Introduction

RSWheel is a Visual Basic OLE Custom Control (OCX).   It can be accessed directly by Visual Basic, Microsoft Access or any Microsoft compatible OLE container.

Description

The RSWheel control is a Visual Basic OLE Custom Control developed by Rockwell Software. It is a panel thumbwheel emulator with multi-column spin control.   The types of wheel available for display are single spin, classical multi-wheel, add-a-spin, electronic advance, slot machine (random number generator) and read only.   Decimal, octal, binary and hexadecimal data types are supported.
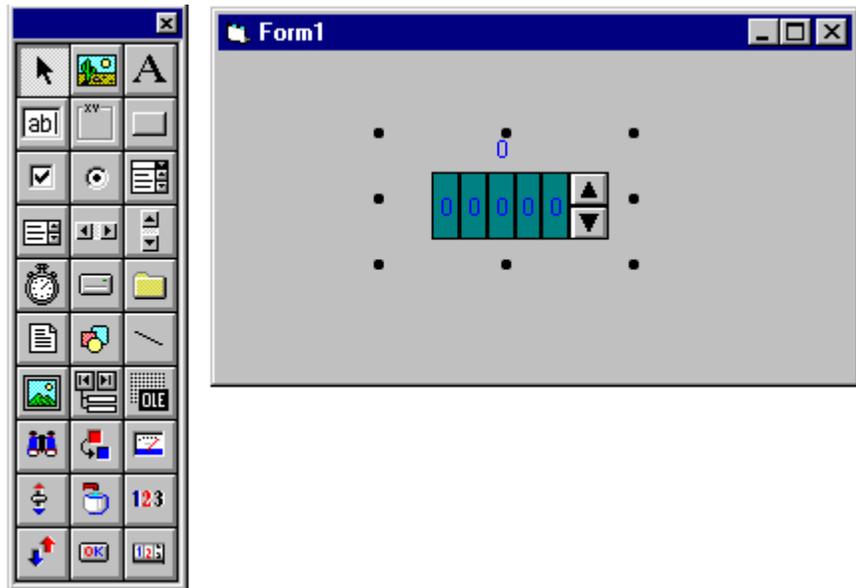
File Name

RSWhl32.OCX

Object Type

RSWheel

Remarks

The RSWheel control has several custom properties that allow you to monitor and control data.   The RSWheel control also has custom events that allow you to be notified when data has changed, or if data has finished it's request or poke.

Note   When you create and distribute applications that use the RSWheel control, certain files need to be installed in the Windows\System directory.   Refer to the "Redistributing Files" section of this chapter for specific file names.   The Setup Wizard included with Visual Basic provides tools to help create setup programs for installing your applications.

About

This control was developed by Rockwell Software Inc.   If you need assistance, contact Rockwell Software Inc.

Basic Concepts

- The RSWheel control is designed to be used with any Dynamic Data Exchange Server and provides enhanced performance when used with those that conform to AdvanceDDEprotocol. In order for RSWheel to communicate via AdvanceDDE or XL_Table protocols, RSJunctionBox, the module that provides RSWheel with the ability to use those protocols, must be purchased separately from Rockwell Software Inc.   If you choose to write your own DDE server, the AdvanceDDE protocol can be obtained from Rockwell Software Inc., by contacting our Technical Support.
- The RSWheel control can be easily configured by setting its properties, without writing a single line of code.
- The RSWheel control can be used as a bound control.   It automatically handles, updating and displaying data from the Data control, which supports ODBC, Microsoft Access, dBASE, Foxpro, Paradox, Btrieve and several other database types.
- The RSWheel control also supports the Paste Link method from **RS**Linx or WINtelligent LINX, Excel or other servers for transferring DDE Link Information via the clipboard.
- The RSWheel control has built in error notification and handling.   If an error has occurred in the data stream, the error can be displayed in the controls caption property, or handled via code in one of the events.

Property List

Event List

[Change](#)
[Click](#)
[DblClick](#)
[DragDrop](#)
[DragOver](#)
[GotFocus](#)
[KeyDown](#)
[KeyPress](#)
[KeyUp](#)
[LinkError](#)
[LinkItemNotSupported](#)
[LinkItemSupported](#)
[LinkNotify](#)
[LinkOutOfMemory](#)
[LinkServerDisconnected](#)
[LinkUnableToConnectToServer](#)
[LostFocus](#)
[MouseDown](#)
[MouseMove](#)
[MouseUp](#)
[PokeCompleted](#)
[RequestCompleted](#)

Method List

[Container](#)
[DoPoke](#)
[DoRequest](#)
[Drag](#)
[LinkPoke](#)
[LinkRequest](#)
[Move](#)
[Object](#)
[Parent](#)
[SetFocus](#)
[ShowWhatsThis](#)
[ZOrder](#)

Copyright Information

Bound Properties

The RSWheel control has three bound properties: **DataUpdate**, **DataField** and **DataSource**.   This allows the RSWheel control to be linked to a Visual Basic Data control or a remote data control and display field values for the current record in the recordset.   The RSWheel control can also write values to the Data control's recordset.

Note   For more information on using bound controls, refer to Accessing Databases With the Data Control, in the Visual Basic Programmers Guide.

Installing the OCX

You can install RSWheel on your computer using Rockwell Software's SETUP.EXE.   The setup program installs all RSWheel files, the Help system and other product components from the distribution disks to your hard disk.

System Requirements

Before you install RSWheel, make sure that your computer meets the minimum system requirements.   You must have certain hardware and software installed on your computer.   The system requirements include:

Minimum Requirements

- IBM-compatible 486 processor or higher.
- 8 MB of RAM
- 10 MB Free Hard Disk Drive Space
- A 3.5" floppy drive
- VGA Graphics Card
- Microsoft Visual Basic 4.0
- Microsoft Windows NT 3.51 or Microsoft Windows 95

Recommended Requirements

- IBM compatible Pentium
- 16 MB of RAM or more
- 30 MB Free Hard Disk Drive Space
- CD-ROM Drive
- Color (800x600) or (1024 x 768) display
- Any Microsoft compatible pointing device (mouse, trackball, touchscreen, etc.)
- Microsoft Visual Basic 4.0, Professional Edition or Enterprise Edition
- Microsoft Windows NT 3.51 or Microsoft Windows 95

RSTOOLS.WRI File

The RSTOOLS.WRI file lists any last minute changes to the RSWheel documentation, Help file and to the RSWheel control.   To read the file, open the Windows Write application or double-click the **RSTOOLS.WRI** file in the file manager or Windows Explorer.

Running Setup

When you run the setup program, you will set a path for RSWheel.

To Start Setup:

1. Insert Disk 1 in drive A.
2. From the file menu in Program Manager, File manager or Explorer, choose Run.
3. Type a:setup
4. Follow the setup instructions on the screen.

Learning To Use RSWheel

The RSWheel control requires very little programming to create full-featured applications.   Much of the functionality is available by setting standard properties.   You can even log data seamlessly through the Visual Basic Data control without writing a single line of code.

Loading RSWheel (Adding RSWheel to your VB Project)

To use RSWheel in Visual Basic, you must add the RSWheel control to the Visual Basic toolbox.

1. Start Visual Basic.
2. From Visual Basic, select Custom Controls from the Tools menu.
3. Scroll through the available controls listed, choose "Rockwell Software RSWheel" and choose OK.
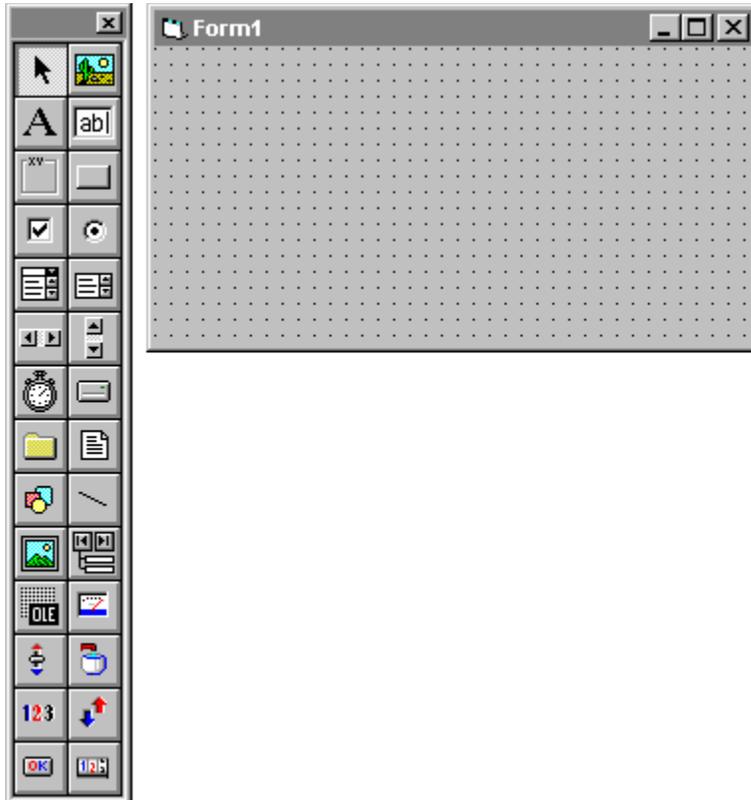
The RSWheel icon is added to the Visual Basic Toolbox.

Autoloading RSWheel

1. Start Visual Basic and open AUTO32LD.VBP.
2. Choose Custom Controls from the Tools menu.   (The "Custom Controls" Dialog appears.)
3. Scroll down the list box until "Rockwell Software RSWheel" is visible, select it and choose OK. The control is added to the project list.
4. Choose Save Project from the File menu.

Note: If "Rockwell Software RSWheel" does not appear in the list of available custom controls, you may have to click the Browse button and manually select RSWHL32.OCX and RSWHLX32.DLL, which are located in the C: \WINDOWS\SYSTEM directory .When attempting to load RSWHLX32.DLL the message "Unable to load control from RSWHLX32.DLL" may appear. This occurs because this DLL contains supporting code for the RSWheel OCX and does not contain the actual control. Choose OK to continue.

Placing the RSWheel Control on a Form

Creating a new RSWheel control and placing it on a form is as simple as point, click and drag.

1. Select the RSWheel tool in the Visual Basic toolbox.
2. Position the mouse on the form at the location where you want to draw the control.

3. Click and drag to draw the outline of the RSWheel control on the form.
4. When you release the mouse, the new RSWheel control is placed in the location you specified.
5. Or you may double click on the RSWheel tool in the toolbox and a RSWheel control will be placed on the center of the form.

Using Help

Comprehensive on-line help is available to assist you as you learn and use the RSWheel control.   The complete RSWheel documentation is available through on-line help.   In addition, you can receive context-sensitive help for properties, events and methods.   The Help file is located in your RSWheel directory.

To access the help contents page:

1. Click the RSWheel icon in the toolbox.
2. Press F1.

To access context-sensitive help for properties:

1. Select an RSWheel control on your form.
2. Highlight an RSWheel property in the properties window.
3. Press F1.

To access context-sensitive help for events:

1. Double-Click an RSWheel control on your form.
2. Pull down the procedure Combo-Box, labeled "Proc:", and select an event from the list.
3. Press F1.

Distributing RSWheel Applications

Please read the license agreement that was shipped with this package.   You are bound by the licensing restrictions contained in that document.

Redistributing Files

You can use all the files accompanying this product for development of an application.   You can redistribute the run time version of the software according to the terms of the license agreement.

You must ship the following files with your application:

File	Description
RSWhl32.OCX	Wheel OCX
RSTool32.DLL	Common Code for Design and Run modes

If the run time application requires features of the RSJunctionBox (enhanced communications, calculation engine) then in addition to the files listed above, an RS JunctionBox needs to be installed on the system.   The RSJunctionBox (can be purchased seperately) installs the following files into the Windows\System directory.   These files may not be freely distributed and require a special activation key which is automatically installed during setup.

RSJBOX32.DLL	RSJunctionBox module
RSJBP32.DLL	RSJunctionBox License (Protection) DLL
RSCALC32.DLL	Calculation engine for Read/Write expressions

Using Custom Property Tabs

The RSWheel OCX dialog box provides sets of options grouped on separate tabs.   As you click each tab, the controls in the dialog box change to allow you to edit a different set of options.   Any options that are not appropriate for the current chart type or situation are grayed.   The following   illustration shows an example of an RSWheel OCX dialog box.
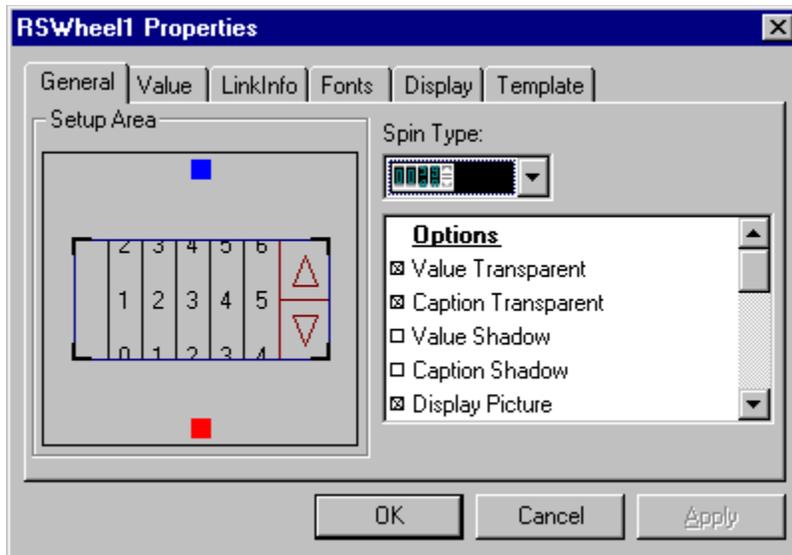
Note :   Switching between the Tabs would apply any changes made so far.   Click Cancel to discard the changes.

See Also

Visual Basic Floating Menu

RSWheel Properties can be configured using the following property tabs

General Tab

Value Tab

LinkInfo Tab

Font Tab

Display Tab

Template Tab

Visual Basic Floating Menu

Click the right mouse button anywhere within an RSWheel control to display the floating menu.   Once the menu appears, use the left mouse button to select a menu item.   Clicking on menu items followed by three periods bring up various dialog boxes that perform certain functions for the control.   The Properties menu item will bring up the Custom Property Tab dialog discussed in the next section.

```
Cut
Copy
Paste
Delete

Bring To Front
Send To Back

View Code
Align to Grid

Properties...
Paste Link
```

The following table describes the purpose of each item on the floating menu.

