED 'FALSE'

• New PNG image support for the **Tree View** and **DB Tree View** controls. The default PNG dimension is 24. When PNG images are specified, the bitmap based images are ignored.

R Tree Vi	ew Prope	erties				×
roperties	Effects	Images	Nodes	EEPs	Variable Links][
		2		1	199	^
0		1	2		3	
2			Į	*	3	
4		5	6		7	
-		?	1			
8		9	10		11	
R		2*		2/	Ø	
12		13	14		15	
内				()	?	~
🕂 Add I	mage	- De	lete Imag	je (Clear All Images	
Use PN	IG Image	s				
mage Size						24
						^
0		1	2		3	
-				1	100	
4		5	6		7	
					000	
		35		SCL	SCL	
8		ي 9	10		11	
8		9	10		11	~
100	mage	9			1000	-

- The **Web Browser** controls within the R:BASE Form Designer were updated with dynamic properties to allow manipulation of HTML controls in EEPs. The dynamic properties are useful in the following:
 - $_{\odot}\,$ Integrating local data with web sites that do not have an API
 - $_{\odot}\,$ Automating web page tasks within R:BASE
 - Extracting data from web pages

• Added "Highlight Text Color" property for the **Split View** control to specify the text color for menu item when highlighted, where the mouse cursor is hovered over the menu item

erties			×
lenu EEPs Var	riable Links		Ŀ
	-		
			40
en Items:			0
			6
jin:			2
on Bar:			
Color:	Custom		~
t Color:	Black		~
			4
			R
			43
e			
-13-V		14	
	lenui EEPs Vai en Items: gin: on Bar: Color: t Color:	en Items:	en Items:

- Enhanced Variable Lookup List View to recognize a right-click on a row, to set the focus upon that row
- Improved **Enhanced DB Grid** using Sequence Mode to fire the "On Drag Drop" EEP after a is row dragged and dropped and the sequence field is updated
- Enhanced **Tab Set** control with two properties TabTo and AllowChange and an added "On Before Tab Change" EEP, which is triggered before the tab is changed. The changes make it possible for access to a tab to be prevented.
 - \circ TabTo returns the index of the target tab.
 - AllowChange tells the Tab Set control if it should allow the change or not. The default behavior is to allow the change.

Note that the properties TabTo and AllowChange are only to be used in the "On Before Tab Change" EEP.

• Added Popup Menu support for **Tree View** and **DB Tree View** controls, to offer a right-click popup menu to run procedures

	Caption a Caption a	u Item and Image				
	Image:		Load			
	On Click					
	n	Edit		Edit Cu	stom EEP	
					ОК	Cancel

 Added GETPROPERTY parameter to capture the field/column name where the focus is clicked for the column filter in Enhanced DB Grids

GETPROPERTY ComponentID CURRENTFILTERCOLUMNNAME 'vFilterColName'

 Added On Mouse Over and On Mouse Leave EEPs to Form/External Form Properties, to execute when the mouse cursor enters/leaves the form area

Form Prope	rties		×
Properties On Before	Dynamic Caption	EEPs Miscellaneous	•••
On before	Start		
	Edit	Edit Custom EEP	
On After St	tart		
On Close			
On Resize			
On Roll Up)		
On Roll Do	own		
On Key Do			
On Key Pre			
On Key Up			
On Mouse	Enter		
12 2000 - 10			
🗌 In			
	Edit	Edit Custom EEP	
On Mouse	Leave		
🗌 In			
	Edit	Edit Custom EEP	

• Added GETPROPERTY parameters to capture the current WHERE Clause and current sort for the **Enhanced DB Grid**. CURRENTWHERE will return the combination of the form-level WHERE Clause and grid-level filter. CURRENTSORT will return the current ORDER BY.

GETPROPERTY ComponentID CURRENTWHERE 'vGridCurrentWhere' GETPROPERTY ComponentID CURRENTSORT 'vGridCurrentSort'

The command syntax is also supported on a table level to capture the current WHERE clause and current column sort in forms. The below captures the current WHERE Clause and ORDER BY for the table:

GETPROPERTY TABLE 'FormTableName->CURRENTWHERE' 'vCurrentWhere' GETPROPERTY TABLE 'FormTableName->CURRENTSORT' 'vCurrentSort' Added On DateTime Cleared EEP to Date And Time Edit Control, which is triggered if the date is set to NULL

DB Date An	d Time Edit Pro	operties			×
Properties	Appearance	Options	EEPs	Variable Link	s
On Click	*				
	Edit		Edit Cu	istom EEP	
On Drop [own				
On Close	Up				
On DateTi	me Change				- 2
-					
🗌 In					
	Edit		Edit Cu	istom EEP	
On DateTi	me Cleared				20
🗌 In					
	Edit		Edit Cu	istom EEP	
On Doubl	e Click				
On Enter					
On Exit					

• Added PROPERTY command parameters to specify the active view display in the **DB Task Tracker** scheduling area. Tasks can be viewed by day, week, weeks, year, Gantt, or time grid using the following:

PROPERTY D	BTaskTracker1	'VIEWDAY->ACTIVE' 'TRUE'
PROPERTY D	BTaskTrackerl	'VIEWWEEK->ACTIVE' 'TRUE'
PROPERTY D	BTaskTrackerl	'VIEWWEEKS->ACTIVE' 'TRUE'
PROPERTY D	BTaskTrackerl	'VIEWYEAR->ACTIVE' 'TRUE'
PROPERTY D	BTaskTrackerl	'VIEWGANTT->ACTIVE' 'TRUE'
PROPERTY DI	BTaskTracker1	'VIEWTIMEGRID->ACTIVE' 'TRUE'

Added PROPERTY command parameters to add a custom "Label" color and description to the **DB Task Tracker**. The color portion can be a named color, an integer, or an RGB value. The ADD_COLOR
 command should be executed at the start of the application as the custom colors/descriptions are not
 persistent between R:BASE sessions.

PROPERTY TASK_TRACKER ADD_COLOR 'My Status | RED'

• New PROPERTY command parameters implemented to change the predefined color/descriptions of an existing **DB Task Tracker** label; COLOR_DESC[n] and COLOR_VALUE[n]. COLOR_DESC[n] changes the predefined description of a label, where n is a zero-based index as displayed in the drop down. COLOR_VALUE[n] changes the predefined color of a label, where n is a zero-based index as displayed in the drop down. The color can be a named color, an integer, or an RGB value.

PROPERTY TaskTracker COLOR_DESC[n] 'My Description'
PROPERTY TaskTracker COLOR_VALUE[n] 'BLUE'

• A new Hint property was added to the **DB Task Tracker** control. The property is assigned to a table field name, which holds the hint value when the mouse is over a task.

DB Task Tra	cker Pro	perties		-				×
Properties	Fields	Appearance	Туре	Task Tree	View	EEPs	Variable Links	
Task Prope	erty/Field	l Map					Required Prope	rties
Caption:			TaskC	aption (Tas	s <mark>k Capt</mark>	125.26		~
ID*:			ID (Ir	nternal Auto	numbe	ered ID))	~
Group He	ader ID:							~
Start*:			TaskS	tart (Task S	tart Dat	e/Time	2)	~
Finish*:			TaskF	inish (Task	Finish [Date/Ti	me)	~
Task Type	*:		Event	Type (Even	t Type)			~
Options*:			TaskC	ptions (Tas	sk Optio	ons)		~
Task Inde	c :		Tasklı	ndex (Task	Index)			~
Task Com	plete:		TaskC	omplete (lask Co	mplete)	~
Task Statu	IS:							~
Actual Fir	nish:							~
Actual Sta	art:							~
Label Col	or (FG/BC	G):			~			~
Location:								~
Message,	Hint:				~	•		~
Parent ID:								~
Reminder	Date:							~

• Added FILENAME property to the **File List Box** control that can be used to select a single file in a folder based upon knowing part of the file name

PROPERTY FileBox FILENAME .vInitialFileName

• Enhanced CaptureFromVideoEx parameter for **DB Image** and **Variable Image** controls to specify a maximum height, along with the current image format and maximum width functionality. The ability to individually specify a maximum width or maximum height, or both, provides the ability to resize the image so that the final dimension fits inside the given dimension while preserving the aspect ratio. Depending on the specified value pair, sometimes the width will be the limiting factor, and sometimes it will be the height. If you wish to capture a PNG image with a maximum width and height of 100 pixels, use the following:

PROPERTY EmployeePhoto CaptureFromVideoEx 'PNG 100 100'

• Added properties for **DB Image** and **Variable Image** controls to capture/set the active camera as well as capture/set the default resolution of the video feed.

GETPROPERTY ImageCtrl DeviceCameras vCameras Returns a comma separated list of attached camera devices. The functionality allows an application to create a custom camera selection for the user.

GETPROPERTY ImageCtrl DefaultCamera vCamera Returns the last camera used to take a picture. If a picture has not been taken yet, this returns the first devices detected.

PROPERTY ImageCtrl DefaultCamera .vCamera Sets the active camera for taking a picture.

GETPROPERTY ImageCtrl DefaultResolution 'vCameraRes' Returns the default resolution of the camera.

PROPERTY ImageCtrl DefaultResolution .vCameraRes Sets the default resolution for the active camera.

After the device is selected, the supported resolutions are listed in a drop-down on the right. If a dimension is specified with CaptureFromVideoEx (e.g. CaptureFromVideoEx 'JPG 640 640') the resolution size options are hidden. If no size option was specified (e.g. CaptureFromVideoEx 'JPG') ,then the drop-down will be displayed.

Camera Capture
Source Device
Microsoft LifeCam VX-7000
Filter Input
<u>O</u> K <u>Cancel</u>

• New "Empty Date On Null Variable" property for the **Enhanced Variable Calendar** and **Enhanced DB Calendar** controls. If the property is True, instead of using NOW for NULL variables, the calendar will use zero as the date. The default value is False. The "Today's Date Frame" color should be set to Window (or whatever color is used for the calendar background) to improve user clarification.

Enhanced V	/ariabl	e Calenda	ar Prop	erties			×
Properties	Effe	cts Colo	rs EE	Ps Variable	Links		
Size and C	oordi	nates					
Left:		20 -		Width:	199	•	•
Тор:		31 -		Height:	213	•	•
Align:		lone					~
Hint							6
						٦	
Backgrour	nd Col	or and Fo	ont				6
Wind			~	A	aBbYyZz		
Variable							C
Var Name	:	vStartDa	te			_	~
Attributes	ze						
Show [Days						
Show H	lint						
Tab Sto	p						
Native	Appe	arance		_			
Use Em	npty D	ate On N	ull Vari	able			
Compone	nt ID						6

• A new "Rules Validation on Focus Change" form setting has been implemented which determines the focus behavior when moving between form fields when a rules violation occurs. The option allows or does not allow the focus to change. When a rules violation and the focus remains upon a field, the behavior allows the user to better recognize the violation upon forms with many fields.

EEPs	Miscellaneous	Caption Buttons	Timer	Themes	•	•
Forn	n Closing Behavio	or				
Nor	ne					~
Forn	n Opening Behav	ior				
Nor	ne					~
Rule	s Validation on Fo	ocus Change			٦	
Allo	w the focus to cl	nange				~
-						

• A new GETPROPERTY parameter has been implemented to verify if a photo was captured successfully with the **DB Image** or **Variable Image** controls. The property should be used after the using CaptureFromVideoEx. The returned value is True/False.

GETPROPERTY EmployeeImage PHOTOCAPTURED vCapturedOK

• Added "Low Resolution View Finder" property for **DB/Variable Image** controls to specify the camera capture functionality will use a low-resolution feed for the view finder, but still take a picture using the target resolution. The option makes the camera more responsive. Note that when this property is checked (True), there will be a slight pause in the view finder when the picture is taken. This is because the camera will reset to the target resolution and take the actual picture.

Properties	EEPs Variable Link	3	
Size and C	oordinates		
Left:	8	Width:	105 💌 🔺
Тор:	240 🔻 🔺	Height:	105 🝷 🔺
Align:	None		~
Hint			E
Variable			
Var Name	e:		~
lmage Nu	mber		
0			
Attributes			
Transp	arent		
Center	6) -		
Stretch	1		
Propo	tional		
Show I	Hint		
Stretch	DXF		
Force	Opaque		
Low R	esolution View Finder		
Compone	nt ID		C
Variable	mage1		

 Added Orientation option for the Enhanced DB Navigator, to display the navigator vertical or horizontal

Properties	Options	Hints	User Images	Variable Links	-
Visible But					
_	us V I # V V V V V V V V V V V V V V V V V	Delete Edit Save Cance Refres	d		
Autosiz					
Orientatio O Horizo O Vertica	ntal				

• Added Enhanced DB Navigator functionality to assign custom images to the navigator buttons



 New PROPERTY parameter for DB Lookup List View and Variable Lookup List View controls which specifies to scroll the current selection into view

PROPERTY CustomerListView SHOWSELECTEDITEM 'TRUE'

• New APPLICATION PROPERTY has been implemented to check if data has changed prior to using SAVEROW in a form EEP. When the property is ON, SAVEROW will post data only if the table is in edit mode and data values were changed. The default is OFF.