Menu item	Description
Cut	Deletes the selected item and copies it to the clipboard.
Copy	Copies the selected item to the clipboard.
Paste	Paste the contents of the clipboard onto the form.
Delete	Delete the selected item.
Bring To Front	Bring the selected item to top of the ZOrder.
Send To Back	Send the selected item to bottom of the ZOrder.
View Code	View the selected item's code window.
Align to Grid	Align the control's Top and Left property to the form's grid.
Properties	Display Custom Property Dialog.
Paste Link	Supports pasting a link to a valid DDE source.

General Tab
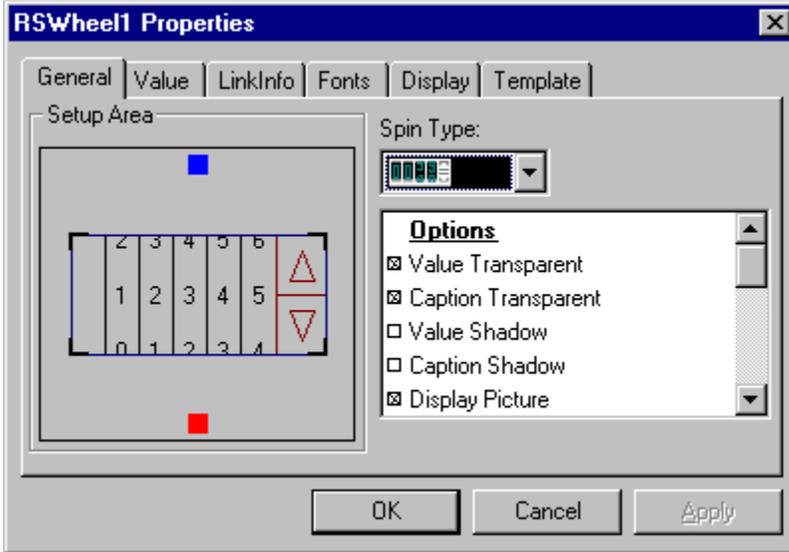
- **OCX Setup Area**. Use this display to change the attributes of the control. The graphic image of the wheel shown is determined by the currently selected Spin Type. To change the size of the wheel grab and drag one of the four corners of the border. To change only the size of the scroll buttons, grab and drag the left vertical side of the scroll button area.

  If the Value and Caption are being displayed on the RSWheel control, their positions can be adjusted by moving their placeholders within the setup area. The Value display is represented by a blue square and the Caption display is represented by a red square. The wheel's shadow position can also be changed here by clicking and dragging the shadow within the setup area.

  While in this rectangular area click the right mouse button to bring up the floating menu.

  From this menu you can enable/disable the **Value**, **Caption**, or **Tips** properties. You can also display the **Preview** window, which allows you to view a real time display of your control. The **Zoom** option enlarges the OCX Display to allow you to better make minute adjustments to the wheel image. The **Columns** option allows you to set the total number of columns and the number of decimal columns used for displaying the wheel value.

- **General Options List Box**. This list box lists all of the general options for the control. You can enable or disable these properties from this list box by clicking in the appropriate check box.

- **Spin Type Combo Box.** Set the wheel's Spin Type property here. These are graphical selections for Single Spin, Classic, Add-A-Spin, Electronic Advance, Slot Machine and Read Only.

Value Tab

Start Value	Sets the starting value for the range of acceptable values.
End Value	Sets the ending value for the range of acceptable values.
Value	Sets the default for the Value property.
Spin Interval	Sets the space between a digit display in a column and the next digit to be displayed as it scrolls.
Decimals	Sets the number of decimal places of the value property.
Time Period	Sets the value for the internal timer.
Write Style	Sets the write style to the DDE server.
Display Base	Sets what base the value will be displayed in.
Randomize	Determines the characters to be displayed on the slot machine spin type.

	Start Char	Sets the start of the selected ASCII characters.
	End Char	Sets the end of the selected ASCII characters.

Caption.	Sets the default for the RSWheel caption.

Increment	*Value*	Determines the value change per click of the wheel*.*
	*Max***Multiplier**	Determines if the internal increment step will increase*.*
	Interval	The increment interval is multiplied with the increment step to determine the internal total increment value.
	Step	Sets the delay spinning in a base other than decimal.

LinkInfo Tab
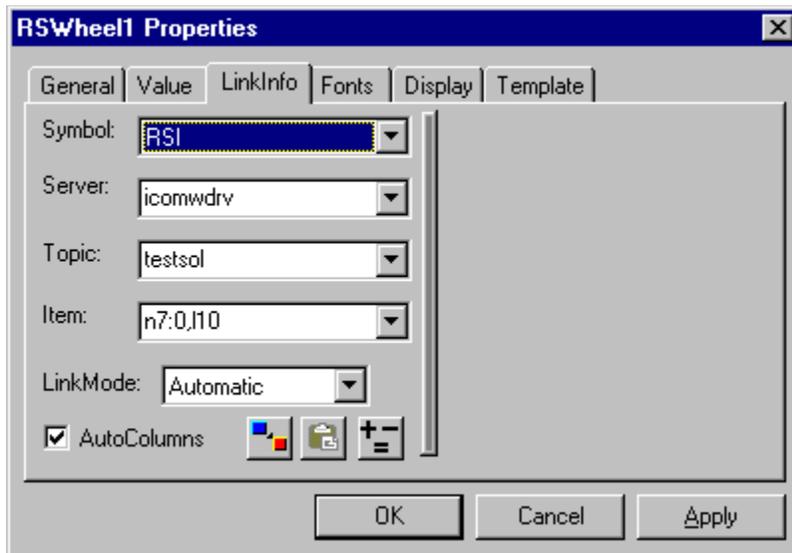
- **Symbol.** This combo box is used to choose the name of a Symbol that has been previously defined for a specific Server, Topic and Item in a DDE link. To define Symbols for different DDE links see the section on Manage Symbols to follow. If the Symbol has been previously defined select it from the combo box list or enter the name of the Symbol in the combo box directly. When a defined Symbol is chosen, then the Server, Topic and Item combo boxes on the LinkInfo page will automatically be filled in with the appropriate data.

- **Server.** This combo box determines the application or Server name that the RSWheel control is linked to. If the Server name has been previously used it can be chosen from the combo box list or enter the name of a new Server into the combo box directly.

- **Topic.** This combo box determines the Topic portion of the data link string, which the RSWheel control uses for addressing in a DDE link. If the topic has been previously used it can be chosen from the combo box or enter the name of a new Topic into the combo box directly.

- **Item.** This combo box determines the Item portion of the data link string, which the RSWheel control uses for addressing in a DDE link. If the Item has been previously used it can be chosen from the combo box list or enter the name of a new Item into the combo box directly.

- **AutoColumns.** This check box is used to enable or disable the AutoColumns property for the RSWheel control. AdvanceDDE servers can provide data in block format. The AutoColumns property will automatically split the blocked data into columns to fit the width of the control

- **LinkMode.** Sets the type of link to be used for a DDE conversation and activates the connection. Available options for the LinkMode property are:

  0 = None - No DDE connection is established between the control and **Server.**

  1= Automatic - A "HOT link". The **Server** automatically updates the control when data changes.

  2 = Manual - A "COLD link". The client has to issue a DoRequest method to get data from the **Server**.

  3 = Notify - Causes Visual Basic to Fire the LinkNotify event which the user can respond to.

- **Manage Symbols**. This button is used to display the Manage Symbols dialog (see below), which is used to define Symbols for DDE links to the control. (See the section on Symbols above.)
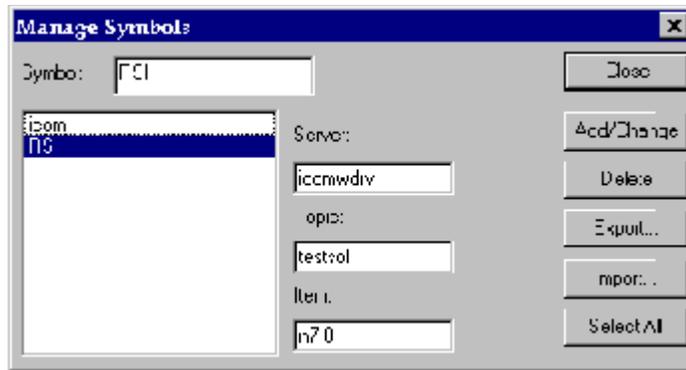
To define a new Symbol for a specific Server, Topic, and Item in a DDE Link,   place the name for the new Symbol in the text box labeled Symbol.   Then place the DDE Link Server name in the text box labeled Server, the DDE Link Topic name in the text box labeled Topic, and the DDE Link Item name in the text box labeled Item.

Press the **Add/Change** button to add the new Symbol name to the Symbol list box.

Press **Delete**   to delete an existing Symbol.

Use the **Select All** button to group all symbols for exporting.

Press **Export** or **Import** to write or read the symbol information to a .RSS file   (Rockwell Software Symbol) This file is a text file with the following format:

```
[SYM]
RSI=icomwdrv|testsol|n7:0
icom=icomwdrv|testsol|n7:22
excel=excel|[book1]sheet1|r1c1
```

This is essentially a .ini file format with a separate *entry*= line for each symbol. This file can be read by a programmer to utilize symbol information in an application.

- **Paste Link.** This button is enabled when the user has copied specific DDE Link information from another application (example: Excel) to the clipboard.   Pressing this button will then fill in the appropriate DDE Link information for the Server, Topic and Item.

- **Expression.**   (This feature is available when the RSJunctionBox is installed on the computer.)

When finished, press the **OK** button to save any changes or the **Cancel** button to exit without saving changes.

Font Tab

The Font tab is where you can change the name, style and size of the RSWheel's fonts.
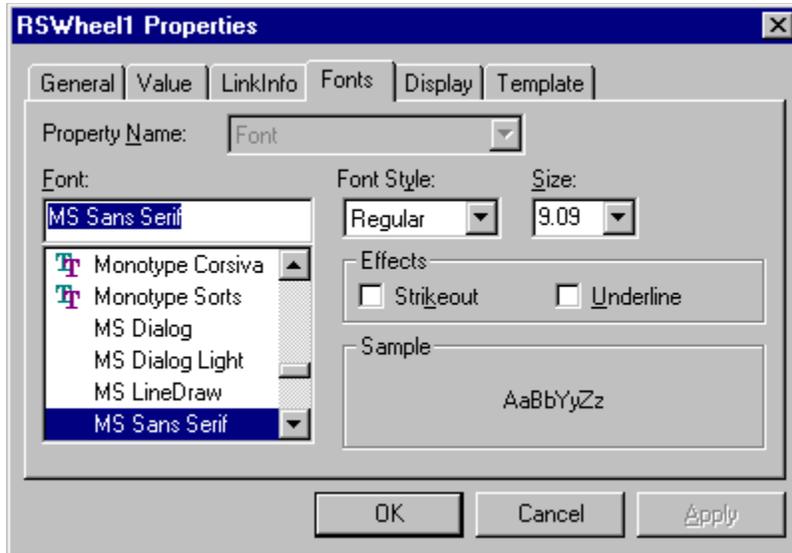
- **Property Name**.   Selects the property of the control that you want to format.
- **Font**.   Select a font from the list of fonts installed on your windows system.
- **FontStyle**.   Select a font style from the list of supported styles for the font you selected.
- **Size**.   Select a size from the list of valid sizes for the font you selected.   You can also type a valid size in the Size field.
- **Strikeout**.   Select the Strikeout checkbox if you want the strikeout applied to the text.
- **Underline**.   Select the Underline checkbox if you want the text to be underlined.

Display Tab

All of the display properties for the RSWheel can be set using the Display tab. Display properties include things like colors, pictures and bevel styles. This section describes the setting of these properties using this tab.
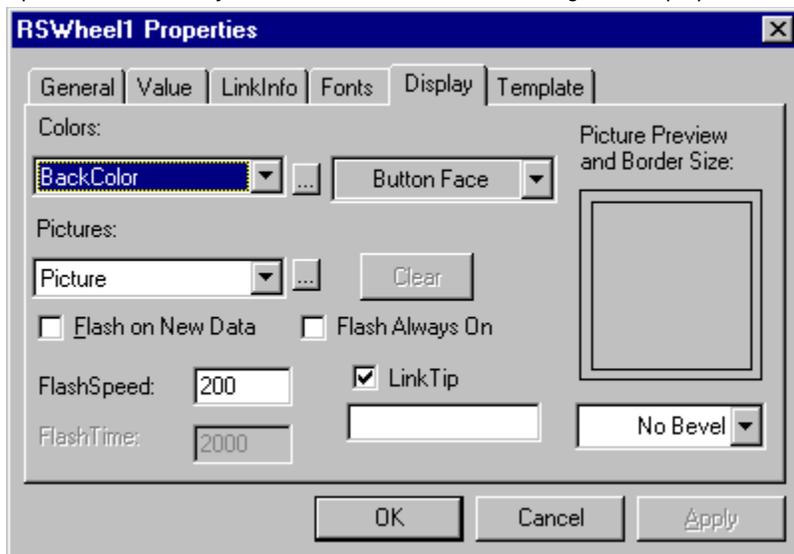
- **Colors**. Setting of colors involves selecting the color property (Example : BackColor) and then choosing a color.

  Color properties that can be set using Display Tab for the RSWheel are:

BackColor	CaptionBackColor	NumbersColor
BevelHighlight	CaptionColor	OverflowBackColor
BevelShadow	CaptionShadowColor	OverflowTextColor
BorderColor	DownArrowColor	UpArrowColor
BorderInnerColor	FaceBorderColor	ValueBackColor
ButtonFaceColor	FaceColor	ValueColor
ButtonHighlight	LinkTipBackColor	ValueShadowColor
ButtonShadow	LinkTipForeColor	

  Select a color property by highlighting it in the drop down combo box and then set the color you want to apply to the property   from either the basic color palette (activated by clicking on the ellipsis button) or the drop down colors combo box. The drop down colors includes windows default scheme colors in addition to standard colors. If you want your control to inherit the colors of the Windows desktop color schemes, use this drop down combo box. The properties set to Windows desktop colors will automatically take up the new desktop's colors' setting (if the project is compiled and made into an executable, then the executable's control colors would also inherit Windows desktop colors.)

- **Picture**. You can assign a picture to the RSWheel control's Picture property with the Picture combo box. Click on the three dot button to bring up a File Open dialog box.   With this dialog box you can   choose any   *.bmp, *.ico or *.wmf file to be used as the picture.   After selecting a file, that file will be displayed in the *Picture Preview and Border Size* window. To clear this picture, simply click on the **Clear** button.

- **Flash on New Data**.   The FlashEnabled property is turned off and on with this check box.

- **Flash Always On**.   The FlashOn property is turned off and on with this check box.

- **FlashSpeed**.   Set the FlashSpeed property value by entering a number here .