PROPERTY APPLICATION CHECK_STATE_ON_SAVEROW ON

- Added GETPROPERTY command parameters for DB Image and Variable Image controls to check the
 accessibility of camera devices for a computer, as a camera may be installed, but not available due to
 privacy settings
 - DeviceCameraCount Captures the number of camera devices that can be detected
 - CheckCameraAccess Tests if a camera can be accessed using a zero-based index on the camera

GETPROPERTY EmployeePhoto DEVICECAMERACOUNT vCameraCount GETPROPERTY EmployeePhoto 'CHECKCAMERAACCESS[0]' vCameraAccess

 Added ability to simulate a mouse click for Image, Variable Image, and DB Image controls with the PROPERTY command MAKECLICK parameter. The parameter specifies to fire the "On Click" EEP for the control, simulating a mouse click. The last parameter will accept any value for the PROPERTY command.

PROPERTY CustomerImage MAKECLICK ' '

 Added "week-based" navigation method to the **DB Task Tracker** settings and Date Navigator area. The available values of Month-Based, Week-Based, and Default offer more flexibility for the calendar display when selecting dates. A GOTOWEEK property has also been implemented to focus the DB Task Tracker upon a whole week for a provided date. The following alters the DB Task Tracker to a weekbased display and goes to the specified week:

PROPERTY FabricationTracking NAVIGATIONMETHOD 'WEEK-BASED' PROPERTY FabricationTracking GOTOWEEK '12/17/2020'

						_×
roperties Fields Appearar	псе Туре	Task Tree	View	EEPs	Variable Links	•
ïew Type: Gantt						~
Day Week Weeks Year	Gantt Ti	me Grid	ate Na	vigator]	•
Column/Row Count:			1			5
First Week Of Year:	Systen	ı				\sim
Navigation Method:	Month	n-Based				<
Holiday Color:	R R	ed				~
Tasks In Bold:	\square					
Holidays In Color:						
Show Week Numbers:	\checkmark					
Selection Is Weeks:						
Visible:						

 Added default file name (PDF, TXT, etc.) when selecting "Document Custom EEPs" in the Form Designer

Save in	: history		ᠵ 🔇 🤌 📂 🗔 🗸	
_	Name	^	Date modified	Туре
	FormEEPs	_CustContAndSales.TXT	1/7/2021 3:35 PM	Text
Quick access	LabelEEPs	_CustShippingLabel.TXT	1/7/2021 3:35 PM	Text
	ReportEEP	s_GetPropInReports.TXT	1/7/2021 3:35 PM	Text
Desktop				
-				
Libraries				
This PC				
1				
Network	<			>
	Object name:	ExtFormEEPs_TileMenu_Sam	ple.TXT V	<u>S</u> ave
	Save as type:	Text files (*.txt)	<u> </u>	Cancel

• Added properties to the Database and Variable Lookup List View controls to specify the background color and the font color of the checked row

PROPERTY CustListView CHECKEDITEMFGCOLOR 'BLACK' PROPERTY CustListView CHECKEDITEMBGCOLOR 'YELLOW'

Properties	Effects	Colors	Lookup Se	ettings	• •
Zebra			Lookap or		
Odd Colo	8244248			Custom	
Even Colo	r:			White	~
Color Opt	ions				
Disabled (Color:			Button Fac	:e ~
Focus Col	or:			Window	~
Selected R	ow Backg	ground a	nd Font Col	lor	
Backgrou	nd Color:			Highlight	~
Font Color:			Highlight Text		
Checked F	low Back	ground a	nd Font Co	lor	
Backgrou	nd Color			Default	~
Font Cold				Default	~

• Added SELECTEDFILES property to the File List Box control to return a comma delimited string of the selected files.

GETPROPERTY FileListBox SELECTEDFILES vSelectedFiles

• Added Database/Variable Lookup List View property where the check box state and row selection are synchronized. A change in the row selection will update the check boxes and vice versa. With "Synchronize Selection and Check Boxes" enabled, the variable will always pick up only one selection.

Properties Effects Col	ors Lookup Setting	s ()
 Visible Frame Frame Hot Track 	☑ Windows	: Theme
Frame Sides Left	✓ Bottom	Right
Frame Settings		c
Frame Color:	Button Shadow	~
Frame Hot Color:	Button Shadow	~
Frame Hot Style:	Flat Bold	~
Frame Style:	Flat	~
Header Sort Display Mo	de	
Right of Text		~
Header Height		
		0 🔹 🔺
Show Row Numbers		
Horizontal Alignment:	Left	
Vertical Alignment:	Default	~
Show Check Boxes		

• Added PROPERTY/GETPROPERTY command parameter for the PDF Viewer control to support the logical page number in PDF documents, for documents that support such

GETPROPERTY CompID PAGELABEL vLogicalPage

• Enhanced DB Web Browser, Variable Web Browser, and Web Browser form controls with a new "Engine Type" property to specify the browser engine (Internet Explorer/Edge) for displaying web pages. A data folder may be specified for the Edge session information.

Web Brows	er Proper	ties			×
Properties	EEPs \	/ariable Link	5		-
Size and C					
Left:	2	0 -	Width:	1484	-
Тор:		0 -	Height:	811	-
Align:	Clie	nt			~
✓ Tab Sto Suppre URL https://w	ss Script]
Engine Typ	e				
Edge On	ly				~
Edge Data	a Folder:	C:\Temp\E	dgeData]
Compone	nt ID				
WebBrov	vser1				

• Added Display Format, Input Format Mask, and Character Case options to the Enhanced DB Grid Columns properties to apply formatting to characters

Column Properti	es[InvoiceTotal]			×
Hint Expression	Enhanced Properties	Filter	Colors	••
Band				
Invoice Details				~
Sort Caption				
Field Type				
Standard				~
Display Format	For Non-Text Values:			
\$#,0.00;(\$#,0.00))			2
Input Format N	lask:			
Character Case				
Normal				~
Footer				
Type:	Sum		~	

• Added "Trim Digital Clock" property which trims a Digital Clock of the extra spacing/placeholders when a modern appearance is applied

Digital Cloc	k Properties				×
	Variable Lin oordinates	ks			-
Left:	32	•	Width:	526	• •
Тор:	136	•	Height:	98	-
Align:	None				~
Hint					_
Text Aligni	ment				
🖹 Left J	lustified				~
Colors					
Backgrou	nd Color:		Black		~
Active Co	lor:		Lime		~
Passive C	olor:		Custom		~
Moder	n Digital				
Appearan	ce:		Classic		~
Trim Digit	al Clock:				
Attributes					
Show H					
Show S		12			
	olon Segmer	nt			
✓ 12 Hou	ir Clock				

- Improved Enhanced DB Grid Column properties when a list of Predefined Values are specified, the grid will honor the SET AUTODROP setting, where when focused, the list of predefined values will now automatically drop down if the AUTODROP setting is ON.
- Added PROPERTY command parameter for Enhanced DB Grid controls allowing the grid to use its font and background color, and not the color definitions of the columns

PROPERTY EmpGrid COLUMNSUSEGRIDCOLORS TRUE

- 🖹 Custom Table Relationships ctCallNotes : T1 - x ContID (Contact ID) EmpID (Employee (Sales Rep ID)) CallDate (Call Date) CallTime (Call Time) - x CallNotes (Call Notes) CustID (Customer Identification Number) ContID (Contact Automated ID) ContFName (Customer Contact First Name) ContLName (Customer Contact Last Name) - x ContPhone (Customer Contact Phone Number) CustID (Customer Identification Number) ContFax (Customer Contact Fax Number) Company (Customer Company Name) CustAddress (Customer Address) ContPager (Customer Contact Pager Number) CustCity (Customer City) CustState (Customer State) ContEMail (Customer Contact E-Mail Address) Continfo (Customer Contact Notes) CustZip (Customer Zip Code) ContPhoto (Customer Contact Photo) CustPhone (Customer Phone Number) CustFax (Customer Fax Number) LastContactDate (Last Contact Date) ModLevel (Customer Mod Level) LastUpdateDate (Last Update Date) LastUpdateTime (Last Update Time) LastOrderDate (Last Order Data) CustURL (Customer WWW URL Address) CustEMail (Customer E-Mail Address) CustStatus (Customer Status (A/I)) PaymentTerm (Payment Terms) CreditLimit (Credit Limit) Add Common Field Links Add PK/FK Field Links Remove All Links OK Cancel
- Enhanced Custom Table Relationships where the graphic table/view layout is now saved between sessions

• Added "Hour Glass Cursor On Filter" Enhanced DB Grid setting to inform the user that R:BASE is still processing when filtering records. The cursor change prevents users from closing the application prematurely when thinking the program is not responding.

	a construction	Properties	944 T 12				
Effects	Options	Enhanced Options	Bands	Columns	•	•	
Option	s						
Aut	o Width						
Dra	w Graphic	Field					
Sho	w Footer						
Dra	w Bands						
Hot	Track						
🗌 Ban	ds over Tit	tles					
☑ Title	Word Wr	ар					
Sho	w Filter Ba	ar					
Sort	ted Filter L	ist					
Foc	us on Filte	er Bar					
Nav	igation Ev	ents On Calculation					
Hou Hou	ur Glass Cu	ursor On Filter					
Seq	uence Mo	de					
		equence Field:					

• New Default Values implemented at the form level for all table-based controls. Within the Form Designer, select Tables > Default Values from the main menu bar to assign a default value to any column for the form.

😰 Default Values			×
Tables/Columns Customer CustlD (Customer Identification Number) Company (Customer Company Name) CustAddress (Customer Address) CustCity (Customer City) CustZip (Customer State) CustFax (Customer Fax Number) CustFax (Customer Mod Level) LastUpdateDate (Last Update Date) LastOrderDate (Last Order Data) CustStatus (Customer E-Mail Address) CustStatus (Customer Status (A/II)) PaymentTerm (Payment Terms) CreditLimit (Credit Limit) TransID CustID TransDate	Default Values Table Name: Column Name: Data Type: Current Default Value:	Customer CustState TEXT PA	
			OK Cancel

• New PROPERTY command parameters implemented to simulate a mouse double click and a mouse right click for form controls. The syntax is available to fire the appropriate control EEP, as well as to display popup menu items in list view controls. The last parameter will accept any value for the PROPERTY command.

PROPERTY CustomerName MAKEDBLCLICK ' ' PROPERTY CustomerList MAKERIGHTCLICK ' '

• Enhanced pop-up menu display behavior, where the current value will now be assigned as the default selection, for DB Edit, DB Memo, Variable Edit, Variable Memo, and Variable Unicode Memo controls

• Added independent Date Picker and Time Picker options for Enhanced DB Grid controls. If "Picker for DATE and TIME Fields" is unchecked, the individual pickers can be activated using the "Picker for DATE Fields" and "Picker for TIME Fields" options.

Enhanced D	B Grid Pr	operties		×
Properties	Effects	Options	Enhanced Options	Bands 4 + -
Size and C	oordinate	25		-
Left:		7 -	Width:	649 💌 🔺
Тор:		40 🔹 🔺	Height:	251 💌 🔺
Align:	Non	e		~
Hint				8
Table				
Table Nan	ne: Cu	stomer (C	Customer Information	n) ~
Backgroun	d Color :	and Eant		
Wind		inditione	1	
VVIna	ow	~	AaBt	oYyZz
DB Grid Or	otions			
Editing			Tabs	
Show E			ontal Scroll Bar	
✓ Titles			al Scroll Bar	
Indicat	or	Picke	r for DATE and TIME	Fields
Colum	n Resize	Show	Hint	
Colum	n Lines	Nativ	e Appearance	
Row Li	nes		ocus Navigation	
Row Se	lect	Tab St	-	
Selection	on	Skip F	Read Only Columns	
Scroll H	lints	Multi	select	
Multilin	ne Titles	Persis	tent Field Value Colo	r
Title Ell	ipisis		R as TAB	
	n Ellipisis	Picke	r for DATE Fields	
	Number		r for TIME Fields	
Cell Hi	nts	Colur	nns Use Grid Colors	

• Enhanced capture from video functionality to support silent/hidden camera snap shots. The PROPERTY command CaptureFromVideoEx parameter for DB Image and Variable Image controls allows an image to be captured without having to press the OK button. As the CaptureFromVideoEx dialog may take time to focus when initialized, the silent mode can be set to pause prior to the image capture.