- **FlashTime**. Set the FlashTime property value by entering a number here.

- **LinkTip**.   RSWheel provides the ability to add tool tips for the control. The tool tip can be turned on by checking this check box. Text for the tool tip is entered in the text box below the check box. If no text is entered, then the tool tip defaults to the DDE Link details or *Symbol* name for the control, if any.

- **Bevel Style**.   This combo box allows you to select a bevel style for the RSWheel control. The available bevel styles are:

No Bevel	Marble	Thick
Indented	Bevel	Stripe

Template Tab

You can save the property settings of a control and apply them again to different controls using templates. Using this Custom Property Page Tab, templates can be Added , Changed and Managed. These property templates are saved in a file with   a *.rwc extension. Each set of properties template is saved with a distinct name. Duplicate names would replace any other template in that file.
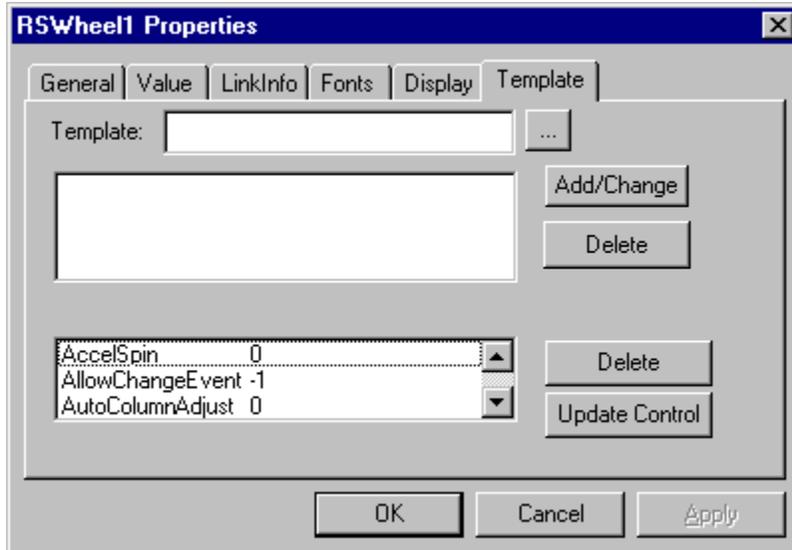
- **Template**. This field displays the name of the template to be applied, added or changed. The template file can be selected by clicking on the three dot button [...] next to the field. Available templates names are displayed in the list below this field and can be selected by clicking on the template name (selected template is highlighted).

- **Add/Change Button**.   New templates or changes in an existing template can be saved by clicking on this button. The template is saved in the selected *.rwc file. The template file can be selected as described above.

- **Delete Button**.   Use this button to delete a template from the file.   Only the template is removed from the file, with all other templates in that file remaining.

- **Properties.   T**his field, below the template list, describes the properties and their settings for the selected template. Properties can be deleted if not required to be in the template.

- **Delete Property Button**.   If you want to take out a property from the template, select the property from the list (selected property is highlighted) and click on this button.

    Note: Properties have to be set using the other property pages and then saved in templates. Property values cannot be set on this property page

- **Update Control Button**. To apply an existing template to the control, select the template and click on this button. This button updates the control with the property settings defined in the template which can be permanently applied by clicking on the Apply or OK button. Clicking on Cancel button will discard the changes and revert the control settings to what they were before the control was updated with Update Control button.

Using RSWheel Custom Events

The RSWheel control comes with a set of ten custom events, that allow you to track and monitor actions performed on a RSWheel control by users of your application.   Events allow you to respond to user's actions and control the operation of the RSWheel control.

Click on the event to view more information

Change
LinkError
LinkItemNotSupported
LinkItemSupported
LinkNotify
LinkOutOfMemory
LinkServerDisconnected
LinkUnableToConnectToServer
PokeCompleted
RequestCompleted

Change Event

You can use the **AllowChangeEvent** to create progress bars, animation sequences or copy data as it changes to other controls. The following sample explains how to display a progress bar using the Value argument.

- Place a RSWheel control and a ProgressBar control on your form.
- Set the RSWheel1 **AllowChangeEvent** = True, **LinkServer** = "Excel", **LinkTopic** = "[Book1]Sheet1", **LinkItem** ="R1C1" and **LinkMode** = 1-Automatic
- In the ProgressBar1 properties window set **Max** = 100 and **Min** = 0
- Type in the following code.

```
Private Sub RSWheel1_Change(ByVal dValue As Double, ByVal ThumbIndex As
    Integer)

    ProgressBar1.Value = Value

End Sub
```

- Run the program.

In Excel, change the value of Cell 1 of Row 1. The RSWheel value will change accordingly and the progress bar will show the value in a graph form.

Note : RSWheel can also be linked to a column of cells. For example try changing the **LinkItem** to R1C1:R2C1. When you run the program RSWheel will split in two wheels showing the value from Row1 Col1 and Row2 Col1. **ThumbIndex** will now be the index of the two split controls.

LinkError Event

The **LinkError** event occurs when there is an error during a DDE conversation.   This event is recognized only as the result of a DDE-related error that occurs when no Visual Basic code is being executed.   The error number   and error string are passed as arguments.

- Place a RSWheel control on your form.
- Set the RSWheel1 **AllowChangeEvent** = True, **LinkServer** = "Excel", **LinkTopic** = "[Book1]Sheet1", **LinkItem** ="R1C1" and **LinkMode** = 1-Automatic
- Type in the following code.

```
Private Sub RSWheel1_LinkError (ByVal iRet As

Integer, ByVal ErrorString As String)

    Dim Msg as String

    Msg = "Link Error Occurred"

    MsgBox Msg, 48, "Error Report"

End Sub
```

- Start Excel and run your Visual Basic program.
- While your program is running, close book1 in Excel.   Click on the wheel scroll bar and the error message will occur since the link topic has been closed.

LinkItemNotSupported Event

The **LinkItemNotSupported** event occurs when the wheel's LinkItem has an incorrect format.

- Place a RSWheel control on your form.
- Set the RSWheel1 **AllowChangeEvent** = True, **LinkServer** = "Excel", **LinkTopic** = "[Book1]Sheet1", **LinkItem** ="R0C1" and **LinkMode**= 1-Automatic
- Type in the following code.

```
Private Sub RSWheel1_LinkItemNotSupported ()

    Dim Msg as String

    Msg = "Link Item Not Supported"

     MsgBox Msg, 48, "Error Report"

End Sub
```

- Run the program.
- The error message will occur since R0C1 is not a valid link item.

LinkItemSupported Event

The **LinkItemSupported** is fired when the DDE communication is initialized and the specified LinkItem is supported by the server.

- Place a RSWheel control on your form.
- Set the RSWheel1 **AllowChangeEvent** = True, **LinkServer** = "Excel", **LinkTopic** = "[Book1]Sheet1", **LinkItem** ="R1C1" and **LinkMode** = 1-Automatic
- Type in the following code.

```
Private Sub RSWheel1_LinkItemSupported()

 Dim Msg as String

 Msg = "Link Item " & RSWheel1.LinkItem& " is

    supported by server " & RSWheel1.LinkServer

 MsgBox Msg, 48, "Link Report"

End Sub
```

- Run the program.
- The message will occur since R1C1 is a valid link item.

LinkNotify Event

The **LinkNotify** event occurs when the source has changed the data defined by the DDE link, if the **LinkMode** property of the RSWheel control is set to 3-Notify.

```
Private Sub RSWheel1_LinkNotify ()

    Dim Msg as String

    Msg = "Data Value has Changed"

    MsgBox Msg, 48, "Link Report"

End Sub
```

LinkOutOfMemory Event

The **LinkOutOfMemory** event occurs when the client (RSWheel) has exhausted its memory resources.

```
Private Sub RSWheel1_LinkOutOfMemory ()

    Dim Msg as String

    Msg = "Out of memory to carry on Link activities"

    MsgBox Msg, 48, "Error Report"

End Sub
```

LinkServerDisconnected Event

This event is another tool for efficient DDE link error management.   The **LinkServerDisconnect** event occurs when the wheel is connected to a server and that server becomes unavailable.

- Place a RSWheel control on a form.   Set the following properties: **AllowChangeEvent** = True, **LinkServer** = "Excel", **LinkTopic** = "[Book1]Sheet1", **LinkItem** ="R1C1" and **LinkMode** = 1 - Automatic
- Type in the following code.

```
Private Sub RSWheel1_LinkServerDisconnected ()

    Dim Msg as String

    Msg = "Link Server Disconnected"

    MsgBox Msg, 48, "Error Report"

End Sub
```

- Start Microsoft Excel.
- Run the program.
- Type in a value in   Row 1 Cell 1 of your Excel spreadsheet.
- The wheel value should change accordingly.
- Now shutdown Excel. *LinkServerDisconnected* event is now fired and the above error message should be displayed.

LinkUnableToConnectToServer Event

The LinkUnableToConnectToServer event occurs when the wheel attempts to connect to a server that is unavailable.

- Place a RSWheel control on a form.   Set the following properties: **AllowChangeEvent** = True, **LinkServer** = "Excel", **LinkTopic** = "[Book1]Sheet1", **LinkItem** ="R1C1" and **LinkMode** = 1 - Automatic
- Type in the following code.

```
Private Sub RSWheel1_LinkUnableToConnectToServer ()

    Dim Msg as String

    Msg = "Unable to connect to link server"

    MsgBox Msg, 48, "Error Report"

End Sub
```

- Run the program without having started Excel. This error handling event should be fired.

PokeCompleted Event

The **PokeCompleted** event occurs when the wheel completes a DDE Poke.

```
Private Sub RSWheel1_PokeCompleted (ByVal iRet As Integer)

    'Once the Poke is completed, tell the user.

    RSWheel1.Caption = "The Download has been processed."

End Sub


Private Sub RSWheel1_Click()

'Once the Poke is completed, the Excel cell is updated.

    Const manual = 2, none = 0

    RSWheel1.UseInPoke = True

    RSWheel1.LinkMode = none

    RSWheel1.LinkServer = "Excel"

    RSWheel1.LinkTopic = "[Book1]Sheet1"

    RSWheel1.LinkItem = "R1C1"

    RSWheel1.LinkMode = manual

    RSWheel1.DoPoke

    RSWheel1.LinkMode = none

End Sub
```

Note : This event is useful for preventing the sending of additional data to a server while it is still processing previous data.("Outrunning the server")

RequestCompleted Event

The **RequestCompleted** event occurs when the wheel completes a DDE Request.

```
Private Sub RSWheel1_RequestCompleted (ByVal iRet As Integer)

    'Once the Request is completed, tell the user.

    RSWheel1.Caption = "The Request has completed        successfully!"

End Sub


Private Sub RSWheel1_Click()

    'Once the Request is completed, cell R1C1 is updated.

     Const Manual = 2, None = 0

    RSWheel1.UseInRequest = True

    RSWheel1.LinkMode = None

    RSWheel1.LinkServer = "Excel"

    RSWheel1.LinkTopic = "[Book1]Sheet1"

    RSWheel1.LinkItem = "R1C1"

    RSWheel1.LinkMode = Manual

    RSWheel1.DoRequest

    RSWheel1.LinkMode = None

End Sub
```

Note : This event is useful for preventing the requesting of additional data from a server while it is still processing previous data. .("Outrunning the server")

Samples Using RSWheel

This section gives you examples to try which demonstrate just a few features of the RSWheel control.

The following examples are included with RSWheel

Spin Types
Base Conversions
Poking Data
Requesting Data

Spin Types

The following example enables you to view each of the available wheel types.
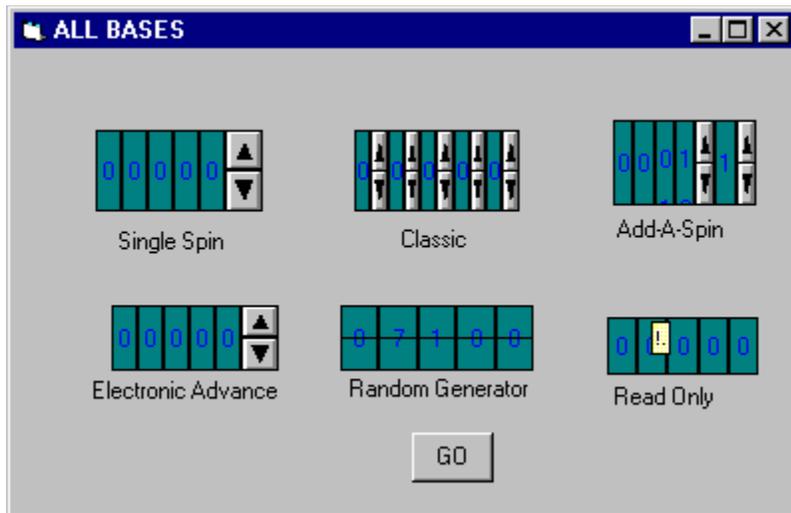
To recreate this form:

1. Open a new project and form.

2. Place six RSWheel controls on the form and set a different **SpinType** property for each.   You can do this in the Properties Window or in the SpinType combo box of the General section of the Custom Properties page.

3. Set the **Caption** property to describe each spin type. You can do this in the Properties Window or in Value section of the Custom Properties page.   If you need to adjust the placement of the caption on the control, you can do this in the General section of the Custom Properties page.   You may also want to deselect the **Caption Shadow** in the Options window.

4. If the value is visible above your control and you wish to remove it, you can do this by right mouse clicking on the graphical display of the wheel in the General section of the Custom Properties page. This will bring up the floating menu and you can deselect the Value option.

5. Add a Visual Basic Command control below the slot machine and change its caption to GO.   To set the wheel to automatically spin and generate new values, add the following code.

```
Private Sub Command1_Click()

If RSWheel5.HandleDown = False Then

    RSWheel5.HandleDown = True

Else

    RSWheel5.HandleDown = False

End If

End Sub
```

Run your Visual Basic program and select the GO command button to see the random generator in action.

Base Conversion

There are four bases available to display the wheel's value.   The following example will let you change a value and display it in all four bases simultaneously.
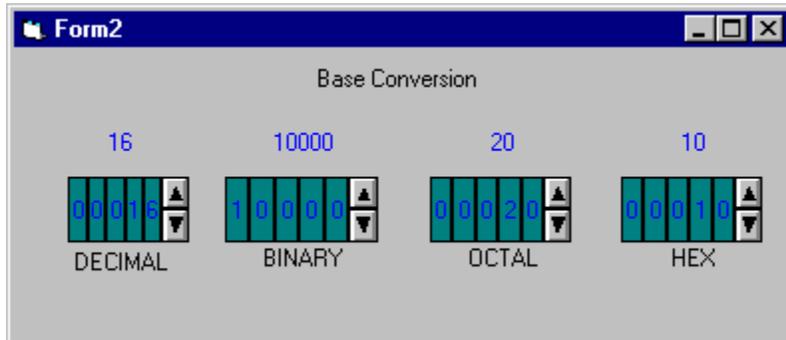
1. Place a Visual Basic Label on your form and change its Caption property to Base Conversion.
2. Place four RSWheel controls on your form and set **SpinType** = 3 (Electronic Advance).
3. Set the base for each wheel by setting the **DisplayBase** property on the Properties window or in the Value section of the Custom Properties page.
4. Add the following code.

```
Private Sub RSWheel1_Change(ByVal dValue As Double,  ByVal ThumbIndex As
Integer)

    RSWheel2.Value = RSWheel1.Value

    RSWheel3.Value = RSWheel1.Value

    RSWheel4.Value = RSWheel1.Value

End Sub


Private Sub RSWheel2_Change(ByVal dValue As Double, ByVal ThumbIndex As
Integer)

    RSWheel1.Value = RSWheel2.Value

    RSWheel3.Value = RSWheel2.Value

    RSWheel4.Value = RSWheel2.Value

End Sub


Private Sub RSWheel3_Change(ByVal dValue As Double, ByVal ThumbIndex As
Integer)

    RSWheel1.Value = RSWheel3.Value

    RSWheel2.Value = RSWheel3.Value

    RSWheel4.Value = RSWheel3.Value

End Sub


Private Sub RSWheel4_Change(ByVal dValue As Double, ByVal ThumbIndex As
Integer)

    RSWheel1.Value = RSWheel4.Value

    RSWheel2.Value = RSWheel4.Value

    RSWheel3.Value = RSWheel4.Value

End Sub
```

Run your program.   Whenever you click on a scroll arrow of a wheel its value and the value of all the other wheels will change and be displayed in their correct bases.

Poking RSWheel Data to Excel

The DoPoke or the LinkPoke methods allows you to write the value of a RSWheel (or values of all RSWheels in an array) to the server in a DDE conversation. To work successfully the RSWheel control's **UseInPoke** property must be set to True.   Also set the **PokeLength** and **PokeStartIndex** for a single wheel or an array of wheels.

The following example demonstrates a the DoPoke method using Excel as the server.

1.   Place a RSWheel control on your form and open up Book1 Sheet1 of Excel.
2.   Double click on the wheel and put the following code in for its Click procedure.

```
Private Sub RSWheel1_Click()

    Const manual = 2, none = 0

    RSWheel1.LinkMode = none

    RSWheel1.LinkServer = "Excel"

    RSWheel1.LinkTopic = "[Book1]Sheet1"

    RSWheel1.LinkItem = "R1C1"

    RSWheel1.LinkMode = manual

    RSWheel1.DoPoke

    RSWheel1.LinkMode = none

End Sub
```

Run your program.   Every time you click on the wheel's scroll arrow (either up or down) the code will be executed and once the Poke is completed, the Excel cell is updated with the wheel's current value.

This code would also work if the line RSWheel1.DoPoke was changed to RSWheel1.LinkPoke.

Another way to accomplish this without writing any code, would be as follows:

- Open the wheel's Custom Properties page and go to the LinkInfo tab.
- Fill in the following information.   Server = Excel, Topic = [book1]sheet1, Item = r1c1 and LinkMode = manual (or automatic).
- Click Apply to accept these changes and then OK to exit the Custom Properties page.

Run your program.   When you change the value on the wheel by clicking on a scroll arrow the Excel cell will be updated to reflect the change.

Requesting Data from Excel

The **DoRequest** and **LinkRequest** methods request the source application in a DDE conversation to update the value of the RSWheel (or values of all RSWheel in an array).   **LinkMode** should be set to either None(0) or Manual(2).   To work successfully, the RSWheel control's **UseInRequest** property must be set to True. Also set the **RequestLength** and **RequestStartIndex** for a single wheel or an array of wheels.

The code to execute a link request will be very similar to that of a DoPoke or LinkPoke.   You will need to change from a DoPoke to a DoRequest or from a LinkPoke to a LinkRequest.

To test a DoRequest method:

1. Using the same code from the DoPoke example, change the text RSWheel1.DoPoke to RSWheel1.DoRequest.
2. In your Excel spreadsheet enter a value in R1C1.
3. Run your program.   When you click a wheel scroll arrow, the value of the wheel will be updated to that of R1C1 of the spreadsheet.

To accomplish this without writing any code
- Open the wheel's Custom Properties page and go to the LinkInfo tab.
- Fill in the following information.   Server = Excel, Topic = [book1]sheet1, Item = r1c1 and LinkMode = automatic.
- Click Apply to accept these changes and then OK to exit the Custom Properties page.

Run your program.   When you change the value of the cell in Excel, the wheel value will be updated to reflect the change.

Using RSWheel to Read from Datasource

With the RSWheel control and Visual Basic's Data control, you can create an application to display information from many types of existing databases.   Creating a data-aware application with Visual Basic can be done easily through a few steps, and requires very little code.

The first thing you need to do to make a "data-aware" application is to add the Visual Basic Data control to your form.   Next, you will have to specify the database you would like to get the information from.   Once you have decided on the database, you must load the RSWheel control on the form and set its properties to "bind" the control to the Visual Basic's data control.   Depending on the property settings you choose for DataSource, when you run this application you will be able to view data coming from your server or   from a database.

The RSWheel's AdvancedDDE technology combined with Visual Basic's data control gives you seamless access to many standard database formats, including Microsoft Access, Btrieve, dBASE , Mircosoft FoxPro, and Paradox.

The following procedure gives you a brief overview of how to "bind" or use the RSWheel control and Visual Basic's data control in your application.   We will use the color.dbf sample database that comes with RSWheel.

- Select the RSWheel control in the toolbox and draw a RSWheel control on the form.
- Select the Visual Basic Data control and draw a control on the form.   The control icon looks like this:

After you have drawn the control on the form, it will look like this, with the default caption as Data1.

- In the properties window for the Visual Basic Data control, set the DatabaseName property to the filename you want to connect to.   You must specify the path to the database only.   We will use the example database located in C:\RSWKSHOP\RSTOOLBX\DEMO\COLOR.MDB   You will set **DatabaseName** property to this.

For the **Connect** property, you must specify "ACCESS". Then set **RecordSource** = "TABLE1".   The RecordSource is the name of the database file .
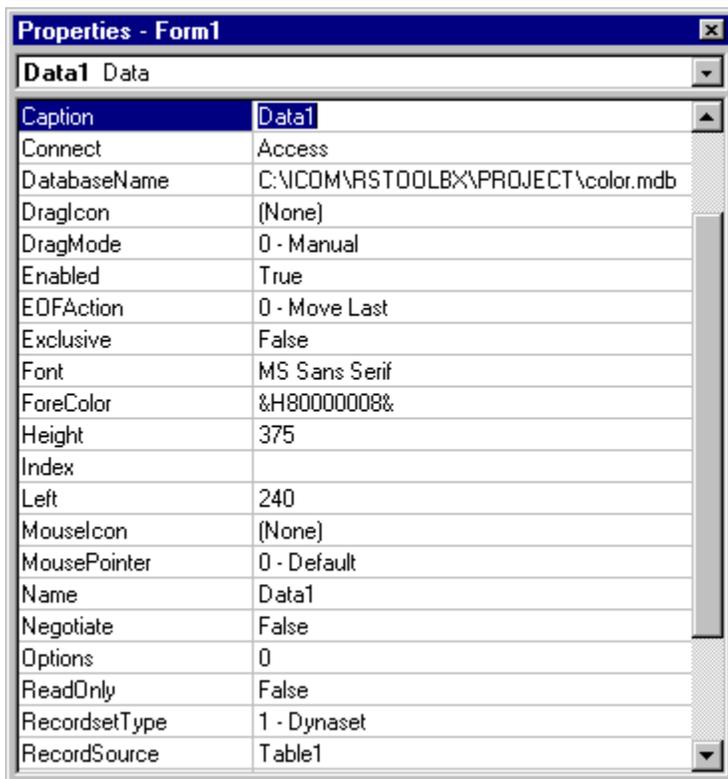
- Click once on the RSWheel control and bring up it's property window.   In the properties window, set the **DataSource** = Data1, the **DataField** = Red, and set the **DataUpdate** = 2- Data Source.
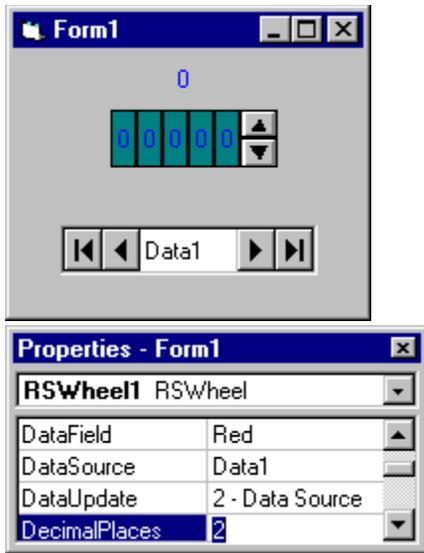
- Now run the application.   The RSWheel control displays the data in the "COLOR" field based on which database record you display.   You can use the arrow buttons in the data control to move through the records.

Using RSWheel to Log to the Data Source

One of the biggest advantages of the RSWheel control is its ability to log   the wheel's value to the **DataSource** specified by the Visual Basic Data control.

Before you can log any information to the DataSource, you must have an existing database to log the information.   This database must contain at least one entry or record.   You may have several field names depending on how many data points you have.

Once you have set up your database, all you need to do is set a few properties, write a few lines of code and run your project.

Follow the steps below to setup the RSWheel control for logging.   You may want to use the sample database file in the samples directory: C:\RSWKSHOP\RSTOOLBX\DEMO\COLOR.MDB

1. Using the previous example, in the Visual Basic data control, set the **RecordSource** = "TABLE1" and for the **Connect** property, you must specify "ACCESS".
2. In the RSWheel control set **DataUpdate** = 2 - Data Source and **DataField** = Red.
3. Add the following code:

```
Private Sub RSWheel1_Change(ByVal dValue As Double, ByVal ThumbIndex As
Integer)

    Dim sTemp As String

    sTemp = RSWheel1.Value

    Data1.Recordset.AddNew

    RSWheel1.Value = sTemp

    Data1.Recordset.Update

    Data1.Recordset.MoveLast

End Sub
```

Once these changes have been made, simply run the program.   As the value of the RSWheel changes data will be logged to the database.

(About) Property

Description: Displays the *About Rockwell Process Objects* dialog box with revision number.

Remarks: For more information refer to the RSTools Common Reference Guide.

(Custom) Property

Description: Displays the wheel's custom properties page.

Remarks: For more information refer to the RSTools Common Reference Guide.

AccelSpin Property

Description: Sets the spin of the wheel to an accelerated rate.

Custom: Adjusted in the General section of the Custom Properties page with a checkbox in the Options window.

Visual Basic: [Form1.]RSWheel1.AccelSpin [=setting]

Remarks: The default for this property is false.   True activates the accelerated spinning and false deactivates it.   The longer a button is held down the faster the wheel accelerates. Acceleration adds increment interval to the increment value.

Data Type: Boolean

AutoColumnAdjust Property

Description: Adds columns necessary to display the current value.

Custom: N/A on Custom Properties page.

Visual Basic: [Form1.]RSWheel1.AutoColumnAdjust [=setting]

Remarks: The default value is one.

Data Type: Boolean

ButtonWidth Property

Description: Changes width of the vertical scroll button.

Custom: In the General section of the Custom Properties pages adjust the button width by adjusting the left side of the button on the wheel display.

Visual Basic: [Form1.]RSWheel1.ButtonWidth [=setting%]

Remarks: Default value is   20 and   maximum value is 100.   This value will only change one scroll bar (right side).   When adjusting the width in the general section use the preview window to resize.

Data Type: Integer

DisplayBase Property

Description: Determines if the wheel's Value will be displayed in decimal, binary, octal or hexidecimal base.

Custom: Value section of the Custom Properties page.

Visual Basic: [Form1.]RSWheel1.DisplayBase

Remarks: Default value is 0. The slot machine only supports the decimal base.

Selections available are:

Settings	Description
0	Decimal
1	Binary
2	Octal
3	Hexidecimal

Data Type: enum DisplayBase

DisplayButtons Property

Description: Displays vertical scroll bars on the wheel.

Custom: Adjusted in the General section of the Custom Properties page with a checkbox in the Options window.

Visual Basic: [Form1.]RSWheel1.DisplayButtons

Remarks: The default value is true. The spin type of "No Spin" does not have display buttons.

Data Type: Boolean

DisplayLine Property

Description:	Horizontal line displayed through the center of the wheel.
Custom:	Adjusted in the General section of the Custom Properties page with a checkbox in the Options window.
Visual Basic:	[Form1.]RSWheel1.DisplayLine
Remarks:	The default value is true.
Data Type:	Boolean

DisplayNumbers Property

Description: Displays the start and end values

Custom: Adjusted in the General section of the Custom Properties page by selecting the *Display Start/End Values* in the Options window.

Visual Basic: [Form1].RSWheel1.DisplayNumbers

Remarks: The default value is true.

Data Type: Boolean

DisplaySign Property

Description: Displays either a + or - sign in the left-hand column of the wheel display.

Custom: General section of the Custom Properties page with a checkbox in the Options window.

Visual Basic: [Form1.]RSWheel1.DisplaySign

Remarks: The default value is false. This is not available for use with the slot machine. Will only be used with decimal based values.

Data Type: Boolean

DownArrowColor Property

Description:	Determines the down arrow color of the vertical scroll bar.
Custom:	Display section of the Custom Properties page. The DownArrowColor is set by selecting DownArrowColor from the Colors combo box and then selecting a color from the list of available choices.
Visual Basic:	[Form1.]RSWheel1.DownArrowColor
Remarks:	The default color is black.
Data Type:	OLE_Color

EndChar Property

Description: Ends the range of selected ASCII characters.

Custom: Adjust in the Value section of the Custom Properties page in the randomized section.

Visual Basic: [Form1.]RSWheel1.EndChar

Remarks: The default value is 57; which is the digit 9.   EndChar is set at design time.

Data Type: Integer

HandleDown Property

Description: Puts the wheel in a continuous spin mode.

Custom: N/A on the Custom Properties page.

Visual Basic: [Form1.]RSWheel1.HandleDown

Remarks: The default is false.   This only works for the SpinType set to "Slot Machine".   Clicking the scroll bar will stop the spinning.   Values displayed are random and decimal based. This property is available through code only and is not accessible through Custom Property Pages or Visual Basic Property Window.