PROPERTY <CompID> CaptureFromVideoEx '<Format> <Width> <Height> <TimeoutInMs> <SHOW_CAMERA|HIDE_CAMERA>'

 $_{\odot}$ <TimeoutInMs>: specifies the auto-click wait time in milliseconds. The default is zero.

 <SHOW_CAMERA|HIDE_CAMERA>: specifies to show or hide the camera. The default is SHOW_CAMERA. This option is only interpreted if <TimeoutInMs> is not zero.

PROPERTY ImageCamera CaptureFromVideoEx 'JPG 320 240 1500 HIDE_CAMERA'

 Added visual functionality for the PDF Viewer control to drag the document display in all directions with the mouse Support for automatic text content scrolling in memo and rich edit controls. Two new properties were
added, AutoScrollInterval and AutoScrollContent, to allow automatic scrolling. The "Auto-Scroll
Interval" property can only be defined (in milliseconds) within the Form Designer. The
AutoScrollContent property specifies to begin scrolling for the content of the form control, which can
only be assigned (TRUE/FALSE) at runtime with the PROPERTY command. The text will automatically
scroll, and when reaching the end of the text, resets to the top and continues scrolling. The DB Memo,
Variable Memo, Advanced DB Rich Edit, Advanced Variable Rich Edit, DB Rich Edit, Variable Rich Edit,
DB Unicode Memo, Variable Unicode Memo controls allow automatic scrolling.

PROPERTY OrderNotes AUTOSCROLLCONTENT 'TRUE'

Properties Attribute	es Effects	Pop-up Menus	EEPs 4	•		
✓ Visible Frame ☐ Frame Hot Track		Vindows Th	ieme			
Frame Sides	Гор	Bottom	Right			
Frame Settings				0		
Maximum Length:			0 -			
Color Options						
Disabled Color:		Windo	w	~		
Focus Color:		🔲 Window 🗸				
Read-Only Color:		☐ Window ~				
Read-Only Color	on Focus			134		
Character Case						
Normal				~		
Scroll Bars		Clipboard Sett	ings			
None Ve	ertical	Prevent Cut				
⊖ Horizontal ⊖ B	oth	Prevent Co	ру			
		Prevent Pa	ste			
Auto-scroll Interval:		-	0 -	100		

- Improved "Document Custom EEPs" output to now follow the Tab Order of controls, to locate code easier
- Enhanced "PROPERTY TABLE Search" functionality with an added option to use an EQUAL condition, in
 addition to the current CONTAINS condition (default). The syntax was enhanced to perform exact
 criteria searches. To search using EQUALS (exact search), add a equal character and enclose the
 search criteria in double quotes; "=(" and ")".

```
PROPERTY TABLE 'ContactCallNotes' 'SEARCH->CallNotes->=(SearchText)'
```

 Augmented "Record Search" dialog for Enhanced DB Grid controls regarding the "in field <fieldname>" radio button, where the field names match the custom field names

		Custome	ers				G	First
Company	City	State	Zip Code	Status	Web Site	^		
/icrotech University - I	Boston	MA	02162		http://www.mui.com		G	Prev
ndustrial Computers Inc.	Denver	со	80214		http://www.ici.com			
Computer Mountain Inc.,	Record Search				× ^p		-	
ndustrial Concepts Inc.							Ð	Next
C Consultation And Design	Value:				<u>O</u> K <u>com</u>			
Computer Warehouse - I					Consel			1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
Aidtown Computer Co.	O in all fields				<u>C</u> ancel <u>m</u>			Last
lordan Distributors, Inc.	in field Co	ompany		~	<u>n</u>		2	
Compdat Computer Consulting		ompany			<u>n</u>		-	
oftech Database Design	/	ty ate p Code			m	-	2	Close
	At a beginn La	p Code stUpdateTime eb Site				1	Selec	ted Invoid

• Added "Fixed Columns" menu option within the Enhanced DB Grid property editor, to specifies the number of columns on the left of the grid that cannot be scrolled

Enhanced DB Gri	d Properties		×
Properties Effe Cell Hint Optic	ns	nced Options Band	• • •
Selected Row E Background C	Background and Fon	Highlight	
Font Color: Multiline Ro Lines per Row: Variable Row H Data row starts	leight	Highlight Text	1 .
Row	Heigh	t	
+ Add	📝 Change	🛥 Delete]
Fixed Columns			0 💌 🔺

• Enhanced "History" functionality to save the entire form, rather than just a snapshot of the EEP code. A revision number and date/time are listed within the History tab to track changes over time, and restore a form from a right click menu option. The backup files are stored in a "___history" sub folder beneath the current database folder. An option is available within the Form Designer Settings to disable the History feature, if desired.

R Form Designer - Contacts [Contact]	
🤊 🖻 🐰 📋 🌉	다 방 : 고 또 토 비 운 ~ 비 비 가 피 튼 후 ᅴ (연 🛯 🖉
Revision Date 21 06/03/2022 04:07 PM 20 02/23/2022 03:31 P 19 02/23/2022 03:30 F	1 { 2 02/23/2022 14:31:32 3 Connected Database : C:\RBTI\RBGX5E\Samples\RRBY#20\RRBY#20.RX1 bre History Item ▶ Item A (Latest)
18 02/23/2022 12:42 PM 17 07/19/2021 03:48 PM 16 12/03/2020 10:36 AM	6 Item B 7 (
15 12/03/2020 10:32 AM 14 12/03/2020 10:25 AM 13 09/30/2020 10:18 AM 12 09/30/2020 10:17 AM 11 09/30/2020 10:16 AM 12 09/30/2020 10:16 AM 10 09/30/2020 10:16 AM 10 09/30/2020 10:16 AM 9 06/26/2019 01:52 PM 8 06/26/2019 01:49 PM 7 06/26/2019 01:49 PM 6 06/26/2019 01:46 PM 5 06/26/2019 01:46 PM 4 03/11/2019 03:24 PM 3 03/08/2019 04:50 PM 2 03/08/2019 04:47 PM	<pre>10 11 { On Before Start EEF 12 13 IF (CHKVAR('vFormMode')) <> 1 THEN 14 SET VAR vFormMode')) <> 1 THEN 14 SET VAR vFormMode')) <> 1 THEN 15 ENDIF 16 IF (CHKVAR('vRows')) <> 1 THEN 17 SET VAR vRows INTEGER = 0 18 SELECT COUNT(*) INTO vRows INDIC ivRows FROM Contact 19 CLEAR VAR iv% 20 ENDIF 21 RETURN 22 23 { On After Start EEF 24</pre>
1 12/18/2018 11:43 AM	25 PROPERTY RBASE_FORM DONTSHOWSAVEDIALOG 'TRUE' 26 PROPERTY RBASE_FORM DONTSHOWDELETEDIALOG 'TRUE' 27 SWITCH (.vFormMode) 28 CASE 'ENTER' 29 PROPERTY EnhancedTab_Page0 CAPTION 'New Contact'
Design Code History	
Form, Caption :, Left :0, Top :0, Widt	h :705, Height :437, Component ID: Form: Contacts

• Enhanced GETPROPERTY command to trigger required value checks manually upon form fields. The functionality checks if a field has a value (not empty), and displays a message if a required value is not present. When enabled, a value for the field is checked when the form is closed. With the PROPERTY command, an EEP may be defined as below:

```
GETPROPERTY RBASE_FORM CheckRequiredValues 'vState'
IF vState = 'OK' THEN
SAVEROW
CLOSEWINDOW
ENDIF
```

• Add REQUIREALTONACCELCHAR property for accelerator character use within the Group Bar control to specify whether pressing the one character is enough to activate that menu option, without having to press the [Alt] key first

```
PROPERTY GroupBar REQUIREALTONACCELCHAR 'TRUE'
```

• Added Sequence Mode support within the DB Tree Grid and DB Grid controls, which specifies to assign a column which controls the sequence order of rows in the grid

DB Tree Grid Properties						×
Properties Columns	Appearance	Grid Options	Other Options	Filter Options	EEPs Variable L	inks 💌
Grid Options				MD 28 1		
Grid Lines:	Both					~
Grid Lines Color:	E Defa	ault				~
Row Separator Width:						0
Row Separator Color:	Silve	er				~
Header Height:						0
Data Row Height:						0
Group Row Height:						0
Indicator Width:						12
Group By Header:	Horizont	al				~
Group Row Style:	Standard	l				~
Group Summary:	Align Wi	th Columns Ar	nd Distribute			~
Group Footer:	Invisible					~
Preview Column						
Column:	Compan	у				~
Auto Height:						
Indent (Left, Right):				4		5
Max Line Count:						3
Placement:	Тор					~
Sequence Mode						
Column:						~
?				ОК	Cancel	Apply

 Added Pop-up Menu support within the DB Tree Grid control, which enables the user to access a popup menu when the field is double-clicked

olumns	Columns	Appearance	Grid Options	Other Options	Filter Options	EEPs V	ariable Links
	Properties	1	-				
Column	Properties	Attributes	Pop-up Men	u			l
V Use	er can Acces	s a Pop-up N	lenu		Judan	Conver la	
	e a Custom I)rder	Group In	Yes
Pop-u	p Menu Sett	ings					Yes
Table/	View Name:				~		Yes
Pop-u	р Туре:	Single Co	lumn		~		Yes
Colun	nn Returned				~		Yes Yes
Menu	Values:						TES
Menu	Caption:						
Menu					-1		
Numk	er of Lines:	I 0 I	Show Li	nes 🗌 Distinct			
		olor and For					
B	utton Face	~	A	AaBbYyZz			
List Ba	ckground C	olor and Font					
<u>□</u> ₩	/indow	~	A	AaBbYyZz	Text	Separat	tor Item
	E Clause		-				
		here Clause					
Messag	ge:				_ _		
-			05 D 11/			Cance	d Anati
		WHE	RE Builder			Cance	Apply

- New read-only properties for the DB Tree Grid control to capture the selected cell. The "On Cell Click" and "On Cell Double Click" EEP events are available for capturing the cell information.
 - SelectedColumn 0 based column index
 - SelectedRow 0 based row index
 - SelectedField the field name associated with the selected field

```
GETPROPERTY DBTreeGrid2 SelectedField vActiveField
GETPROPERTY DBTreeGrid2 SelectedRow vActiveRow
GETPROPERTY DBTreeGrid2 SelectedColumn vActiveColumn
```

• When resizing objects, the width and/or height coordinates appears as a hint once a handlebar is selected, and change as the mouse is dragged

	Customer:	Photo:			
Last Name:	Contact:ContLName				
First Name:	Contact:ContFName				
	Contact:Contphone				
Notes:		(Contact:ContPhoto)			
ABC Spell Check					
	Contact:ContEMail	202 x 1			

• Added "On Cell Right Click" EEP to the Enhanced DB Grid and DB Tree Grid controls

Enhanc	ed DB Grid I	Properties				×
Bands	Columns	Grid Style	EEPs Variable Links	•	•	•
On Ent	try into DB (Grid			-	
🗌 In 🛛						
	Edit		Edit Custom EEP]		
On Exi	t from DB G	Grid			-	X
🗌 In						***
	Edit		Edit Custom EEP]		
On Ent	try into DB (Grid Colum	n		0	
On Exi	t from DB G	Frid Column	n			
On DB	Grid Colun	nn Moved				
On DB	Grid Cell C	lick				
On DB	Grid After	Cell Click				
On Do	uble Click					
On Co	Widths Ch	ange				
On DB	Grid Filter	Change				
On Mo	ouse Enter					
On Mo	ouse Leave					
On Top	Left Chan	ge				
On Ce	ll Right Clic	k				X
-						
🗌 In						***
	Edit		Edit Custom EEP			

- Added sub-directory support within the File List Box control to traverse folders
- Added Find Previous support for Enhanced DB Grid searches, where the [Ctrl+F] search method works for "Find", [F3] works to "Find Next", and [Shift+F3] works for "Find Previous"
- Added PROPERTY command to redraw an Enhanced DB Grid control after an update is performed

PROPERTY EnhancedDBGrid1 REDRAWGRID ' '

- Added drag/drop support for the DB Tree List control
- Enhanced DB Tree List property editor including an additional "Band" column

DB Tree List Properties					×		
Properties Columns Ban	ds Appearance	Grid Options	Other Options	EEPs Va	riable Links 🔹		
Control Fields							
Key Field:	EmpID (Employ	ee Identification	n Number)		~		
Parent Field: ReportsTol		EmplD ~					
Categorized Field:					~		
Columns Available Fields:							
EmplD (Employee Identifi	cation Number)				~		
* ~ ^	*				1		
Field	Capt	ion	Sort Order	Visible	Band		
EmployeePhoto (Employ	ree Photo)			Yes	[0] EMPLOYEE		
EmpFName (Employee F		Name		Yes	[0] EMPLOYEE		
EmpLName (Employee L		Name		Yes	[0] EMPLOYEE		
ActivEmp (Employee Cu		e		Yes	[0] EMPLOYEE		
EmpAddress (Employee				Yes	[2] ADDRESS		
EmpAddress2 (Employee				Yes	[2] ADDRESS		
EmpCity (Employee Hon				Yes	[2] ADDRESS		
EmpState (Employee Hor	the second s			Yes	[2] ADDRESS		
EmpZip (Employee Hom	e Zip Co Zip			Yes	[2] ADDRESS		
HireDate (Employee Date	of Hire) Hire	Date		Yes	[3] EMPLOYMENT		
EntryDate (Date Employe	e Inform Entry	Date		Yes	[3] EMPLOYMENT		
EmpPhone (Employee H	ome Pho Emp	Phone		Yes	[3] EMPLOYMENT		
Move Up 🖳 Mor	ve Down						
?			ОК		Cancel Apply		

9 Functions

The following enhancements have been made to the R:BASE X.5 functions:

• New **ENCRYPT** and **DECRYPT** functions supporting data encryption, adding further security for sensitive data. The functions allow for encryption, even at the column level, for data such as social security numbers. A password is specified with the ENCRYPT function, which must used with the DECRYPT function to return the original string.