Data Type: Boolean

IncrementInterval Property

Description: Determines the interval at which to increment the internal counter of timer ticks. Increment interval *   increment step determines the internal total increment interval.

Custom: Adjust in the Value section by clicking on the # sign in the increment section and bringing up a number pad on which you may enter a value.

Visual Basic: [Form1.]RSWheel1.IncrementInterval

Remarks: The default value is 0.1.   This is only used when accelerated spinning is active.

Data Type: Double

IncrementStep Property

Description: This is an internal counter of timer ticks.   Used for delay spinning in a base other than decimal.   Also used for animation.

Custom: Adjust in the Value section by clicking on the # sign in the increment section and bringing up a number pad on which you may enter a value.

Visual Basic: [Form1.]RSWheel1.IncrementStep

Remarks: The default value is one.   This is only applied for delay spinning.

Data Type: Double

IncrementValue Property

Description:	Determines the amount of value change per click of the wheel.
Custom:	Adjust in the Value section by clicking on the # sign in the increment section and bringing up a number pad on which you may enter a value.
Visual Basic:	[Form1.]RSWheel1.IncrementValue
Remarks:	The default value is one and is set at design time.
Data Type:	Double

MaxIncrementMultiple Property

Description: This value sets the limit for increasing the increment step.

Custom: Adjust in the Value section by clicking on the # sign in the increment section and bringing up a number pad on which you may enter a value.

Visual Basic: [Form1.]RSWheel1.MaxIncrementMultiple

Remarks: Internal increment step does not increase if the total increment value is greater than the maximum increment multiple.   The default value is 2.5.   Valid   range is from 0 to 100

Data Type: Double

NumberOfColumns Property

Description: Number of columns that the wheel will display.

Custom: Adjust in the General section of the Custom Properties page.   Right mouse click on the wheel display and select columns.

Visual Basic: [Form1.]RSWheel1.NumberOfColumns

Remarks: The default value is five.

Data Type: Integer

NumberOfDecimalColumns Property

Description: This determines the number of decimal digits that will be displayed in the columns of the wheel value.

Custom: Adjust in the General section of the Custom Properties page.   Right mouse click on the wheel display and select columns.

Visual Basic: [Form1.]RSWheel1.NumberOfDecimalColumns

Remarks: The default value is zero.   The decimal point will take up one column of the wheel display.   This is not used for the slot machine.

Data Type: Integer

OverflowBackColor Property

Description: Sets the background color if the value of the wheel exceeds the number of available display columns.

Custom: Adjust in the Display section of the Custom Properties page.   The OverflowBackColor is set by selecting OverflowBackColor from the Colors combo box and then selecting a color from the list of available choices.

Visual Basic: [Form1.]RSWheel1.OverflowBackColor

Data Type: OLE_Color

OverflowTextColor Property

Description: Sets the text color of the value on the wheel when the value is beyond the end value.

Custom: Adjust in the Display section of the Custom Properties page.   The OverflowTextColor is set by selecting OverflowTextColor from the Colors combo box and then selecting a color from the list of available choices.

Visual Basic: [Form1.]RSWheel1.OverflowTextColor

Data Type: OLE_Color

Rounding Property

Description:	Rounds the last decimal value of the current display value.
Custom:	Adjusted in the General section of the Custom Properties page with a checkbox in the Options window.
Visual Basic:	[Form1.]RSWheel1.Rounding
Remarks:	The default is false.
Data Type:	Boolean

SpinInterval Property

Description: This determines the space between a digit display in a column and the next digit to be displayed as it scrolls.

Custom: Adjust in the Value section of the Custom Properties page.

Visual Basic: [Form1.]RSWheel1.SpinInterval

Remarks: The default value is 60.   Valid range is from   0 to 100.

Data Type: Integer

SpinType Property

Description: Selects the type of wheel spinner to display.

Custom: Adjusted in the General section of the Custom Properties page by selecting a type from the spin type combo box.

Visual Basic: [Form1.]RSWheel1.SpinType

Remarks: The default value is 0.

Available choices are:

Settings	Description
0	Single Spin
1	Classic
2	Add-A-Spin
3	Electronic Advance
4	Slot Machine
5	Read Only

Data Type: enum SpinTypes

StartChar Property

Description:	This determines the start of selected ASCII characters.
Custom:	Adjusted in the Value section of the Custom Properties page under the randomized section.
Visual Basic:	[Form1.]RSWheel1.StartChar
Remarks:	The default value is 48, which is the digit 0. This is set at design time
Data Type:	Integer

TimePeriod Property

Description: Sets the value for the internal timer.   Every time period the increment value is added to the current value.

Custom: Adjust in the Value section of the Custom Properties page.

Visual Basic: [Form1.]RSWheel1.TimePeriod

Remarks: The default value is 50.   Valid range is from 0 to 1000.

Data Type: Integer

UpArrowColor Property

Description: This sets the color of   the up arrow on the vertical scroll bar.

Custom: Adjusted in the Display section of the Custom Properties page.   The UpArrowColor is set by selecting UpArrowColor form the Colors combo box and then selecting a color from the list of available choices.

Visual Basic: [Form1.]RSWheel1.UpArrowColor

Data Type: OLE_Color

ValueString Property

Description: String representation of the wheel's value.

Custom: N/A on the Custom Properties page.

Visual Basic: [Form1.]RSWheel1.ValueString

Data Type: String

INI Files Used for RSWheel

RSWheel saves some of the information such as the default files names etc. in the RSTOOLS.INI file located in the c:\windows directory. Only the following information should be changed or altered and others section should not be altered for proper operation of the OCX.

The following section sets the default template file for RSWheel.   The user templates are stored in this file.

[cfg]

cfg=c:\windows\mytempls.rwc

where mytempls.rwc is the default template file you want your templates to be saved in.

The symbol information for the DDE link is set in the following section.

[sym]

symbolname=server|topic|item

where the 'server' is the DDE server, 'topic' is the DDE topic and 'item' is the DDE item. Example of the above is

[sym]

subtotal= Excel|[Book1]Sheet1|R6C2

total= Excel|[Book1]Sheet1|R8C2

See Visual Basic Help for more information

Binding to the Data Control

With the RSTools controls and Visual Basic's Data control, you can create an application to display edit, and update (log) information from many types of existing databases.   Creating a data-aware application with Visual Basic can be done easily through a few steps, and requires very little code.

The first thing you need to do to make a "data-aware" application is to add the Visual Basic Data control or the Remote Data control to your form.   Next, you will have to specify the database you would like to get the information from.   Once you have decided on the database, you must place the RSTools controls on the form and set their properties to "bind" to Visual Basic's Data control.   Depending on the property settings you choose for DataUpdate, when you run the application you will be able to view data coming from your server, view data from a database, or log data to the database.

The RSTools controls combined with Visual Basic's Data control give you seamless access to many standard databases, including Microsoft Access, Btrieve, dBASE , Microsoft FoxPro, and Paradox.   If the Remote Data control is used, ODBC databases such as SQL Server and Oracle are accessible anywhere on a network.

Data Binding topics

Quick Start

Working with other types of databases

Quick Start - Using RSTools to read from DataSource.

The following procedure gives you a brief overview of how to "bind" or use the RSData control (one of the RSTools controls) and Visual Basic's data control in your application.   Below we will use the COLOR.MDB sample database that comes with RSTools.

How to use the RSData (or any RSTools control) control as a "Database" tool.

1. Select the RSData control in the toolbox and draw a RSData control on the form.   The RSData control icon looks like this:
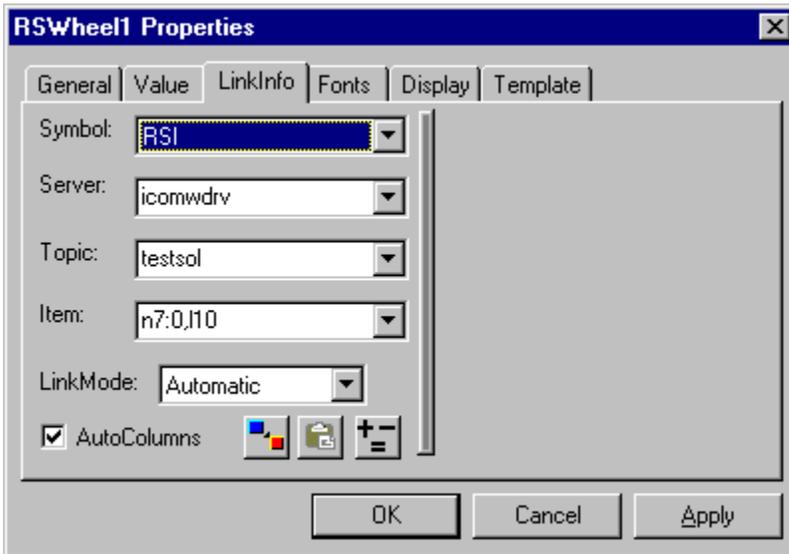
Click and drag the control on your form.   It will look like a label control.   The default name of the control is RSData1.

1. Select the Visual Basic Data control and draw a control on the form.   The Data control icon looks like this:
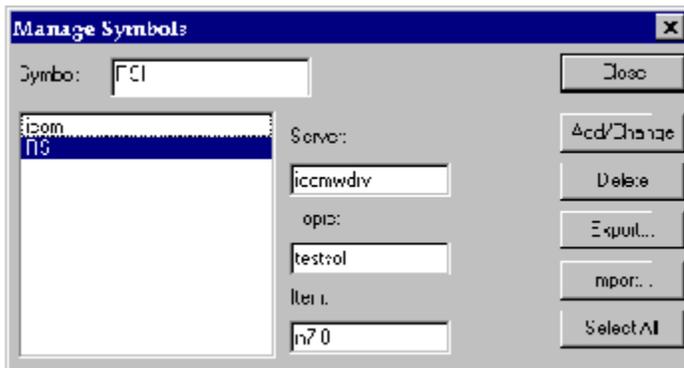
After you have drawn the control on the form, it will look like this, with the default caption as Data1.

1. In the properties window for the Visual Basic Data control, set the DatabaseName property to the filename you want to connect to C:\RSWKSHOP\RSTOOLBX\DEMO\COLOR.DBF.

1. For the **Connect** property, you must specify "Access" Then set **RecordSource =** "COLORS".   The RecordSource is the name of the database table.
1. Click once on the RSData control and bring up it's property window.   In the properties window, set the **DataSource** = Data1, the **DataField** = COLORNAME, and set the **DataUpdate** = 2- Data Source.

RSWheel1 Properties

General | Value | LinkInfo | **Fonts** | Display | Template

Property Name: `Font`

Font:
`MS Sans Serif`

- Tr Monotype Corsiva
- Tr Monotype Sorts
- MS Dialog
- MS Dialog Light
- MS LineDraw
- **MS Sans Serif**

Font Style:
`Regular`

Size:
`9.09`

Effects
- ☐ Strikeout
- ☐ Underline

Sample
AaBbYyZz

[OK] [Cancel] [Apply]

RSWheel1 Properties

General | Value | LinkInfo | Fonts | **Display** | Template

Colors:
`BackColor` ▼ [...] `Button Face` ▼

Pictures:
`Picture` ▼ [...] [Clear]

☐ Flash on New Data   ☐ Flash Always On

FlashSpeed: `200`

☑ LinkTip
`                    `

FlashTime: `2000`

Picture Preview and Border Size:

`No Bevel` ▼

[OK] [Cancel] [Apply]

---

1. Now run the application.   The RSTools control displays the data in the "COLOR" field based on which database record you display.   You can use the arrow buttons in the data control to move through the records.

Working with other types of Databases

The RSTools controls support all database types that Visual Basic's Data control and Remote Data control supports.   These include: Microsoft Access, dBASE, Paradox, FoxPro, and many other ODBC compliant drivers.

If you used any database other than Access, in earlier versions of Microsoft Visual Basic, you would have had to create an initialization file (*.INI) for your application.   This INI file would need to contain ISAM information for the database type you have chosen, and would have the same name as your Visual Basic EXE name.   The INI file would be placed in your C:\WINDOWS directory. With Visual Basic 4.0, you no longer have to be concerned with creating your own INI files for the ISAM drivers; Visual Basic will take care of connecting to these databases.

Note   Refer to the Visual Basic Programmers Guide for more information on other types of databases.

AllowChangeEvent Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Enables the firing of a Change event when data in the control changes.
Visual Basic	*object*.**AllowChangeEvent**[*= setting %*]
Settings	The following table lists the AllowChangeEvent property settings for the control.

Settings	Description
False	Do not allow the Change event to occur.
True	Allow the Change event to occur.

Data Type	Integer

AutoColumns Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Creates the correct number of columns to be displayed based on the LinkItem.
Custom	No access via custom property page.
Visual Basic	*object*.**AutoColumns[**=*setting %***]**
Remarks	AutoColumns will work only if the LinkItem length divided by the number of columns leaves a remainder of zero. For example, a LinkItem of "C5:0,L11,C2" would display as only one column because eleven divided by two leaves a remainder of one. AutoColumns will only work with AdvanceDDE, which requires RSJunctionBox.
Data Type	Integer

BackColor Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the background color for the control.
Custom	Display section.
Visual Basic	*object***.BackColor[=***setting %***]**
Settings	Visual Basic uses the Microsoft Windows operating environment red-green-blue (RGB) color scheme. The settings for color are:

Setting	Description
Normal RGB colors	Colors specified by using the Color palette or by using the RGB or QBColor functions in code.
System default colors	Colors specified by system color constants listed in the Visual Basic (VB) object library in the Object Browser. The Windows operating environment substitutes the user's choices as specified in the Control Panel settings.

Data Type   Color

BackStyle Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines if the control will be transparent or opaque.
Custom	No access via custom property page.
Visual Basic	*object*.**BackStyle[**=*setting* **%]**

Settings

Settings	Description
0	Sets the control to transparent.
1	Sets the control to opaque.

Data Type   Integer

BevelHeight Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the height of the top and bottom beveled edges around the control.
Custom	No access via custom property page.
Visual Basic	*object***.BevelHeight[**=*setting %***]**
Data Type	Integer

BevelHighlight Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the highlight color of the control's beveled border.
Custom	Display section.
Visual Basic	*object***.BevelHighlight[**=*setting* **%]**
Remarks	BevelHighlight is dependent on the bevel style chosen for the control. If BevelStyle is set to either 1 (indented) or 3 (beveled), the control's outside border will be given a 3 dimensional appearance by displaying a bevel highlight and a bevel shadow.
Data Type	Color

BevelShadow Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the shadow color of the control's beveled border.
Custom	Display section.
Visual Basic	*object*.**BevelShadow[=***setting %***]**
Remarks	BevelShadow is dependent on the bevel style chosen for the control. If BevelStyle is set to either 1 (indented) or 3 (beveled), the control's outside border will be given a 3 dimensional appearance by displaying a bevel highlight and a bevel shadow.
Data Type	Color

BevelStyle Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the style of the beveled area around the control object. A beveled appearance is one that has a three dimensional look. This property controls the beveled appearance of the outside border around the control.
Custom	Adjusted in the Display section of the custom properties page. The BevelStyle list box in the lower right hand corner has a drop drop down menu with six styles available for the bevel:

Settings	Description
0	None
1	Indented
2	Marble
3	Beveled
4	Thick
5	Stripe

Visual Basic	*object***.BevelStyle[**=*setting %***]**
Remarks	If a bevel does not appear when this property is set to True, make sure that the BevelWidth and BevelHeight properties are set to a value greater than zero.
Data Type	Integer

BevelWidth Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the width of the left and right beveled edges around the control.
Custom	No access via custom property page.
Visual Basic	*object*.**BevelWidth[**= *setting %***]**
Data Type	Integer

BorderBeveled Property

Applies To   RSCompare, RSVessel

Description   Toggles display of BorderHighlight and BorderShadow.

Custom   Adjusted in the General section of the custom properties page with a checkbox in the Options window.

Visual Basic   *object*.**BorderBeveled[=***setting %***]**

Remarks   When set to False in the RSVessel control, the BorderHighlight and BorderShadow are not displayed, but PolyBorderColor is displayed. When True, all three are shown. When set to False in the RSCompare control, BorderHighlight and BorderShadow are not displayed, while DownBorderColor, EqualBorderColor, and UpBorderColor are still shown. When set to True, all are shown.

Data Type   Integer

BorderColor Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Determines the color of the border around the control object.

Custom   Display section.

Visual Basic   *object*.**BorderColor[**=*setting %***]**

Remarks   The BorderColor property can be set to any color in the palette or to a hex integer value that represents a color.

Data Type   Color

BorderHighlight Property

Applies To   RSCompare, RSVessel

Description   Sets the Highlight color for the three-dimensional border of the applicable controls' graphic shapes.

Custom   Display section.

Visual Basic   *object*.**BorderHighlight[**=*setting %***]**

Remarks   For the RSCompare control, this property sets the BorderHighlight color for all of its states - Up, Equal, and Down.

Data Type   Color

BorderInner Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines if the inner border is displayed around the control object.
Custom	No access via custom property page.
Visual Basic	*object*.**BorderInner[** = *setting* **%]**
Remarks	This property is dependent upon the BevelStyle property in that the inner border is displayed only when a BevelStyle other than 0 (none) is chosen.
Data Type	Integer

BorderInnerColor Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the color of the inner border around the control object.
Custom	Display section.
Visual Basic	*object*.**BorderInnerColor[=***setting %***]**
Remarks	The BorderInnerColor property can be set to any color in the palette or to a hex integer value that represents a color.
Data Type	Color

BorderShadow Property

Applies To   RSCompare, RSVessel

Description   Sets the Shadow color for the three-dimensional border of the applicable controls' graphic shapes.

Custom   Display section.

Visual Basic   *object***.BorderShadow[**=*setting %***]**

Remarks   For the RSCompare control, this property sets the BorderShadow color for all of its states - Up, Equal, and Down.

Data Type   Color

BorderStyle Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the type of border displayed around the control object.
Custom	No access via custom property page.
Visual Basic	*object*.**BorderStyle***[=setting %]*
Remarks	There are two border styles available: 0 = None and 1 = Fixed Single.
Data Type	Integer

BorderWidth Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the width of the border displayed around the control object.
Custom	No access via custom property page.
Visual Basic	*object***.BorderWidth[=***setting* **%]**
Remarks	The BorderStyle property needs to be set to 1 (Fixed Single) in order to make changes in BorderWidth visible.
Data Type	Integer

BottomBorder Property

Applies To RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description Sets the distance between bottom external border of the control and bottom of the control.

Custom Adjusted in the General section of the custom properties page. Placing the mouse pointer over either of the control graphic's lower corners will cause a sizing pointer to appear. Clicking and holding the left mouse button allows the bottom border for the control to be adjusted to the appropriate position with respect to the bottom external border of the control. Releasing the mouse button will then set the BottomBorder property.

Visual Basic *object*.**BottomBorder[=***setting* **%]**

Remarks The BottomBorder property controls the distance between the outside border of the control and the lower edge of the control. Use this property to adjust the space available for displaying a caption or value.

Data Type Integer

ButtonBorderWidth Property

Applies To	RSCompare, RSVessel
Description	Sets the width of the BorderHighlight and BorderShadow properties for applicable controls.
Custom	No access via custom property page.
Visual Basic	*object*.**ButtonBorderWidth[**=*setting %***]**
Remarks	Sets the width of the three-dimensional border (shown with the BorderHighlight and BorderShadow properties) around the RSVessel and RSCompare controls' graphic shapes. For these two controls there is not a corresponding ButtonBorderHeight property as in the RSButton control.
Data Type	Integer

ButtonFaceColor Property

Applies To   RSButton, RSSlider, RSWheel

Description   Sets the color for the face of the control's buttons.

Custom   Display section.

Visual Basic   *object***.ButtonFaceColor[=***setting %***]**

Remarks   For the RSButton control, the Button's (all styles) face color is set with ButtonFaceColor,   for the
RSSlider control, the face color of the its two scroll buttons is set with ButtonFaceColor, and for
the RSWheel control ButtonFaceColor sets the face color for the up and down scroll arrow
buttons.

Data Type   Color

ButtonHighlight Property

Applies To   RSButton, RSSlider, RSWheel

Description   Sets the highlight color for the control's three-dimensional button(s) effect.

Custom   Display section.

Visual Basic   *object*.**ButtonHighlight[**=*setting* %**]**

Remarks   ButtonHighlight sets the highlight color for the Button control's three-dimensional outside border, sets the highlight color on the scroll buttons for the Slider, and sets the highlight color for the up and down scroll arrow buttons for the Wheel.

Data Type   Color

ButtonShadow Property

Applies To   RSButton, RSSlider, RSWheel

Description   Sets the shadow color for the control's three-dimensional button(s) effect.

Custom   Display section.

Visual Basic   *object*.**ButtonShadow[**=*setting %***]**

Remarks   ButtonShadow sets the shadow color for the Button control's three-dimensional outside border, sets the shadow color on the scroll buttons for the Slider, and sets the shadow color for the up and down scroll arrow buttons for the Wheel.

Data Type   Color

Caption Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the caption to be displayed on the control.
Custom	Set in the Value section of the custom properties page with the "Caption" text box. Text entered in this text box will appear as the control's caption.
Visual Basic	*object*.**Caption[**=*setting %***]**
Remarks	The DisplayCaption property must be set to True in order for the Caption to be shown.
Data Type	String

CaptionBackColor Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the background color of the caption for the control.
Custom	Display section.
Visual Basic	*object*.**CaptionBackColor[**=*setting %*]
Remarks	The CaptionBackColor property can be set to any color in the palette or to a hex integer value representing a color. If the CaptionTransparent property is set to True, CaptionBackColor will not be shown.
Data Type	Color

CaptionColor Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Sets the color of the caption text for the control.

Custom   Display section.

Visual Basic   *object*.**CaptionColor[**=*setting %***]**

Remarks   The CaptionColor property can be set to any color in the palette or to a hex integer value representing a color. The DisplayCaption property must be set to True in order for this property to have any effect.

Data Type   Color

CaptionShadow Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Enables/disables the shadow behind the caption for the control.
Custom	Adjusted in the General section of the custom properties page with a checkbox in the Options window.
Visual Basic	*object*.**CaptionShadow [**=*setting %*]
Remarks	The DisplayCaption property must be True before this property will have any visible effect. When set to True, a shadow will be displayed behind the caption text; when set to False, the shadow will not be displayed.
Data Type	Integer

CaptionShadowColor Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the color of the caption's shadow for the control.
Custom	Display section.
Visual Basic	*object*.**CaptionShadowColor[**=*setting %***]**
Remarks	The CaptionShadowColor property can be set to any color in the palette or to a hex integer value representing a color. The DisplayCaption and the CaptionShadow properties must be set to True before this property will have any visible effect.
Data Type	Color

CaptionTransparent Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Enables/disables display of the CaptionBackColor.
Custom:	Adjusted in the General section of the custom properties page with a checkbox in the Options window.
Visual Basic	*object*.**CaptionTransparent[**=*setting %***]**
Remarks	When set to True, the CaptionBackColor is transparent and will not be displayed; when set to False the CaptionBackColor will be displayed. DisplayCaption must be set to True before this property will have any visible effect.
Data Type	Integer

CaptionX Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the horizontal position of the caption with respect to the left edge of the control object.
Custom	Adjusted in the General section of the custom properties page. The red square caption position indicator on the control graphic shows the relative position of the caption. To change the caption position, click, drag, and drop the red square in the desired location. If the red square is not displayed, the DisplayCaption property needs to be set to True.
Visual Basic	*object*.**CaptionX [**=*setting %***]**
Remarks	The range for the CaptionX property is from 0 to 100 with zero being the left edge and 100 being the right edge of the control. The DisplayCaption property must be set to True before this property will have any visible effect.
Data Type	Integer

CaptionY Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Sets the vertical position of the caption with respect to the top edge of the control object.

Custom   Adjusted in the General section of the custom properties page. The red, square caption position indicator on the control graphic shows the relative position of the caption. To change the caption position, click,   drag, and drop the red square in the desired location.   If the red square is not displayed, the DisplayCaption property needs to be set to True.

Visual Basic   *object***.Control.CaptionY[=** *setting %***]**

Remarks   The range for the CaptionY property is from 0 to 100 with zero being the top edge and 100 being the bottom edge of the control. The DisplayCaption property must be set to True before this property will have any visible effect.

Data Type   Integer

Clip Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Returns or sets the contents of the data elements in a control. Not available at design time.
Visual Basic	*object*.**Clip** *[= string]*

The Clip property syntax has these parts:

Part	Description
object	An object expression that evaluates to an object in the Applies To list.
string	A string expression containing the element contents.

Remarks The string can contain the contents of multiple rows and columns.   In the string, a tab character (ANSI character 9) indicates a new element in a row, and a carriage return (ANSI character 13) indicates the beginning of a new row.   Use the Chr function to embed these characters in strings.   For example, the following line of code puts text into 4 Gauge controls that are displayed in 2 rows by 2 columns:

RSGauge1.Clip = "231" & Chr(9) & "400" & Chr(13) & "278" & Chr(9) & "58"

Compiling a string and setting a control's **Clip** property is an excellent way to programmatically use a single instance of a control to display multiple values.

The clip property works in a similar fashion for the other RSTool controls.

Data Type String

DataChanged Property

Description   Returns or sets a value indicating that RSData in a control has changed by some process other than by retreiving RSData from the current record.

Visual Basic   *object*.*Control*.**RSDataChanged***[=setting]*

Remarks   The Visual Basic Data control will record changes made to a bound database as you move through its records. In order to avoid recording changes made to the database's records, set the DataChanged property to False in the Data control's Validate event. When the Data control is moved to the next record, the Validate event is fired and if DataChanged is True, changes made to the database are recorded.

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel

DataField Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Binds the control to a particular field in a database. Used for reading from and writing to a database. The DataSource property must be set prior to this property to enable browsing.
Custom	No access via custom property page.
Visual Basic	*object*.**DataField[**=*setting %***]**
Remarks	The DataField, DataSource, and DataUpdate properties work together with the Visual Basic Data control to bind the RSTools control to a database.
Data Type	String

DataSource Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Binds the control to the particular Visual Basic data control which is bound directly to a database.   The available data controls appear in a drop-down list next to the property name in the properties window

Custom   No access via custom property page.

Visual Basic   *object*.**DataSource[**=*setting %*]

Remarks   DataSource is read/write at design time; not available at run time. The DataField, DataSource, and DataUpdate properties work together with the Visual Basic Data control to bind the RSTool control to a database.

Data Type   String

DataUpdate Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the primary source of displayed data as well as which data triggers a Change event.
Visual Basic	*object*.**DataUpdate[**=*setting %***]**
Remarks	Available settings for the DataUpdate property are 0 = Data Link, which displays only the data specified by the LinkItem; 1 = Data Source, which displays only the data (field in database) that the control is bound to; 2 = Data Link, Log To Data Source, which logs data to the Data Source specified by the data control; and 3 = No Update. When DataUpdate is set to 1 (Data Source), you will be able to view the contents of the field that the control is bound to. When DataUpdate is set to 2 (Data Link, Log to Data Source) and LinkMode is set to Automatic, the data control will add new records to the database whenever the control's value changes.
Data Type	Integer

DataValue(Index) Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel
Description	When requesting an array of data by using the block method (i.e. LinkItem = t4:0.acc, L25), you can use the DataValue property to select the specified element in the array. DataValue(0) for a single item data link is valid as well, even though it is not an array. DataValue(n) is an array property and must have an index.
Visual Basic	*object*.**DataValue(***item number***)**
Remarks	Specifying array items in your LinkItem string makes it very easy to move large blocks of data with only one control. If you want to use element 25, simply specify that number. (i.e. rsdata1.datavalue(24)).
Data Type	Integer

DecimalPlaces Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the number of decimal places that will be shown when the value is displayed on the control.
Custom	Adjusted in the Value section of the custom properties page by changing the value in the "Decimals" text box. This value can be changed either by typing the number directly or by using the up and down scroll buttons.
Visual Basic	*object***.DecimalPlaces[**=*setting***]**
Remarks	The range for the DecimalPlaces property value is from 0 to 9. TheDisplayValue property must be set to True before this property will have any visible effect, however the setting affects the **Value** and **DataValue(n)** properties whether visible or not.
Data Type	Integer

DisplayBorder Property

Applies To   RSCompare, RSVessel

Description   Enables/disables all borders for the control's graphic shape.

Custom   Enabled/disabled in the Options window of the General section of the properties page.

Visual Basic   *Object*.**DisplayBorder[**=*setting***]**

Remarks   In the case of the RSCompare control, when set to True a three-dimensional border will be displayed around the control's graphic shapes using the **DownBorderColor**, **EqualBorderColor**, **UpBorderColor**, **BorderHighlight**, and **BorderShadow** properties; when set to False none of those properties will be displayed.   In the case of the RSVessel control, when set to True, a three-dimensional border around the fill area will be displayed using the **PolyBorderColor**, **BorderHighlight**, and **BorderShadow** properties; when set to False none of those properties will be displayed.

Data Type   Integer

DisplayCaption Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Determines if the caption will be displayed on the control.