In the following example, the value "7247330053" is encrypted, with the password specified as "laser", resulting with "1CCF2D7B795D4317475B5144154A".

SET VAR vEncrptNumber = (ENCRYPT('7247330053','laser'))

In the following, the encrypted value is decrypted with the password, resulting with "7247330053".

SET VAR vDecryptNumber = (DECRYPT(.vEncrptNumber, 'laser'))

• New **TRANSLATE** function which replaces a sequence of characters in a string with another set of characters. In the process, it replaces a single character at a time. For example, it will replace the 1st character in the "source string" with the 1st character in the "replacement string". Then, it will replace the 2nd character in the "source string" with the 2nd character in the "replacement string", and so forth. An optional pad parameter can be used to replace a blank in the return string.

In the following example the square and curly braces in the input string are replaced with parentheses, resulting with $2^{(7-2)}$.

```
SET VAR vBracketSwitch = (TRANSLATE('2*[3+4]/{7-2}','[]{}','()()'))
```

In the following example the "w" and "t" replace the "8" and "7" corresponding number values in the string. The "9" and "0" are replaced with the pad character, resulting in "123456tw..".

SET VAR vNumberText = (TRANSLATE('1234567890','8790','wt','.'))

• Enhanced **GETDATE** function to specify a default date using an initial value variable, with the added option to hide the circle for today's date.

```
SET VAR vDefaultDate DATE = 10/20/2018
SET VAR vGetDate DATE = (GETDATE('Select Date|INIT_VAR vDefaultDate|
SHOW_TODAY_CIRCLE OFF'))
```

•	October, 2018							
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	
40	30	1	2	3	4	5	6	
41	7	8	9	10	11	12	13	
42	14	15	16	17	18	19	20	
43	21	22	23	24	25	26	27	
44	28	29	30	31	1	2	3	
45	4	5	6	7	8	9	10	
		То	day: 1	0/10/2	2018			

• New **IFCASEEQ** function which provides a case-sensitive comparison of two string values. The function enables easier conformance for password verification as a mixture of upper and lower case is a standard. In the following example, the value for vCheckPW is NO.

```
SET VAR vCheckPW TEXT =
(IFCASEEQ('SuperStrong1147','SUPERSTRONG1147','YES','NO'))
```

Additional ICAP3 function for title casing, to only capitalize letters that start the string, and principal
words. Non-capitalized letters/words include articles (a, an, the), conjunctions (e.g., and, but, or), and
prepositions (e.g., on, in, with). In the following example, the value for vTitle is "Snow White and the
Seven Dwarfs".

SET VAR vTitle TEXT = (ICAP3('SNOW WHITE AND THE SEVEN DWARFS'))

• New **SSUBCD** function to capture text from a string containing sub-strings separated by a delimiter, with the ability to specify a custom delimiter. In the following example, the value for vSubString is "Reports".

```
SET VAR vSubString = (SSUBCD('Forms|Reports|Labels',2,'|'))
```

• New **REVERSE** function to return the reverse order of text in a string. In the following example, the value for vReverse is "erawtfoS evitcaretnI".

SET VAR vReverse TEXT = (REVERSE('Interactive Software'))

 New (CVAL('ERROR MESSAGE')) function to get the error message when an -ERROR- occurs. The function also return the error message when from an SQL data source.

SET VAR vErrorMsg = (CVAL('ERROR MESSAGE'))

New CHKTABLE function to see if a table/view exists. The function returns a value based upon the
permanent or temporary nature of a table or view, and if a table is attached as a server or dBASE
table.

SET VAR vChkServTable = (CHKTABLE('CustomerSummary'))

New LASTMOD function to provide the last structure modification timestamp for a given table or view.

SET VAR vLastMod DATETIME = (LASTMOD('InvoiceHeader'))

 Enhanced DWRD function to allow for fractional whole dollars to be returned for the cents portion of the word representation. In the following example, the value for vAmount is "ten and 50/100 dollars".

SET VAR vAmount TEXT = (DWRD(10.50,1))

New FSTATUS function to check if a file or folder exists, and also returns the status for a file

SET VAR vFileStatus INTEGER = (FSTATUS('brates.xlsx'))

• Added GetLockType parameter to the **GETVAL** function, to capture the type of lock on a table. The function returns the following values: None, Local, Remote, Cursor, Row

SET VAR vCheckLockType TEXT = (GETVAL('GetLockType','Customer'))

New (CVAL('VIEWLOCKS')) function to show locks upon views

```
SET VAR vViewLocks VARCHAR = (CVAL('VIEWLOCKS'))
```

 Added FONT_NAME and FONT_SIZE parameters to the GETDATE function to alter the calendar and button fonts

```
SET VAR vDate = +
```

(GETDATE('Select Date | INIT_VAR vDefaultDate | FONT_NAME Georgia | FONT_SIZE 14'))

Select	Date						×	
•		July 2020						
	Sun	Mon	Tue	Wed	Thu	Fri	Sat	
27	28	29	30	1	2	3	4	
28	5	6	7	8	9	10	11	
29	12	13	14	15	16	17	18	
30	19	20	21	22	23	24	25	
31	26	27	28	29	30	31	1	
32	2	3	4	5	6	7	8	
Today: 7/31/2020								
		OK Can						

10 Query Builder/Query Wizard

The R:BASE X.5 Query Builder has been modernized for efficient query building. The utility offers following new features:

• Enhanced Query Wizard allowing for multiple instances of a single table, for building self-referential constructs



 Added "Column Comments" option to toggle the display of comments for table columns in the wizard workspace


11 R:BASE Editor

The R:BASE Editor provides enhanced functionality for working with R:BASE command files. The updated editor offers these special features:

 Added Code Template support for programmers to easily load frequently used code fragments. A Code Template stores a description, block of code, and a short name, which is specifically typed during coding to be expanded to the stored code template with the [Ctrl+Alt+J] key combination. The block of code for templates also preserve indents for multi-line commands, just as they were stored. The Code Templates are stored in the CodeTemplates.rct file, which is located in the local <UserProfile>\RBTI\ folder.

🕜 Code Templates Editor		×
Code Templates:		
Name	Description	
PAUSE_With_Gauge	PAUSE Using a Moving Gauge	
SYSDIALOG_YesNoCancel	Cancel Without Saving Dialog	
PLUGIN_LoadFileName	Load File Name	
PLUGIN_LoadDirectory	Load Directory Name	
DIALOG_EnterPassword	Enter Password Prompt	
DIALOG_YellowInputField	Prompt With Yellow Input Field	
PROJECT_SELECT	New PROJECT From SELECT Syntax	
SELECT_LISTOF	SELECT LISTOF Syntax	
PAUSE 3 USING 'Calculating P CAPTION ' ' + ICON WINDOWS + OPTION GAUGE_VISIBLE ON + IGAUGE_COLOR RED + IGAUGE_INTERVAL 10 + IMESSAGE_FONT_NAME VERDAU IMESSAGE_FONT_SIZE 10 + IMESSAGE_FONT_COLOR BLACK	NA +	^
		~
<		>
🕂 <u>N</u> ew 📝 Edit 🖷	Delete Paste Selected Template	Close

In addition to loading the template's block of code, the cursor location can be determined by inserting a carat character (^) into the template source, allowing immediate typing for programming efficiency. For example, a code template storing a DIALOG command can have a carat placed at the "message" parameter location, so the custom message can be immediately defined after the block of code is loaded.

- Enhanced "Block Uncomment" option which supports removal of command file comments for all comment types: "{...}", "*(...)", as well as "--".
- Enhanced "Copy Command" option to place a command within the clipboard without having to highlight the entire command. If no text is already selected, the code will be scanned starting from the current line (up and down), then select the entire command. Note that if there's an existing text selection, the menu option works like the original implementation.

 Added "Clipboard History" toolbar. Only clipboard operations in R:BASE Editor are tracked. The history is per session, and is cleared when R:BASE is closed.

SET VAR vTitle TEXT = (ICAP3('SNOW WHITE AND THE SEV., SET VAR vCheckPW TEXT = (IFCASEEQ('SuperStrong1147','S. SET VAR vCheckPW TEXT = (IFCASEEQ('SuperStrong1147','S. SET VAR vNumberText = (TRANSLATE('1234567890','8790','w. SET VAR vBracketSwitch = (TRANSLATE('2*[3+4]/{7-2}','[]{}', SET VAR vDecryptNumber = (DECRYPT(.vEncrptNumber,'Ias. SET VAR vDecryptNumber = (DECRYPT(.vEncrptNumber,'Ias. SET VAR vCetDate DATE = (GETDATE('Select Date INIT_VAR SET VAR vGetDate DATE = 10/20/2018 GETPROPERTY APPLICATION TitleBarColor vTitleBarColor PRINT BonusText + OPTION ETXT + FILENAME BonusText.t. GATEWAY EXPORT XLSW DataCalculation.xlsx + SELECT * FR. GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION & EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D. PRINT BonusRates OPTION XLSX + FILENAME BonusRate.xl.	SET VAL	vSubString = (SSUBCD('Forms Reports L	abels' 2.'l'))
SET VAR vCheckPW TEXT = (IFCASEEQ('SuperStrong1147', 'S. SET VAR vNumberText = (TRANSLATE('1234567890', '8790', 'w. SET VAR vBracketSwitch = (TRANSLATE('2*[3+4]/{7-2}', '[]{', SET VAR vDecryptNumber = (DECRYPT(.vEncrptNumber, 'las. SET VAR vDecryptNumber = (ENCRYPT('7247330053', 'laser')) SET VAR vGetDate DATE = (GETDATE('Select Date INIT_VAR SET VAR vDefaultDate DATE = 10/20/2018 GETPROPERTY APPLICATION TitleBarColor vTitleBarColor PRINT BonusText + OPTION ETXT + FILENAME BonusText.t. GATEWAY EXPORT XLSW DataCalculation.xlsx + SELECT * FR. GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION . EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.			
SET VAR vNumberText = (TRANSLATE('1234567890', '8790', 'w. SET VAR vBracketSwitch = (TRANSLATE('2*[3+4]/{7-2}', '[]{', SET VAR vDecryptNumber = (DECRYPT(.vEncrptNumber,'las. SET VAR vDecryptNumber = (ENCRYPT('7247330053', 'laser')) SET VAR vGetDate DATE = (GETDATE('Select Date INIT_VAR SET VAR vDefaultDate DATE = 10/20/2018 GETPROPERTY APPLICATION TitleBarColor vTitleBarColor PRINT BonusText + OPTION ETXT + FILENAME BonusText.t. GATEWAY EXPORT XLSW DataCalculation.xlsx + SELECT * FR. GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION . EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.			
SET VAR vDecryptNumber = (DECRYPT(.vEncrptNumber, 'las. SET VAR vEncrptNumber = (ENCRYPT('7247330053', 'laser')) SET VAR vGetDate DATE = (GETDATE('Select Date INIT_VAR SET VAR vDefaultDate DATE = 10/20/2018 GETPROPERTY APPLICATION TitleBarColor vTitleBarColor PRINT BonusText + OPTION ETXT + FILENAME BonusText.t. GATEWAY EXPORT XLSW DataCalculation.xlsx + SELECT * FR. GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION . EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	SET VAI	vNumberText = (TRANSLATE('12345678	90','8790','w
SET VAR vEncrptNumber = (ENCRYPT('7247330053', 'laser')) SET VAR vGetDate DATE = (GETDATE('Select Date INIT_VAR SET VAR vDefaultDate DATE = 10/20/2018 GETPROPERTY APPLICATION TitleBarColor vTitleBarColor PRINT BonusText + OPTION ETXT + FILENAME BonusText.t. GATEWAY EXPORT XLSW DataCalculation.xlsx + SELECT * FR. GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION . EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	SET VA	vBracketSwitch = (TRANSLATE('2*[3+4])	/{7-2}','[]{}',
SET VAR vGetDate DATE = (GETDATE('Select Date INIT_VAR SET VAR vDefaultDate DATE = 10/20/2018 GETPROPERTY APPLICATION TitleBarColor vTitleBarColor PRINT BonusText + OPTION ETXT + FILENAME BonusText.t. GATEWAY EXPORT XLSW DataCalculation.xlsx + SELECT * FR. GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION . EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	SET VAI	vDecryptNumber = (DECRYPT(.vEncrpt)	Number, 'las
SET VAR vGetDate DATE = (GETDATE('Select Date INIT_VAR SET VAR vDefaultDate DATE = 10/20/2018 GETPROPERTY APPLICATION TitleBarColor vTitleBarColor PRINT BonusText + OPTION ETXT + FILENAME BonusText.t. GATEWAY EXPORT XLSW DataCalculation.xlsx + SELECT * FR. GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION . EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	SET VA	vEncrptNumber = (ENCRYPT('72473300	53', 'laser'))
GETPROPERTY APPLICATION TitleBarColor vTitleBarColor PRINT BonusText + OPTION ETXT + JFILENAME BonusText.t. GATEWAY EXPORT XLSW DataCalculation.xlsx + SELECT * FR. GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.			
PRINT BonusText + OPTION ETXT + FILENAME BonusText.t. GATEWAY EXPORT XLSW DataCalculation.xlsx + SELECT * FR. GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION . EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	SET VA	vDefaultDate DATE = 10/20/2018	
GATEWAY EXPORT XLSW DataCalculation.xlsx + SELECT * FR. GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION & EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	GETPR	PERTY APPLICATION TitleBarColor vTitle	eBarColor
GATEWAY IMPORT CUS FILE.EXT APPEND TABLE + OPTION . EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	PRINT	SonusText + OPTION ETXT + FILENAME	BonusText.t
EDIT ALL FROM Contact OPTION NO_FOCUS_FIELDS ContF DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	GATEW	AY EXPORT XLSW DataCalculation.xlsx + 1	SELECT * FR
DIALOG 'Dialog Message with ROSK' vResponse vEndKey 1 GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	GATEW	AY IMPORT CUS FILE.EXT APPEND TABLE	+ OPTION
GATEWAY EXPORT XLS BonusRate2018.xls + SELECT * FROM. BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	EDIT AL	L FROM Contact OPTION NO_FOCUS_FIL	ELDS ContF
BROWSE ALL FROM CustomerContact + OPTION TREEGRID. GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	DIALOC	'Dialog Message with ROSK' vResponse	vEndKey 1
GATEWAY IMPORT XLS TitleInput.xls APPEND_UPDATE JobT. PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	GATEW	AY EXPORT XLS BonusRate2018.xls + SELE	CT * FROM.
PROJECT StaffDepts FROM + SELECT T2.DepartmentID,T2.D.	BROWS	E ALL FROM CustomerContact + OPTION	V TREEGRID
	GATEW	AY IMPORT XLS TitleInput.xls APPEND_U	PDATE JobT
PRINT BonusRates OPTION XLSX + FILENAME BonusRate.xl.	PROJEC	T StaffDepts FROM + SELECT T2.Departn	nentID,T2.D
	PRINT	SonusRates OPTION XLSX + FILENAME B	onusRate.xl

• Added line, word, and character count statistics, for text selection and for an entire file

C:\RBTI\RB	GX5E\CommandsFunctions.RMD	
Lines:	60	
Words:	203	
Characters:	1,613	

- New multi-view support with dual command files visible simultaneously
 Support for synchronized scrolling with dual command files displayed using [Ctrl]+[MouseWheel]

Database File Edit View Insert Goto Block Structure Run Options		Settings Utilities Window Help
	_	
Explorer R:BASE Editor R> Prompt Code Lock File Gateway (Leng Query Bui	
) 😅 • 🗐 🚱 🍖 🔶 🖆 🗂 🖻 💩 🕨 •		🕂 🖓 🤊 (° X 🖻 🖺 🔒 🔒 👫 👫 🖏 🖼 🥝 🖻 🖶 🗸
BYW20.dat Encrypt.rmd NorthWind_ProjectSample.rmd	-	ROSK_Keys.RMD SerRepl.rmd X NorthWind_Sample.rmd X
5 DROP TABLE 'Invoices Sql'		1
6 DROP TABLE 'Customers Sql'		2 PROPERTY ROSK SHOW TRUE
7 SATTACH 'Invoices' AS 'Invoices Sql' USING +		3 PROPERTY ROSK TYPE ALPHA
8 'OrderID' ALIAS +		4 PROPERTY ROSK CAPTION 'Number Keys Are Disabled'
9 ShipName', +		5 PROPERTY ROSK DISABLE KEY 1
0 `ShipAddress` , +		6 PROPERTY ROSK DISABLE KEY 2
1 ShipCity , +		7 PROPERTY ROSK DISABLE KEY 3
2 ShipRegion , +		8 PROPERTY ROSK DISABLE KEY 4
3 ShipPostalCode', +		9 PROPERTY ROSK DISABLE KEY 5
4 ShipCountry , +		10 PROPERTY ROSK DISABLE_KEY 6
5 'CustomerID' , +		11 PROPERTY ROSK DISABLE_KEY 7
.6 CustomerName', +		12 PROPERTY ROSK DISABLE_KEY 8
7 Address , +		13 PROPERTY ROSK DISABLE_KEY 9
8 'City', +		14 PROPERTY ROSK DISABLE_KEY 0
9 Region , +		15
0 PostalCode', +		16 RETURN
1 Country , +		17
2 Salesperson , +		18 PROPERTY ROSK SHOW TRUE
3 'OrderID' , +		19 PROPERTY ROSK TYPE NUMPAD
4 `OrderDate` , +		20 PROPERTY ROSK HEIGHT 250
5 RequiredDate , +		21 PROPERTY ROSK WIDTH 300
6 ShippedDate , +		22 PROPERTY ROSK BK_START_COLOR_NORMAL 999900
7 ShipperName , +		23 PROPERTY ROSK BK END COLOR NORMAL GRAY
8 'ProductID', +		24 PROPERTY ROSK TEXT_HALIGN CENTER
9 ProductName , +		25 PROPERTY ROSK TEXT_VALIGN CENTER
0 'UnitPrice', +		26 PROPERTY ROSK TEXT_SIZE 18
1 'Quantity', +		27

- Enhanced Compare by Content toolbar allowing for file names to be typed directly into the field, followed by the [Enter] key
- Enhanced Compare by Content utility to display the date and time stamps for the two files being compared

	Compare 👩 Reload 🔜 Options	
Diffe	erences: 6	
File 1		Modified: 08/10/2017 13:52:04
C:\R	BTI\RBGX5E\Samples\RRBYW20\NorthWind.rn	nd 🚽 🔁
		Λ́.
		52
09		
10	SATTACH dbo.Invoices AS Invo	ices_Sql USING DrderID AI
11		
12	RETURN	
13	SELECT * FROM ?dbo.Invoices? W	HERE ShipCity = Kirkland 🗸
¢		V ,
File 2		Modified: 08/11/2017 10:03:10
C:\RI	BTI\RBGX5E\Samples\RRBYW20\NorthWind_S	ample.r <mark>md 77</mark>
4.3		
200702	'Address' , +	^
42	'City', +	^
42 43	'City', + 'Region', +	^
42 43 44	'City', + 'Region', + 'PostalCode', +	^
42 43 44 45	<pre>`City`, + `Region`, + `PostalCode`, + `Country`, +</pre>	^
42 43 44 45 46	<pre>`City`, + `Region`, + `PostalCode`, + `Country`, + `Phone`, +</pre>	^
42 43 44 45 46 47	<pre>`City`, + `Region`, + `PostalCode`, + `Country`, +</pre>	^
42 43 44 45 46 47	<pre>`City`, + `Region`, + `PostalCode`, + `Country`, + `Phone`, +</pre>	^
42 43 44 45 46 47 48	<pre>`City`, + `Region`, + `PostalCode`, + `Country`, + `Phone`, +</pre>	^
42 43 44 45 46 47 48 49	<pre>`City`, + `Region`, + `PostalCode`, + `Country`, + `Phone`, + `Fax`</pre>	^
41 42 43 44 45 46 47 48 49 50 51	<pre>`City`, + `Region`, + `PostalCode`, + `Country`, + `Phone`, +</pre>	^

• The Structure Toolbar right-click context menu has been enhanced to include the refresh, jump to command, various output options, and a settings shortcut



- The COMMAND.INI was updated with current command and function templates, with additional variations of commands and comment templates added
- The command and function template popup, [F5], has been increased in size, and alphabetical sorting was implemented

CRE	CREATE VIEW [viewname] ([collist]) AS SELECT [colname] FROM [tblname] CREATE TEMPOAREY TABLE [tblname] ([colname] [datatype] [size] DEFAULT [value])	CREATE	
	CREATE TABLE [tblname] ([colname] [datatype] [size] DEFAULT [value])	CREATE	
	CREATE SCHEMA AUTHORIZATION [dbname] [ownername]	CREATE	
	CREATE INDEX [indexname] ON [tblname] ([colname] ASC SIZE [n])	CREATE	
	CREATEOBJECT [ControlType] [ComponentID] [ParentControl] [Left Top Width Height]	CREATEOBJECT	

• The Command Builder, [Ctrl+F5], was enhanced with a list box to review commands/functions, an increased size, and alphabetical sorting

Command Name: Command Code: CVTYPE DateIIME DateIIME DECLARE [c1] CURSOR FOR SELECT [column1], [column2], [column3] + DEBUG FROM [tablename] + UPECLARE OPEN c1 PECET filespec] DELETE ROWS FROM [tb VVar1 INDIC ivVar1, + VVar1 INDIC ivVar2, + vVar2 INDIC ivVar2, + vVar3 INDIC ivVar2, + vVar3 INDIC ivVar3 DELETE ROWS FROM [tb Do what you have to do FETCH c1 INTO + vVar2 INDIC ivVar1, + vVar3 INDIC ivVar2, + vVar3 INDIC ivVar2, + vVar1 INDIC ivVar2, + vVar3 INDIC ivVar2, + vVar3 INDIC ivVar3 FETCH c1 INTO + vVar2 INDIC ivVar2, + vVar2 INDIC ivVar2, + vVar3 INDIC ivVar3 ENDWHILE DIALOG ['message'] v DRO CURSOR c1 DISCONNECT DISPLAY DLCALL LLCAD
DATETIME DEBUG DECLARE DECLARE DECLARE DECLARE DECLARE DECRYPT DEFF DELFI [filespec] DELETE ROWS FROM [tb DELETE ROWS FROM [tb DELETE ROWS FROM [tb DELETE DUPLICATES FR DELETE DUPLICATES FR DELETEOBJECT DELETOBJECT DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELETOW DELET
OK Cancel

 Added "Insert" menu bar options, to insert the date, time, a GUID, commands, or a file, to the R:BASE Editor when launching Custom EEPs

R Form -> On Before Start EEP			×
File Edit View Insert Goto Settings Utilities Image: Insert Date Image: Insert Date Image: Insert Time SET Image: Insert GUID Image: Insert File Name		≫ - 2	
	<u>o</u> k	Cano	el
5:8 Insert NUM			.d

• Enhanced R:BASE Editor settings where the default characters assigned to an inserted GUI value can be specified with or without brackets, quotes, and braces

ditor Settings					×
General String	Display	Line Highlight	Background	Printer Font	••
Draw Right Draw Gutter Thumb Trac Double Clic Line Numbe Overwrite C Disable Drag Show Scroll Triple Click	r cking k Line ers aret g Hints	✓ Note ✓ Break ✓ Draw ☐ Limit ☐ Word ☐ Creat	t Only Text pad Cursor Sty Word at Righ Line Bookman Line Number: Wrap Wrap Se Backup Files ys Refresh Stru	t Margin rks s	
Draw Specia EOF: Form Custom Open Edito	EOL: EEPs/Act or as Max	1 Cold	Jse Read-Only or: Gray		~
 ✓ Add UTF-8 GUID Generatio ✓ Add Bracket 	on	nen Saving Unico		Add Brace {/}	