Custom   Adjusted in the General section of the custom property page. Place the mouse pointer inside the setup frame of the General Tab and right-click to display the   popup property menu. Clicking on "Caption" on this menu will toggle a check mark on and off which represents the True state for the DisplayCaption property. When the DisplayCaption is True, a red square caption position indicator appears on the control graphic in the General section.

Visual Basic   *object*.**DisplayCaption[**=*setting %***]**

Remarks   When set to True the Caption will be displayed; when set to False the Caption will not be displayed.

Data Type   Integer

DisplayCaptionVertically Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines if the caption will be displayed vertically on the control.
Custom	Adjusted in the General section of the property page. The red indicator (square) on the control graphic represents the relative position of the caption on the control. Double clicking on the red indicator toggles the caption display between horizontal and vertical. When the caption is vertical the red indicator becomes a rectangle, and when the caption is horizontal the red indicator is a square.
Visual Basic	*obect*.**DisplayCaptionVertically[=***setting***]**
Remarks	When set to True, the caption will be displayed vertically; when set to False, the caption will be displayed horizontally.
Data Type	Integer

DisplayPicture Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Determines if a picture will be displayed on the control.

Custom   Adjusted in the General section of the custom properties page with a checkbox in the Options window.

Visual Basic   *object***.DisplayPicture[**=*setting %***]**

Remarks   When set to True, the picture designated in the Picture property will be displayed; when set to False, the picture will not be displayed. Because the RSCompare control has three possible picture properties (PictureUp, PictureEqual, PictureDown), this property applies to all three.

Data Type   Integer

DisplayValue Property

Applies To   RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Determines if the control's current value will be displayed.

Custom   Adjusted in the General section of the custom property page. Place the mouse pointer inside the setup frame of the General Tab and right-click to display the popup property menu. Clicking on "Value" on this menu will toggle a check mark on and off which represents the True state for the DisplayValue property.

Visual Basic   *object*.**DisplayValue[**=*setting %*]

Remarks   When set to True, the value will be displayed; when set to False the value will not be   displayed.

Data Type   Integer

DrawDisabledShadow Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines if a shadow will be displayed over the entire control when it is disabled.
Custom	Adjusted in the General section of the custom properties page with a checkbox in the Options window.
Visual Basic	*object*.**DrawDisabledShadow[**=*setting* **%]**
Remarks	When set to True, a shadow will be displayed when the control's Enabled property is set to False. When set to False, the shadow will not be displayed if the Enabled property is set to False. The shadow is not displayed if the control's Enabled property is set to True.
Data Type	Integer

EndValue Property

Applies To	RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the maximum for the value range of the control.
Custom	Adjusted in the "End Value" text box in the Value section of the custom properties page.
Visual Basic	*object*.**EndValue[**=*setting %*]
Remarks	For the RSGauge and RSSlider controls, EndValue applies to both the Scale1 and Scale2 value ranges. For the RSCompare, RSData, and RSWheel controls, the EndValue will be ignored if the UseStartEndValue property is set to False.
Data Type	Double

ExpressionForRead Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Determines the mathematical expression that will be performed on the link item value when the control reads that value.

Custom   Adjusted in the LinkInfo section of the custom property page. When the "Expression" button is pressed another form appears with two input boxes. Input the appropriate mathematical expression into the "Read Expression" text box.   The expression must be in the form item[mathematical expression]. For example, "item+5" would add 5 to the LinkItem value.

Visual Basic   *object*.**ExpressionForRead[**=*setting %***]**

Remarks   This property allows you to perform a mathematical function on the link item as it is read by the control. The expression must be in the form item[mathematical expression]. For example, "item+5" would add 5 to the LinkItem value.

                            Optional Calculation/Math module required, RSCALC32.DLL.

Data Type   String

ExpressionForWrite Property

Applies To RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description Determines the mathematical expression that will be performed on the link item when the control writes that value.

Custom Adjusted in the LinkInfo section of the custom property page. When the "Expression" button is pressed another form appears with two input boxes. Input the appropriate mathematical expression into the "Write Expression" text box.   The expression must be in the form item[mathematical expression]. For example, "item+5" would add 5 to the LinkItem value.

Visual Basic *object*.**ExpressionForWrite[=***setting* **%]**

Remarks This property allows you to perform a mathematical function on the link item as a write is performed by the control. The expression must be in the form item[mathematical expression]. For example, "item+5" would add 5 to the LinkItem value.

Optional Calculation/Math module required, RSCALC32.DLL.

Data Type String

FaceBorderColor Property

Applies To RSGauge, RSSlider, RSWheel

Description Sets the color of the face border for the control.

Custom Display section.

Visual Basic *object*.**FaceBorderColor[=*color*]**

Remarks The FaceBorderColor property can be set to any color in the palette or a hex integer value representing a color. The DisplayFace property must be True before this property will have any visible effect.

Data Type Color

FaceColor Property

Applies To	RSGauge, RSSlider, RSWheel
Description	Sets the color of the face for the control.
Custom	Display section.
Visual Basic	*object*.**FaceColor[**=*setting %*]
Remarks	The FaceColor property can be set to any color in the palette or a hex integer value representing a color. The DisplayFace property must be True before this property will have any visible effect.
Data Type	Color

FillColor Property

Applies To	RSGauge, RSVessel
Description	Determines the color of the filled area on the control.
Custom	Display section.
Visual Basic	*object*.**FillColor[**=*setting %***]**
Remarks	The FillColor property can be set to any color in the palette or a hex integer value representing a color. For the Gauge control this property is only used with the LED-style, Vertical and Horizontal Gauge types (4-7).
Data Type	Color

FlashEnabled Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines if the control will flash when its value changes.
Custom	Enabled / disabled in the Display section of the properties page with the "Flash on New Data" check box.
Visual Basic	*object*.**FlashEnabled[**=*setting %***]**
Data Type	Integer

FlashOn Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines if the control will continuously flash from visible to invisible.
Custom	Enabled / disabled in the Display section of the properties page with the "Flash Always On" check box.
Visual Basic	*object*.**FlashOn [** = *setting %*]
Remarks	When set to True the control flashes continuously; when set to False the control does not flash. The FlashSpeed property adjusts the rate that the control flashes on and off.
Data Type	Integer

FlashSpeed Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the rate that the control flashes on and off.
Custom	Set on the Display section of the custom properties page with the "FlashSpeed" text box.
Visual Basic	*object***.FlashSpeed[=***setting %***]**
Remarks	The setting for FlashSpeed is in milliseconds.
Data Type	Long

FlashTime Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines how long the control should flash when server sends new data and FlashEnabled is True.
Custom	Set on the Display section of the custom properties page with the "FlashTime" text box.
Visual Basic	*object*.**FlashTime[**=*setting %***]**
Remarks	Enabled only when the "Flash On New Data" check box is checked. The setting for FlashTime is in milliseconds.
Data Type	Long

Font Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the font name, style, and size of text that will be used for the control's caption and value.
Custom	Set on the Fonts section of the custom properties page.
Visual Basic	*object*.**Font[**=*setting***]**
Remarks	Available effects on the Fonts section of the custom properties page are Strikeout and Underline. These can be enabled and disabled with check boxes on the Font section.
Data Type	Font

KnobWidth Property

Applies To   RSGauge, RSSlider

Description   Determines the width of the knob displayed on the control.

Custom   The knob width can be changed on the General section of the custom properties page by clicking the mouse on the knob graphic and drag-dropping the knob outline to the desired width.

Visual Basic   *object*.**KnobWidth[**=*setting %***]**

Remarks   For the Gauge control, KnobWidth will have a visible effect only when the NeedleType property is set to a knob-type setting (3 = Knob; 4 = Knob-Plate; 5 = NeedleKnob; 6 = Needle-Knob-Plate). For the Slider, the KnobWidth property will affect both the button and pointed style knobs.

For the Gauge control, KnobWidth is represented as Diameter.

Data Type   Integer

LeftBorder Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Sets the distance between left external border of the control and left edge of the control.

Custom   Adjusted in the General section of the custom   properties page. Placing the mouse pointer over either of the control graphic's left corners will cause a sizing pointer to appear. Clicking and holding the left mouse button allows the bottom border for the control to be adjusted to the appropriate position with respect to the left external border of the control. Releasing the mouse button will then set the LeftBorder property.

Visual Basic   *object*.**LeftBorder[**=*setting %***]**

Remarks   The LeftBorder property controls the distance between the outside border of the control and the left edge of the control. Use this property to adjust the space available for displaying a caption or value.

Data Type   Integer

LinkErrorDisplay Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines if an error message will be displayed in a control if an error has occurred when attempting to establish a DDE conversation with a LinkItem.
Custom	No access via custom property page.
Visual Basic	*[Form1.]Control.**LinkErrorDisplay**[=setting %]*
Remarks	When set to True, link error messages will be displayed; when set to False link error messages will not be displayed.
Data Type	Integer

LinkErrorNumber Property (Run Time Only)

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Returns the error number associated with its LinkItem. Not available at design time and read only at run time.
Custom	No access via custom property page.
Visual Basic	*[Form1.]Control.***LinkErrorNumber**
Remarks	Use the LinkErrorNumber property along with a label control to display the error number. For example: Label1.caption = rsdata1.LinkErrorNumber.
Data Type	Integer

LinkErrorString Property (Run Time Only)

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Returns the error string associated with its LinkItem. Not available at design time and read only at run time.
Custom	No access via custom property page.
Visual Basic	*[Form1.]Control.***LinkErrorString**
Remarks	Use the LinkErrorString property along with a label control to display the error string. For example: Label1.Caption = rsdata1.LinkErrorString.
Data Type	String

LinkItem Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the item portion of the data link string to which the control is linked.
Custom	Adjusted in the LinkInfo section of the custom property page.
Visual Basic	*object*.**LinkItem[=***setting %***]**
Remarks	Depending upon which type of DDE link is being established, the LinkItem can have many different formats, for example: "N7:1" is an integer address from a PLC datatable; "T4:0.ACC,L10" is a DDE block array, with a length of 10 items; "B3/0" is a binary address from a PLC datatable; "T4:11.ACC" is a timer address from a PLC datatable; and "r1c1" or "R2C2" are row and column addresses from a Microsoft Excel table.
Data Type	String

LinkMode Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the type of link to be used for a DDE conversation and activates the connection.
Custom	Adjusted in the LinkInfo section of the custom properties page.
Visual Basic	*object***.LinkMode[**=*setting %***]**
Remarks	Available options for the LinkMode property are: 0 = None; 1= Automatic; 2 = Manual; and 3 = Notify.
Data Type	Integer

LinkServer Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Determines the application or server name that the control is linked to.

Custom   Adjusted in the LinkInfo section of the custom properties page.

Visual Basic   *object***.LinkServer[**=*setting %***]**

Remarks   Depending upon which type of DDE link is being established, the LinkServer
                        can have different formats, for example: "ICOMWDRV" is the DDE server
                        name for WINtelligent Linx and "EXCEL" is the DDE server name for
                        Microsoft Excel.

Data Type   String

LinkTip Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines if a pop up LinkTip will be displayed whenever the mouse pointer is positioned above the control. The message in the LinkTip will either be the address that the control is linked to or a message specified by the LinkTipText property.
Custom	Enabled / disabled in the Display section of the custom properties page with the "Link Tip" check box.
Visual Basic	*object*.**LinkTip[**=*setting %***]**

Settings

Settings	Description
True	Displays LinkTip window.
False	Disables LinkTip window.

Remarks	When set to True, the LinkTip popup box will appear whenever the mouse pointer is positioned above the control; when set to False the LinkTip popup box will not appear. If there is not a string value entered for the LinkTipText property, the LinkTip popup message box will display the Link Server, Topic, and Item to which the control is connected.
Data Type	Integer

LinkTipBackColor Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the background color of the LinkTip popup box.
Custom	Color is set in the Display section of the custom properties page by choosing LinkTipBackColor in the properties Combo Box and then selecting a color in the color Combo Box.
Visual Basic	*object*.**LinkTipBackColor[=***setting***]**
Remarks	The LinkTipBackColor property can be set to any color in the palette or a hex integer value representing a color. The LinkTip property must be set to True before this property will have any visible effect.
Data Type	Color

LinkTipForeColor Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the color of the LinkTip message text.
Custom	Color is set in the Display section of the custom properties page by choosing LinkTipForeColor in the properties Combo Box and then selecting a color in the color Combo Box.
Visual Basic	*object*.**LinkTipForeColor[**=*setting %*]
Remarks	The LinkTipForeColor property can be set to any color in the palette or a hex integer value representing a color. The LinkTip property must be True before this property will have any visible effect.
Data Type	Color

LinkTipText Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Displays a text string that will be displayed in the LinkTip popup box, or the symbol name of a DDE address or the actual DDE address (i.e. LinkServer. LinkTopic, LinkItem).
Custom	No access via custom property page.
Visual Basic	*object*.**LinkTipText [**=*setting %*]
Remarks	This property will only be effective when the LinkTip property is set to True. The LinkTip window has an order of precedence as follows: If there is not any string value entered for this property, then the LinkTip popup window will display the Symbol name associated with the DDE address. If a Symbol name is not used then the actual DDE address will be displayed (i.e. LinkServer, LinkTopic, and LinkItem) to which the control is connected.
Data Type	String

LinkTopic Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Determines the topic portion of a data link string to which the control is linked.

Custom   Adjusted in the LinkInfo section of the custom property page.

Visual Basic   *object***.LinkTopic[**=*setting %***]**

Remarks   Depending upon which type of DDE link is being established, the LinkTopic can have different.   Formats, for example: "testsol" would be a DDE topic created for the WINtelligent Linx driver and "sheet1.xls" would be a DDE topic name for Microsoft Excel.

Data Type   String

MoveRefresh Property

Applies To	RSGauge, RSSlider
Description	Determines if the Windows repaint commands called messages will be acted upon immediately upon mouse movement over the control or if the Windows system will decide when to send the messages and repaint the control.
Custom	No access via custom properties page.
Visual Basic	*object*.**MoveRefresh[**=*setting %***]**
Remarks	When set to True the repaint messages will be acted upon immediately; when set to False the Windows system will decide the most appropriate time to send the message. On a fast machine there will probably not be a visible difference, therefore most users can set this property to False.
Data Type	Integer

NotFilledColor Property

Applies To   RSGauge, RSVessel

Description   Determines the color of the not-filled area on the control.

Custom   Display section.

Visual Basic   *object***.NotFilledColor[**=*setting %*]

Remarks   The NotFilledColor property can be set to any color in the palette or a hex integer value representing a color. For the Gauge control this property is only used with the LED-style, Vertical and Horizontal Gauge types (4-7).

Data Type   Color

NumberOfDataValues Property (Run Time Only)

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Returns the total number of individual data values represented by the control. Not available at design time. Read only at run time.