• Added Structure Toolbar setting to exclude empty commands from the Output Structure content when not listed in the command file

Background	Printer Font	Com	pare By Conten	t Struc	ture Toolb	oar	4	
Available It	ems							
	O Statements			tatemen	ts			
	l Statements		PAUSE State	ements				
BROWS	E Statements		PLUGIN Sta	tements				
CHOOS	E Statements		PRINT State	ments				
	CT Statement	s	PROJECT St	atement	s			
DECLAR	RE Statements		PROPERTY S	Stateme	nts			
DELETE	Statements		QUIT TO Sta	tement	5			
DETACH	- Statements		RUN Statem	nents				
DIALOG Statements		SATTACH St	tatemen	ts				
	INECT Statem	ents	SCONNECT	Statem	ents			
EDIT Sta	tements		SDETACH S	tatemen	ts			
ENTER S	Statements			ECT Stat	ements			
FILLIN S	tatements		UPDATE Sta	tements	19 A			
GETPRC	PERTY Statem	ents	Command	Blocks				
INSERT	Statements		Menu Block	cs				
	atements		Screen Bloc	ks				
✓ LAUNC	H Statements		✓ Labels					
Check Al	Check I	None	Toggle		More Co	mma	inds	
Exclude e	mpty comma	nd se	ctions in Outpu	t Structi	ıre			

• Added R:Style configuration options to individually specify user-defined paths to the R:Style files, (i.e. RStyle.new, RStyle.var, RStyle.cas, etc.) in the local configuration

Local R:Style File Locations	;
RStyle.new	
C:\RBTI\RBGX5E\Samples\RRBYW20	
RStyle.pre	
C:\RBTI\RBGX5E\Samples\RRBYW20	
RStyle.cas	
C:\RBTI\RBGX5E\Samples\	
RStyle.var	
C:\RBTI\RBGX5E\Samples\RRBYW20	
RStyle.exp	
C:\RBTI\RBGX5E\Samples\RRBYW20	
	OK Cancel

- Assigned hot keys to run the R:Style Setup within R:BASE Editor; [Ctrl+Alt+G] runs the Global setup, and [Ctrl+Alt+L] runs the Local setup
- Enhanced R:Style Setup utility dialog allowing the file tabs to be re-ordered (drag-and-drop), and retained for future R:Style use
- Added "RETURN Check at File End" R:Style setting to "not" check for a RETURN at the end of the command file

yle X.5 Setup (Local)			
eneral RStyle.new RStyle Configuration C:\RBTI\RBGX5E\Samples\RRI	pre RStyle.cas RStyle.var RStyle.exp 3YW20\RSTYLEX5.CFG		ОК
Character Settings Ouotes: · · · Blank:	Delimit Continu		Cancel
	Delimit: , Semi: ;		
Other Settings Semi Backups Ambiguity Checking Command Word Checking Set Word Checking SET VAR Splitting	Timestamp Preservation LE Becomes <=, etc. Split Multi-Commands Ignore 79 Character Codeloc RETURN Check at File End	k Limit	
Error Checking:	Enabled	\sim	
Keyword Sizing:	Expanded	~	
Keyword Casing:	Upper	~	
Non-Keyword Casing:	Lower	~	
Indenting Unwrapping (Before Wr Smart Code Wrapping	ap) 🗌 Indent LOAD Block		
Disabled		~	
Structure Indenting: Continued Line Indenting:	2 Spaces Flush with Previous Line	~	Halp
			Help
CASE Indenting:	Indented	<u> </u>	Kill
LABEL Outdenting:	Disabled Disabled	<u> </u>	Default
ELSE Indenting:			

• Enhanced Character Map toolbar where the height and width may be altered by dragging the border, to view fonts and extended characters more easily

723.	Arial														
-		2000210 0000000		(~		R	Σ.							
ASCI		e: 82 ((0x52)	0	0	0	0	0	1		0			0	0
			1.5	1000	1		1.57				1	•	24 . 2	Ц	Ш
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1990	а	b	С	d	е	f	g	h	i	j	k	L	m	n	0
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•	±	2	3		μ	¶	-	-	1	0	»	1/4	1/2	3/4	ż
À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ï
Ð	Ñ	Ò	Ó	Ô	Õ	Ö	×	ø	Ù	Ú	Û	Ü	Ý	Þ	ß
à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï
ð	ñ	ò	ó	ô	õ	ö	÷	ø	ù	ú	û	ü	ý	þ	ÿ

- Enhanced R:Style with added detection of duplicate LABEL names within a single command file
- Enhanced R:Style status dialog with button to review newly added words to the RStyle.NEW file

File Name: RRBYW20	.dat		
Status: Done		Time:	00:00.203
Current Line: 9	Total Lines: 10	Errors:	0

• Enhanced save file dialog with "R:BASE Files" included as a file type, to specifically see all R:BASErelated files types, to simplify saving one R:BASE file extension (.tbl) as another (.rmd)

Save in:	RRBYW20	~ 🕝 🗊 🖡	"			
1	Name	<u>^</u>	Date modified	Туре	Size	1
- X	history		12/10/2021 1:59 PM	File folder		
uick access	Clean_RRB	YW20	5/26/2021 10:20 AM	File folder		
	ADVANTA	5.APP	3/3/2021 10:19 AM	APP File	15 KB	
	ALLDATA.A	APP	7/6/2018 4:38 PM	APP File	65 KB	
Desktop	AutoNum	Test_Table_TestANLength_Data_Structure.tbl	6/10/2021 3:37 PM	TBL File	2 KB	
-	CalcDST.rr	nd	8/20/2021 1:31 PM	RMD File	3 KB	
-	Capturing	error message.rmd	6/16/2021 3:40 PM	RMD File	1 KB	
Libraries	CheckVers	ion.RMD	8/5/2019 11:01 AM	RMD File	1 KB	
	CHOOSE_F	PG.rmd	5/14/2021 9:32 AM	RMD File	1 KB	
	ColumnDe	ecrypt.rmd	6/26/2020 10:40 AM	RMD File	1 KB	
This PC	CONCOM	P.APP	9/23/2019 8:59 AM	APP File	13 KB	
-	ConComp	_Form_MenuForm_v1.frm	8/30/2021 5:30 PM	WordPerfe	1 KB	
S	CONCOM	P_Table_transxBU_Data.tbl	12/24/2020 11:06 AM	TBL File	2 KB	
Network	CONCOM	D2 700	9/19/2003 6:55 AM	APP File	7 KR	
	File name:	Mappings.md		~	/ Sav	е
	Save as type:	R:BASE Files (*.ALL;*.APP;*.CMD;*.DAT;*.EEP;	*.FRM;*.LBL;*.PRO;*.RMD;*.R	PT;*.TBL;*.VIE) ~	Canc	el:
		Add Encryption				
	Encoding:	ANSI		~	*	

12 R> Prompt

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

 Enhanced Command History option to display the date/time stamp to reference when a command was executed

140 /40 /2010 02 20 PL 4	
[10/10/2018 02:30 PM]	PRINT BonusText OPTION ETXT FILENAME BonusT
	EDIT ALL FROM Contact OPTION NO_FOCUS_FIELD
[10/10/2018 02:29 PM]	LIST DATABASES
	LIST FORMS SEARCH% GATEWAY EXPORT XLS BonusRate2018.xls SELECT *
	DIALOG 'Dialog Message with ROSK' vResponse vEr
	BROWSE ALL FROM CustomerContact OPTION TRE
	GATEWAY IMPORT XLS TitleInput.xls APPEND_UPD/
	PROJECT StaffDepts FROM SELECT T2.Departmentil
	PRINT BonusRates OPTION XLSX [FILENAME Bonus
[10/09/2018 04:57 PM]	
[10/09/2018 04:56 PM]	
[10/09/2018 04:56 PM]	
[10/09/2018 04:56 PM]	
[10/09/2018 02:10 PM]	
[10/09/2018 02:09 PM]	
[10/05/2018 04:46 PM]	
	SELECT ALL FROM Customer
[10/05/2018 04:44 PM]	LIST LABELS
[10/05/2018 04:44 PM]	LIST FORMS
[10/05/2018 04:44 PM]	LIST REPORTS
[10/05/2018 04:44 PM]	SET LINE 0
[10/05/2018 04:44 PM]	CONNECT RRBYW20
[10/04/2018 05:50 PM]	HELP APPEND

• Added "Current Folder" toolbar to the R> Prompt window

🚽 🏫 🗸 🙀 Current Folder: <u>C:\RBTI\RBGX5E\Samples\RRBYW20</u>

• Enhanced Command History Panel to highlight the corresponding command, with the [Page Up] and [Page Down] keys synchronized to what is shown in the R> Prompt input console

• Added "search history" support for the Find in R> Prompt Output utility. The entry box is also a drop down where the search history is available. To clear the history, press the [Ctrl+R] key combination. The search history is saved in the C:\Users\<User>\RBTI\ folder within the RPROMPT.RST. file.

Search Text	
customer	~
customer	
sales	

- Enhanced Favorite Commands panel with support for multiple command lists/tabs. The added tabs are useful for distinct lists of favorite commands associated with each database. Right click menu options "Copy To" and "Move To" are available for commands to be transferred between lists.
- Added "Run" button to the Favorite Commands panel to immediately run a favorite command without modification

🗽 Favorite Comm	ands				<u>~</u> 4		×
Default RRBYW20	RDocs						
GATEWAY IMPORT DIALOG 'Dialog Me	XLS TitleInput.xl ssage with ROSK KLS BonusRate2 I CustomerCont PTION ETXT FIL	s APPEND_UF "vResponse 018.xls SELEC act OPTION T ENAME Bonu	PDATE JobTitles O vEndKey 1 CAPTIC T * FROM BonusR TREEGRIDVIEW usText.txt APPENI		BUTTON ON	DIALOO	
LIST RE	ō ►	Default RDocs	LDS Contrivanie,	Conclivance			
Add	Edit	Delete	Edit All	Run	Select	Cl	ose

• Enhanced Command Builder at the R> Prompt providing a list of command and function templates

Command Name:	Command	Code:										
PLUGIN	PROJECT	TEMPORARY	[tblname1]	FROM	SELECT	[clause]	WHERE	[clause]	ORDER	BY	[colname]	
PMT1												
PMT2												
PREVROW												
PREVTAB												
PRINT												
PRNSETUP												
PROCESSMESSAGE												
PROJECT TEMPORARY [t												
PROJECT [tblnamel] F												
PROPERTY APPLICATION												
PROPERTY RBASE FORM												
PROPERTY [ComponentI												
PUT												
PV1												
PV2												
QBE												
QUERY												
QUIT												
RANDOM												
RATE1												
RATE2												
RATE3												
RBAPP	/ <											

• Enhanced Favorite Commands dialog allowing the tabs to be reordered by drag-n-drop with the mouse

DITUSIN	ار NG CustomerF	-						
			GE CallNotes	BY CallDate DI	ESC WHERE Cu	ustLastNam	e&CustFirst	Name&Cu

13 Reports and Labels

The R:BASE X.5 Report and Label Designer is one of the most powerful object oriented report designers available. New features include:

• Added "Find Text in Preview" feature to search a report Print Preview screen.

R Print Preview	- 0	×
Text To Find:	I Image: Close 205 Whitman N Ogden, UT 84403 Phone: 801-248-4798	^
Case Sensitive Find 9 instance(s) in 3 page(s) Page 1 (5 instances) Computer Warehouse - I Computer Mountain Inc	4. Compdat Computer Consulting 1208 Occidental Rd Miami, FL 33128 Phone: 305-767-4309	-
Computer Mountain Inc., Computer Medical Ctr Compumasters Computer Supply Compdat Computer Consulting Page 2 (3 instances)	5. Compumasters Computer Supply 11033 Webster Blvd Concord, CA 94521 Phone:613-226-7171	
Midtown Computer Co Midtown Computer Co Industrial Computers Inc Page 3 (1 instance)	6. Computer Medical Ctr. 4311 Beach Dr Ft Lauderdale, FL 33309 Phone: 305-365-7803	
Renaissance Computer Company	7. Computer Mountain Inc., 14792 15th Ave. E. Denver, CO 80214 Phone: 303-271-1500	~
Page 1 of 4		

Once enabled on a per report basis, the Print Preview will display the "Find Text" button on the toolbar to toggle the visibility of the Find Text pane. Users may double click on the result item (child node) to go to the page.

Report Wizar	d							
INVOICE					INVOR	CE #*:	Transid	~
Company N Address Line 1	Name				INVOI	CE DATE*:	TransDate	~
Address Line 2 Address Line 3					DATE	DUE:	DueDate	~
BILL TO:	BillToCompany	~	SHIP TO:	ShipToCompany	~	CONTAC	T: ContactName	~
ADDRESS 1:	BillToAddress	~	ADDRESS 1:	ShipToAddress	~	PHONE:	CustPhone	~
ADDRESS 2:	BillToCityStateZip	~	ADDRESS 2:	ShipToCityStateZip	~	FAX:	ContFax	~
ADDRESS 3:		~	ADDRESS 3:		~	EMAIL:	ContEMail	~
1	Model ProdName Units Price Discount SalePrice ExtPrice							
* Required Field	<u>.</u>					E TOTAL*: ned Field)	ExtPrice	~
Classic De	efault Invoice							
Help				📑 Cancel		< Bac	k 🛃 Next >	Finish

• Added "Invoice" tab to the Report Wizard to assist in the generation of proficient invoice documents

• Added password encryption for Excel document reports, including XLSX and 2003 formats. Passwords are case sensitive.

Preferences
Page Range All Pages Pages: Enter page numbers and/or page ranges separated by commas. For example, 1,3,5-12 ✓ Open After Create File Password:



• New Report Wizard styles, with enhanced color schemes and fonts, with various professional and corporate options

Transid	^ TransDate
DueDate	In the second
BillToCompany	Transid, DueDate, BillToCompany,
BillToAddress	BillToAddress, ShipToCompany,
ShipToCompany	
ShipToAddress	ShipToAddress, CustPhone, ContFax,
CustPhone	ContEMail, DetailNum, Model,
ContFax	ProdName, Units, Price, Discount,
ContEMail	SalePrice, ExtPrice
DetailNum Model	v
Breaks * * TransDate	
	Priority
	-
	$\mathbf{\Psi}$

• Ability to select from "Classic" and the new "Default" Styles tabs within the Report Wizard

 Automatic zebra stripe coloring added for the Detail band dataset in reports created within the new Report Wizard styles

10	D	- 🚺 🕻	2			Close	
Bill To:RAM DATA S) 3935 Old Will Murrysville PA	(STEMS, INC. iam Penn Hig	hway	Ship Te		ATA SYSTEMS, d William Pen ville		Contact: ER Phone: Fax: 72 Email:
DetailNum Model	Units	Price	Discount		SalePrice	ExtPrice	ProdName
1 CX3020	1	\$895.00		7	\$832.35	\$832.35	Advanced SVGA Color PC
2 CX3010	2	\$1,045.00		8	\$961.40	\$1,922.80	Classic SVGA Color PC
3 MX3030	1	\$1,795.00		10	\$1,615.50	\$1,615.50	Mobile Wireless Noteboo
4 PB3050	2	\$2,195.00		10	\$1,975.50	\$3,951.00	Mobile Wireless Noteboo
5 PX3040	1	\$1,540.00		8	\$1,416.80	\$1,416.80	Standard Notebook SVGA
6 CX3000	1	\$588.00		8	\$540.96	\$540.96	Standard SVGA Color PC
7 MX3020	1	\$757.00		8	\$696.44	\$696.44	Standard VGA Server
8 MB3030	2	\$1,195.00		10	\$1,075.50	\$2,151.00	Superior PC
		m					

• Enhanced recognition for report objects that cross the printable area (on the right side), where a red underline appears on the object. This feature helps the user know the object will not appear on the report output, unless it is moved back into the printable space and does not cross the right margin boundary.

Report Designer : Contacts Table: Contact						
🐱 Design 🧕 Preview						
미문수의 꼬김께요 두락	<u>]†</u> -0} <u>ol</u> l	바음		₩.	Ļ	
Tr Segoe UI • 9 • B / U		≣ A •	🗹 • 🔁 🛛	2		
		× / a		turing terms in the		
0 ' ' ' ' ' ' ' ' ' ' ' ' ' ' 2 ' ' ' '		4	' s ' ' ' ' ' ' '	6 6 7 7 7 7	· 1 · · · · · · · ·	ŀ
Customer Contact List						
^ Report Header, Number of Objects: 3			4			
_ 0					111111111	
Contact Name Phone Number	Company		Notes	*		- All
^ Page Header, Number of Objects: 5						Ш
- ⁰ unt(*) //ContactName 415-878-5600	vCompany		415-878	5600		
^ Detail, Number of Objects: 5						
- ⁰ Wednesday, September 05, 2018 4:36:24 PM	11				Page 1 of 1	-
^ Page Footer, Number of Objects: 3						
						-
Design Code History						
✤ Object: Label, Object Name : Label3	Left: 5.3333	Top: 0.2813	Width: 2.2604	Height: 0.1667	Report: Contacts	ał.

• Enhanced DB Calc control to support a Tally to count the occurrences of identical values in a column. When the "Calculation" is set to "Count" the "COUNT As TALLY" setting enables a tabular output tally of all values.



• Enhanced report Breaks allowing for the conditional display of the Break Footer if only a single row exists for the Detail band. Any subtotals within the footer will still be calculated properly.

Breaks Customer.Com	pany	Add
Break[0]:Customer.Com	pany	<u>I</u> nsert
		<u>D</u> elete
		Reset Vars
Break On	istom Field 🔿 Variable	
Sort Direction	0 .	
 Ascending On Page Break 	 Descending 	
_	Reset Vars	
On Break Change Start new page Reset page number New page when less th		v Detail
Keep break togethe	r ers on subsequent pages	

• Added "List" (LISTOF) functionality to the CrossTab control

🗽 Configure CrossTab										% <u>_</u> %		×
	2. Remove colu 3. Reorder colu	imns, rows mns, rows	b by dragging field or values by drag or values by drag ecting a row, colur	ging from the d ging within the	liagran diagrai	n back m.	to the	field l	ist.	ip menu	1.	
Fields	Layout											
EmpLName	#,0		Verdana	~ 7	~	B	ΙU	E	≣ :		<u>A</u> -	1 -
ExtPrice	Count				;				1			_
	Sum Minimum		Prodname	Grand Total								
	Maximum		new column									
	Average List	ew row	Sum of Extprice	17713247140								
		IEW TOW	\$1,000.00	\$1,000.00								
			new value									
	Grand Total		\$1,000.00									
		1										
									C	Ж	Ca	incel



• New functionality to Lock/Unlock report/label objects within the designers.

Individual and several objects may be locked to prevent accidental editing/moving. When an object is locked, the handlebars display as gray circles rather than the usual blue color. A "Lock/Unlock" button has also been added to the designer toolbar.



• Adding Title Case character case option for label controls

New Lock Size option where field settings for objects can be altered, but the size can be specifically
preserved





• New Scrapbook utility, which acts as repository for created and commonly used report objects.

In the Report/Label Designer any control that is right clicked, the menu option "Add to Scrapbook..." is available. A name can be specified to assign the scrapbook entry. From the designer, the Scrapbook can be launched as a MDI window, where scrapbook entries can be added to the displayed report/label for easy reuse.

 Enhanced PDF Combo Box and PDF List Box controls with a "Data Query" option to populate the control from a SELECT command

🔏 Query			×
SELECT ProdName FROM Product			^
			~
WHERE Builder	ОК	Clos	e

• Enhanced Report Wizard with option to include field comments as captions

Customers <u>Company Region Citt State</u> Actian Club Sautheart Sararata FL Actian Club Sautheart Tampa FL Actian Club Sautheart Sandare CA Actian Club Sautheart Manna TX Actian Club Sauth Dallar TX Actian Club Sauth Atlanta GA Actian Club Sauth Atlanta TX	Layout O Vertical Tabular	Orientation Portrait Landscape	
Actian Divor Sautheart Miami FL Actian Divor Sautheart Calumbia SC Actian Divor Sautheart Loxington VA Adjust the field width so all fields fit on Use field comment as caption.	a page.		

Printer Paper Size	Paper Source	Layout	Margins	
Printer Default	~	Preview		OK
Document Name Contacts				Cancel
Copies 1	<u>\</u>			
Duplex	ollate			Help
None	~			

• New Page Setup setting allowing for a report to use the printer's default duplex setting

• Added "In Property Names" option for Control Property searches to locate text for the actual property (e. g. Read Only, AutoSize, Show Hint, etc.) in use for objects

Find in Form Control Properties		×
Enter text to find:		
CustState		~
Case Sensitive 🗹 Whole Word 🗌 In Property Names	ОК	Cancel

- New PROPERTY command parameter to have all reports displayed in the Print Preview to include the "Find Text" option
- Added font names, styles, and sizes options to the DOS report/label conversion utility to allow the converted objects to fit accordingly

Name:	C	ourier New		~		
Color:		Black		~		
Size:	0	8 () 9	O 10	11		
Style:		Bold Italic Underline				
-			-			
Pass Settings		Two pase				
One pass	0.000			0.000		

• Add "Run (Live)" option for the Report Designer to save and run the report using live table data



• Enhanced report/label conversion to automatically replace double quotes with single quotes

Select Report(s) to Convert	×
BalRept CaseRept OpenRept	
DOS Benatts V Show Conver	sion Errors 🔽 Convert " into ' in Report Variables
Properties	OK Cancel

• Enhanced Report Wizard with clearer screen prompts, and added Help button, where newly added chapter help is available for reference

Report Wizard		
Which fields do you want on your report? To add fields to the report, click each of the fields that you the ">" button. To use all available fields, click the ">>" button. Table Name	rou want to use from the "Available Fields" section, and then click	
Employee (Employee Information)		
Available Fields	Selected Fields	
EmpID (Employee Identification Number) ReportsToEmpID EmpAddress (Employee Home Address Line 1) EmpAddress2 (Employee Home Address Line 2) EmpCity (Employee Home City) EmpZite (Employee Home State) EmpZip (Employee Home Zip Code) EmpExt (Employee Work Phone Extension Number) EntryDate (Date Employee Information Entered) ActivEmp (Employee Current Status (A)ctive, (I)nactive WebAddress (Favorite WEB Address) EMailAddress (E-Mail Address) EmployeePhoto (Employee Photo)	 	Order
PHelp	Cancel Cack Deck Cack Finis	sh

 Added "Preview WHERE" button to the Standard toolbar, to easily launch the Preview WHERE Clause utility

Standard	×
	11 🖳 🔒 🖓

• Added "PDF Controls Tab Order" menu to the "Report" menu bar options, where the tab order for the PDF output can be specified

Control Type	Assigned Field	^
abX PDF Text Field	FullName	
abX PDF Text Field	Company	
abl PDF Text Field	Address1	
abX PDF Text Field	CellNumber	
abl PDF Text Field	City	
abX PDF Text Field	State	
abX PDF Text Field	ZipCode	
abx PDF Text Field	Phone	
abX PDF Text Field	Fax	
abX PDF Text Field	Email	
PDF Radio Button	CustStatus	
PDF Radio Button	CustStatus	
PDF Combo Box	Models1	
abX PDF Text Field	Quantity1	
PDF Combo Box	Models2	
abX PDF Text Field	Quantity2	~

• The Existing tab of the Object List toolbar has been enhanced to display the Component ID, if defined, next to the object name

Add New E	ixisting	
Main: YT	DInvoiceTotal	
	age Header, Number of Objects: 11	
	eak Header[0]: CustlD, Number of Objects: 0 etail, Number of Objects: 8	
8	DBText2 (Source: YTDNetAmount)	
P	DBText: (CompID: YTD_Freight, Source: YTDFreight)	
R	DBTexte (CompID: YTD_Tax, Source: YTDTax)	
	DBText: (CompID: YTD_InvTotal, Source: YTDInvoiceTotal)	
	Line1	
🗸	CheckBox1 (CompID: OverGivenAmontCheckBox)	
8	DBText6 (Source: Company)	
	DBCalc5 (Source:)	

- A new "Maintain Aspect Ratio On Resize" property setting has been added for the Image label to determine whether the image is scaled proportionally when resized
- Added PROPERTY command parameter to disable the Cancel button in the "Printing" report progress dialog. When the parameter is OFF, the progress dialog is displayed, but the Cancel button is disabled.

	PROPERTY REPORT CANCEL IN PROGRESS DIALOG OFF	
--	-----------------------------------------------	--

Printing		
Printing page 79 for	eport CustomPageInvoice to CustomPageIn	voice.pdf
	Cancel	

 Added default file name (PDF, TXT, etc.) when selecting "Document Custom EEPs" in the Report/Label Designer

Save in	: history		G 🔌 📂 🛄 -	
_	Name	^	Date modified	Туре
X	FormEEPs	CustContAndSales.TXT	1/7/2021 3:35 PM	Text
Quick access	LabelEEPs	CustShippingLabel.TXT	1/7/2021 3:35 PM	Text
	ReportEEP	s_GetPropInReports.TXT	1/7/2021 3:35 PM	Text
Desktop				
-				
Libraries				
This PC				
-				
5	<			>
Network	Object <u>n</u> ame:	ExtFormEEPs_TileMenu_Sam	ple.TXT ~	Save
	Save as type:	Text files (*.txt)		Cancel

• Added Unicode setting for Advanced DB Rich Text and Advanced Variable Rich Text labels to display Unicode characters in rich text



• Added "Print Human Readable" support for the QR Code and Data Matrix DB 2D Barcode and Variable 2D Barcode labels, to display the human readable version of the bar code (e.g. actual letters, numbers, etc.)



- R Custom Table Relationships ContactCallNotes : T1 - x ContID (Contact ID) EmpID (Employee (Sales Rep ID)) CallDate (Call Date) CallTime (Call Time) - x CallNotes (Call Notes) CustID (Customer Identification Number) ContID (Contact Automated ID) ContFName (Customer Contact First Name) ContLName (Customer Contact Last Name) Customer : T2 - x ContPhone (Customer Contact Phone Number) CustID (Customer Identification Number) ContFax (Customer Contact Fax Number) Company (Customer Company Name) ContCell (Customer Contact Cellular Number) CustAddress (Customer Address) ContPager (Customer Contact Pager Number) CustCity (Customer City) ContEMail (Customer Contact E-Mail Address) CustState (Customer State) ContInfo (Customer Contact Notes) CustZip (Customer Zip Code) ContPhoto (Customer Contact Photo) CustPhone (Customer Phone Number) LastContactDate (Last Contact Date) CustFax (Customer Fax Number) ModLevel (Customer Mod Level) LastUpdateDate (Last Update Date) LastUpdateTime (Last Update Time) LastOrderDate (Last Order Data) CustURL (Customer WWW URL Address) CustEMail (Customer E-Mail Address) CustStatus (Customer Status (A/I)) PaymentTerm (Payment Terms) CreditLimit (Credit Limit) Add Common Field Links Add PK/FK Field Links Remove All Links OK Cancel
- Enhanced Custom Table Relationships, where the graphic table/view layout is now saved between sessions

• Enhanced "History" functionality to save the entire report, rather than just a snapshot of the EEP code. A revision number and date/time are listed within the History tab to track changes over time, and restore a report from a right click menu option. The backup files are stored in a "___history" sub folder beneath the current database folder. An option is available within the Report/Label Designer Settings to disable the History feature, if desired.

Report I	Designer: CustomerList Table: Cu	stomer						
🖌 Desig	n 📄 Preview							
	; 🗐 🕄 📫 🗎 🖨	I	1 🕫 🔊	ኤ 🗈 🗂	× /A 🛽	🔒 🗟	?	
printing and	<u> </u>							1 • 🖉 • 🔁 🔁
			<u>⊒ ∏</u> f•0-]	<u> 마</u> 바 봄		걸다	, Ъ ↑	
Revision	Date	^]						
23	06/03/2022 04:13 PM	2	1 C C C C C C C C C C C C C C C C C C C				1 222222271	
22	05/05/2022 12:47 PN		and the second	and and the second		GX5E\Samples	RRBYW20\RRE	3YW20.RX1
21	05/05/2022 12:47 PN 05/04/2022 02:36 PN 05/04/2022 02:34 PM	ore History	ltem 🕨	tem A (Latest)	ist			1
20	05/04/2022 02:24 PM							A
19	05/04/2022 02:24 PM	5	{					
18	05/04/2022 02:23 PM	6	Report					
17	05/04/2022 02:23 PM	9						
16	05/04/2022 02:20 PM	10						
15	05/04/2022 02:19 PM	12		Generate EB	5P	1		
14	05/04/2022 02:17 PM	13		Report Name		×.		
13	03/16/2022 03:22 PM	14				vReportName		
12	03/16/2022 03:21 PM	15	and the second second second second	use String				
11	03/16/2022 03:18 PM		CLS					
10	03/16/2022 03:17 PM	17)+(CHAR(013))+ +
9	03/16/2022 03:16 PM	19			Contract of the second second	.vReportNam	te+ (CHAR (009))+(CHAR(015))+ +
8	03/16/2022 03:15 PM	20						
7	03/16/2022 03:14 PM	21		· +				
6	03/07/2022 05:25 PM	22						
5	09/01/2021 11:46 AM		OPTION MESS					
4	09/01/2021 11:42 AM		MESSAGE FO					
3	09/01/2021 11:41 AM		THEMENAME					
2	09/01/2021 11:40 AM	¥ <						>
🔀 Desig	jn 📝 Code 📑 History							
Ready.				Left: 0	Top: 0	Width: 0	Height: 0	Report: CustomerList

• Support to specify a replacement font for all reports/labels using the MS San Serif device font, or any fonts in the Swiss font family, when printing to PDF output. Any TrueType font can be used for the substitute.

PROPERTY REPORT PDF_SERIF_FONT_REPLACEMENT 'Arial'

To clear a substitution, use the following command to pass a space as the font name.

PROPERTY REPORT PDF_SERIF_FONT_REPLACEMENT ' '

14 Trace Debugger

The Trace Debugger allows developers to debug applications and commands files to find programming errors and problems. The debugger has been updated with the following new features:

• Added ability to display the Configuration Settings when tracing a program, to review and alter the current settings

RBYW20.dat			• = %= •=	ଛିଧ୍ୟ ଜ୍ୟୁ 🖄 • 🦓 📔	Watch Variables		1
1 RRBYW20.	DAT Startup fil	e to Run R:	BASE Your Way!	(Part 20)	▲ Variable Name	Туре	Value
	A. Razzak Memon WIDTH 32	Configuratio	n Settinas		×		
4 CLS	WIDTH 52		blic\RBTI\RBENGINEX5	E CEG			
	.itView_Sample.r MR RBTI_%	ff		Transaction Processing Debug	• • •		
8 9 10		MANY	%	SINGLE _			
11 12 13		QUOTES	•	SEMI ;			
14 15 16		PLUS	+	DELIMIT ,			
7 8 9		BLANK		LINEEND			
20		NULL	-0-	IDQUOTES			

• Added "Go to Line Number" functionality to the menu bar, and [F4] hot key, to easily place breakpoints

to Line Number		
Enter new line number:		
400		
	OK	Cancel

- Added friendly naming conventions for tab to identify the module and/or source from where the code is located. Tracing form controls will display ComponentID and Caption/Text (if exist) and the EEP name. Form code will display the form name with EEP or custom form action name. Tracing reports and labels will display the name and the action. The new friendly naming convention for the Trace Debugger tabs are:
 - o Component ID(Caption/Text)|EEP Name (Component ID and Caption/Text will display if exist)
 - Form/External Form Name|EEP Name
 - o Form/External Form Name|Custom Form Action Name
 - Report/Label Name|Action Name
 - Table Name (RUN SELECT)
 - Stored Procedure Name

rout <u>B</u> reakpoints <u>R</u> un <u>W</u> atch <u>H</u> elp stomer OnRowEntry	Watch Variables				Ð
<pre>concernment and the second control of t</pre>	 Variable Name Variable Name vNewRowNumber vMaxMeterReadOldest vMaxMeterReadOldest vMaxMeterRead RowNumber vRows vQRCodeImage vCustID vwt vOK vTemplate v TemplateData 	Type INTEGER INTEGER	Value (Not Defined) (Not Defined) (Not Defined) (Not Defined) (Not Defined) 34 (Not Defined) -0- (Not Defined) (Not Defined) (Not Defined) (Not Defined)	Break On Null	_
CustomerContacts OnBeforeStart 11 Toposition Error	<				>
9	ax is incorrect for the comma	and SET (2045)	File Name [CustomerContacts	s OnBeforeSta	.rt]

• Added "Jump to Line" functionality, where when single-stepping through code, a users may jump to a specific line in the debugger. This ability allows users to start debugging at a specific point, skip over commands, repeat commands, etc. The [F11] hot key also opens the "Jump to Line" dialog.

Jump to Line	×
Line Number	
58	
	OK Cancel

• Added panel within the Watch Variables toolbar to quickly view the value of a selected variable with many characters

R Trace Debugger		- 🗆 X
Layout Breakpoints Run Watch Help		
10 🖟 📀 📑 🖆 🤚 🍓 🗐 🕫 🗊 🗊 🗊 🖄 ௸ 🛩 🖄 😽	y 🚰 🗟 ! y 📑 🭕	
RRBYW20.dat Customer OnRowEntry	Watch Variables	
<pre>1 RecordCount RecNo_Code.RMD 2 CLEAR VAR vRecordCount, vRecNo, vRecInfo 4 3 SET VAR vRecOrdCount TEXT = NULL 4 SET VAR vRecInfo TEXT = NULL 5 SET VAR vRecInfo TEXT = NULL 6 GETEROPERTY TABLE 'Customer->RECORDCOUNT' vRecordCount 7 GETPROPERTY TABLE 'Customer->RECNO' vRecNo 8 SET VAR vRecInfo = (' Customer:'&.vRecNo&'of'&.vRecordCount) 9 PROPERTY RBASE_FORM CAPTION .vRecInfo 10 CLEAR VAR vRecordCount, vRecNo, vRecInfo 11 RETURN 12 13 14 15 16</pre>	Variable Name Type vWhere verror vCustID INTEGER vCopies vQuantity vRBASE TEXT (210)	Value (Not Defined) (Not Defined) (Not Defined) R:BASE is designed much like the powert
17	Variable: vRBASE	
19		na navvarbaura databasa managara ant
20 21 22 23	system of the mainframe and m	e powerhouse database management nid-range computer world, yet with a ower into the hands of the everyday
Cursor Position 3: 1		×.

yout <u>B</u> reakpoints <u>R</u> un <u>W</u> atch <u>H</u> elp				
🔰 🗟 😂 📑 🕘 🧶 🧶 🖶 🗐 🗊 🖓 🖼 💷	🛅 🔂 6न्नू 🖅 🗹	- 🤣 🥱) 🗊 😂 🗟 ! 🖉	2
REYW20.dat LV_Customers OnDoubleClick	Live Variables			
1 IF vCustID IS NULL OR (SLEN(CTXT(.vCustID))) = 0 THEN	Variable Name	Туре	Value	
2 RETURN	vRows	INTEGER	1	
3 ELSE 4 SET VAR vRows = 1	RBTI FORM MODE	TEXT (4)	EDIT	
5 SET VAR VFormMode = 'EDIT'	RBTI_FORM_FORMNAME		SearchAndEditCust2	
6 PROPERTY Btn Close VISIBLE 'FALSE'	RBTI FORM ALIAS	TEXT (4)		
7 EDIT USING Customers WHERE CustID = .vCustID	RBTI FORM DIRTYVAR	INTEGER	1	
8 PROPERTY Btn_Close VISIBLE 'TRUE'	RBTI_FORM_TBLNAME	TEXT (4)		
9 ENDIF	RBTI FORM DBLCLKED	TEXT (12)	LV Customers	
0 RETURN	vCustID	INTEGER	103	
2	RBTI_FORM_CTRLTEXT	TEXT (25)	105	
3	RBTI FORM CLICKED	TEXT (12)	LV Customers	
4	RBTI_FORM_COMPID	TEXT (12)	LV_Customers	
5	RBTI FORM VARVALUE	TEXT (4)	Ev_edstomers	
5	RBTI FORM VARNAME	TEXT (7)	vCustID	
7 8	vKeyWord	TEXT (3)	com	
9	SOLCODE	INTEGER	0	
0	SOLSTATE	TEXT (5)	00000	
1	vWhereClause	TEXT (189)	Company LIKE 'com%' OR Cust	+ A d
2	vSearchString	TEXT (189)	'com%'	LAU
3	vMany	TEXT (0)	%	
5	vQuotes	TEXT (1)	70	
6	vExportResultsAs	TEXT (1)		
	VEXPORTRESUITSAS	TEXT (4)		
B	<			
9	Variable: vWhereClause			
0 L 2 3		'com%' OR (LIKE 'com%' OR CustCity LIKE CustZip LIKE 'com%' OR CustPhone R CustURL LIKE 'com%'	e

• New Live Variables toolbar which automatically populates with defined variables

Notes