Visual Basic   *object*.**NumberOfDataValues**

Data Type   Integer

NumberOfSegments Property

Applies To	RSCompare, RSVessel
Description	Sets the number of line segments to be drawn between the green bezier nodes in the control shape. (Green bezier nodes are visible on the custom properties page.) The higher the number of segments, the more round the control's shape will appear.
Custom	Segments text box on General page.
Visual Basic	*object*.**NumberOfSegments[=***setting* **%]**
Data Type	Integer

NumbersColor Property

Applies To	RSVessel, RSWheel
Description	Sets the color of the Start and End values within the control's display area. This only applies when the DisplayStartEndValues property is set to True.
Custom	Display Section
Visual Basic	*object*.**NumbersColor[**=*setting*%**]**

Picture Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Any file of the *.bmp,*.wmf, *.ico format may be displayed on the control by defining the picture file.

Custom   Display Section.

Visual Basic   *object*.**Picture[**=*filename***]**

Remarks   Bitmaps, Windows metafiles, and icon files may be used as pictures for the control. The RSTools controls also support drag and drop of pictures from the optional RSWorkbench Visual Basic Add-In.

Data Type   String

PictureStretch Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Stretches the picture to fit the control boundaries.
Custom	Check box in General Tab.
Visual Basic	*object***.PictureStrech[**=*setting %***]**
Remarks	True streches the Picture. False lets the picture be displayed in its original size.
Data Type	Integer

PictureUp Property

Applies To	RSButton, RSCompare
Description	Sets the filename of a picture to be displayed within the control when the control is not depressed. (Or in the case of the RSCompare control, when the control is in its Up state.)
Custom	Display section.
Visual Basic	*object*.**PictureUp[**=*file*]
Remarks	Picture files of the format *.bmp, *.wmf, and *.ico may be used. The RSCompare has several other picture properties including PictureUp; PictureDown, PictureEqual and Picture. Refer to the RSCompare documentation for information on these properties.
Data Type	String

PokeLength Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Defines the number of controls in a control array to be used in a LinkPoke starting from the PokeStartIndex in a control array.
Custom	No access via custom property page.
Visual Basic	*object*.**PokeLength[=***setting***%]**
Remarks	The number of controls to be used in single message transaction if AdvanceDDE is used.
Data Type	Integer

PokeStartIndex Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the starting index value of the controls in a control array to be used in a poke to the DDE server (source).
Custom	No access via custom property page.
Visual Basic	*object*.**PokeStartIndex[=***setting***%]**
Data Type	Integer

RequestLength Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Defines the number of controls in a control array for a LinkRequest from the DDE server (source).
Custom	N/A on the Custom properties page
Visual Basic	*object***.RequestLength[=***setting***%]**
Remarks	This property applies if the control is part of an array.
Data Type	Integer

RequestStartIndex Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the starting index value of the controls in a control array to be used in a request from the DDE server (source).
Visual Basic	*object*.**RequestStartIndex[**=*setting*%**]**
Data Type	Integer

ReverseDirection Property

Applies To	RSGauge, RSSlider, RSWheel
Description	This property reverses the start and end values.
Custom	General section.
Visual Basic	*object***.ReverseDirection[=***setting***%]**
Remarks	Setting to False uses the defined start and end values. Setting to True reverses the start and end values.
Data Type	Integer

RightBorder Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the distance between right external border of the control and right edge of the control.
Custom	Adjusted in the General section of the custom properties page. Placing the mouse pointer over either of the control graphic's right corners will cause a sizing pointer to appear. Clicking and holding the left mouse button allows the bottom border for the control to be adjusted to the appropriate position with respect to the right external border of the control. Releasing the mouse button will then set the RightBorder property.
Visual Basic	*object*.**RightBorder[**=*setting %***]**
Remarks	The RightBorder property controls the distance between the outside border of the control and the left edge of the control. Use this property to adjust the space available for displaying a caption or value.
Data Type	Integer

Scale1DecimalPlaces Property

Applies To	RSGauge, RSSlider
Description	Sets or returns the number of decimal places used for the Scale 1 numerals.
Custom	Key in or Use the spin buttons next to 'Decimal' on the Scale Tab.
Visual Basic	*object*.**Scale1DecimalPlaces[**=*setting*%**]**
Data Type	Integer

Scale1End Property

Applies To   RSGauge, RSSlider

Description   Sets or returns the End position and value of the Scale 1 markings.

Custom   Key in or click on the # sign to bring up the key pad on 'Place Scale1 @'
                          settings box on the   Scale Tab.

Visual Basic   *object*.**Scale1End[**=*setting* **%]**

Data Type   Double

Scale1Length Property

Applies To	RSSlider, RSGauge
Description	Determines the physical length of the markings for Scale 1.
Custom	General Section. Can be edited directly on the picture.
Visual Basic	*object***.Scale1Length[**=*setting* %**]**
Data Type	Integer

Scale1Major Property

Applies To	RSSlider, RSGauge
Description	Sets the number of major scale divisions for Scale 1.
Custom	Key in or Use the spin buttons next to 'Major' on the Scale Tab.
Visual Basic	*object*.**Scale1Major[**=*setting* %**]**
Data Type	Integer

Scale1MajorColor Property

Applies To	RSSlider, RSGauge
Description	Sets the major scale color of Scale 1.
Custom	Display section.
Visual Basic	*object*.**Scale1MajorColor[**=*setting*%**]**
Data Type	Color

Scale1Minor Property

Applies To	RSGauge, RSSlider
Description	Sets the number of minor scale divisions for Scale 1.
Custom	Key in or Use the spin buttons next to 'Minor' on the Scale Tab.
Visual Basic	*object*.**Scale1Minor[=***setting***%]**
Data Type	Integer

Scale1MinorColor Property

Applies To	RSGauge, RSSlider
Description	Sets the minor scale mark color of Scale 1.
Custom	Display section.
Visual Basic	*object***.Scale1MinorColor[**=*setting %***]**
Data Type	Color

Scale1NumbersVisible Property

Applies To	RSGauge, RSSlider
Description	Determines whether or not Scale 1 numbers are visible.
Custom	Check Box on the Scale Tab.
Visual Basic	*object*.**Scale1NumberVisible[**=*setting* **%]**
Remarks	True makes the numbers visible. False hides the numbers.
Data Type	Integer

Scale1Offset Property

Applies To	RSGauge, RSSlider
Description	Defines the offset of the Scale 1 markings from the inside border.
Custom	Double Click on the # mark next to scale in the Setup Area on the General Tab.
Visual Basic	*object*.**Scale1Offset[**=*setting* %**]**
Data Type	Integer

Scale1Start Property

Applies To   RSGauge, RSSlider

Description   Determines the Start position and value of the Scale 1 markings on the control.

Custom   Key in or click on the # sign to bring up the key pad on 'Place Scale1 @' settings box on the   Scale Tab.

Visual Basic   *object*.**Scale1Start[=***setting* %**]**

Data Type   Double

Scale1String Property

Applies To	RSSlider, RSGauge
Description	Determines the String Caption to be displayed next to Scale 1.
Custom	Not Available on Custom Property Pages.
Visual Basic	*object*.**Scale1String** [*=setting%*]
Data Type	String

Scale1StringEnabled Property

Applies To   RSSlider, RSGauge

Description   Enables / Disables the display of String caption next to Scale 1.

Custom   Not Available on Custom Property Pages.

Visual Basic   *object*.**Scale1StringEnabled**[*=setting* %]

Data Type   Integer

Scale1Style Property

Applies To	RSGauge, RSSlider
Description	Defines the position of the Scale 1 numbers on the control.
Custom	Drop down combo box on the Scale Tab.
Visual Basic	*object***.Scale1Style[**=*setting* **%]**
Remarks	Valid styles are 0=Next Scale, 1=Inside Border and 2=Outside Border
Data Type	enumScaleStyles

Scale1TextColor Property

Applies To	RSGauge, RSSlider
Description	Defines the text color for Scale 1.
Custom	Display Section
Visual Basic	*object*.**Scale1TextColor[**=*setting* **%]**
Remarks	Color can be chosen form the color palette or specified as RGB in Hex.
Data Type	Color

Scale1TrailingZeros Property

Applies To	RSGauge, RSSlider
Description	Defines the number of trailing zeros for Scale 1.
Custom	Check Box on the Scale Tab.
Visual Basic	*object*.**Scale1TrailingZeros[**=*setting* **%]**
Data Type	Integer

Scale1Type Property

Applies To	RSGauge, RSSlider
Description	Specifies the Scale 1 marking type.
Custom	Drop down combo box on the Scale Tab.
Visual Basic	*object*.**Scale1Type[**=*setting* **%]**
Remarks	Valid style are 0=Normal, 1=Indented and 2=Bevel
Data Type	Integer

Scale1Visible Property

Applies To   RSGauge, RSSlider

Description   Specifies if Scale 1 is visible or hidden.

Custom   Check Box on the Scale Tab.

Visual Basic   *object***.Scale1Visible[**=*setting* **%]**

Data Type   Integer

Scale1Width Property

Applies To	RSGauge, RSSlider
Description	Sets the width of the Scale 1 markings.
Custom	Edit directly on the setup area of the General custom properties tab.
Visual Basic	*object*.**Scale1Width[**=*setting***%]**
Data Type	Integer

Scale2DecimalPlaces Property

Applies To   RSGauge, RSSlider

Description   Sets or specifies the number of decimal places used for the Scale 2 numerals.

Custom   Key in or Use the spin buttons next to 'Decimal' on the Scale Tab.

Visual Basic   *object*.**Scale2DecimalPlaces[**=*setting* %**]**

Data Type   Integer

Scale2End Property

Applies To   RSGauge, RSSlider

Description   Sets or returns the End position and value of the Scale 2 markings on the control.

Custom   Key in or click on the # sign to bring up the key pad on 'Place Scale1 @' settings box on the   Scale Tab.

Visual Basic   *object***.Scale2End[**=*setting* **%]**

Data Type   Double

Scale2EndNumber Property

Applies To	RSGauge, RSSlider
Description	Sets or returns the end number value of the numerals on Scale 2.
Custom	Key in or Use the spin buttons next to 'Scale 2 Numbering' on the Scale Tab.
Visual Basic	*object*.**Scale2EndNumber[**=*setting* **%]**
Remarks	The Scale2End property value is the physical location of the end scale marking with respect to Scale1; Scale2EndNumber represents the text (number) that will be displayed at that end marking.
Data Type	Double

Scale2Length Property

Applies To	RSGauge, RSSlider.
Description	Sets the length of the Scale 2 markings.
Custom	General section. Edit directly on the setup area.
Visual Basic	*object*.**Scale2Length[**=*setting* **%]**
Data Type	Integer

Scale2Major Property

Applies To	RSGauge, RSSlider
Custom	Key in or Use the spin buttons next to 'Major' on the Scale Tab.
Description	Sets the number of major scale divisions for Scale 2.
Visual Basic	*object*.**Scale2Major[**=*setting* **%]**
Data Type	Integer

Scale2MajorColor Property

Applies To	RSGauge, RSSlider
Description	Sets the major scale color for Scale 2.
Custom	Display section.
Visual Basic	*object*.**Scale2MajorColor[**=*setting* **%]**
Data Type	Color

Scale2Minor Property

Applies To	RSGauge, RSSlider
Description	Sets the number of scale divisions for the minor scale of Scale 2.
Custom	Key in or Use the spin buttons next to 'Minor' on the Scale Tab.
Visual Basic	*object*.**Scale2Minor[**=*setting* **%]**
Data Type	Integer

Scale2MinorColor Property

Applies To   RSGauge, RSSlider

Description   Sets Scale 2 minor scale color.

Custom   Display section.

Visual Basic   *object*.**Scale2MinorColor[**=*setting* **%]**

Data Type   Color

Scale2NumbersVisible Property

Applies To   RSGauge, RSSlider

Description   Determines whether Scale 2 numbers are visible or not.

Custom   Check Box on the Scale Tab.

Visual Basic   *object*.**Scale2NumbersVisible[**=*setting* **%]**

Remarks   True sets the numbers to be visible. False hides the numbers.

Data Type   Integer

Scale2Offset Property

Applies To	RSGauge, RSSlider
Description	Defines the offset of Scale 2 markings from the outside border.
Custom	No access via custom property page.
Visual Basic	*object*.**Scale2Offset[**=*setting* **%]**
Data Type	Integer

Scale2Start Property

Applies To	RSGauge, RSSlider
Description	Sets or returns the Start position and value of the Scale 2 markings on the control.
Custom	Key in or click on the # sign to bring up the key pad on 'Place Scale2 @' settings box on the Scale Tab.
Visual Basic	*object*.**Scale2Start[**=*setting* **%]**
Data Type	Double

Scale2StartNumber Property

Applies To	RSGauge, RSSlider
Description	Sets or returns the Scale 2 start number value of the scale numerals.
Custom	Key in or Use the spin buttons next to 'Scale 2 Numbering' on the Scale Tab.
Remarks	The Scale2Start property value is the physical location of the start scale marking with respect to Scale1; Scale2StartNumber represents the text (number) that will be displayed at that start marking.
Visual Basic	*object*.**Scale2StartNumber[=***setting* **%]**
Data Type	Double

Scale2String Property

Applies To	RSSlider, RSGauge
Description	Determines the String Caption to be displayed next to Scale 1.
Custom	No access via custom property page.
Visual Basic	*object*.**Scale1String** [*=setting%%*]
Data Type	String

Scale2StringEnabled Property

Applies To	RSSlider, RSGauge
Description	Enables / Disables the display of String caption next to Scale 1.
Custom	No access via custom property page.
Visual Basic	*object*.**Scale1StringEnabled**[*=setting* %]
Data Type	Integer

Scale2Style Property

Applies To	RSGauge, RSSlider
Description	Defines the position of the Scale 2 numbers on the control.
Custom	Drop down combo box on the Scale Tab.
Visual Basic	*object*.**Scale2Style[**=*setting* %**]**
Remarks	Valid styles are 0=Next Scale, 1=Inside Border and 2=Outside Border.
Data Type	Integer

Scale2TextColor Property

Applies To   RSGauge, RSSlider

Description   Define the text color for Scale 2.

Custom   Display section.

Visual Basic   *object*.**Scale2TextColor[**=*setting* %**]**

Data Type   Color

Scale2TrailingZeros Property

Applies To	RSGauge, RSSlider
Description	Sets the number of trailing zeros for Scale 2.
Custom	Check Box on the Scale Tab.
Visual Basic	*object*.**Scale2TrailingZeros[**=*setting* %**]**
Data Type	Integer

Scale2Type Property

Applies To	RSGauge, RSSlider
Description	Specifies the scale marking type for Scale 2.
Custom	Drop down combo box on the Scale Tab.
Visual Basic	*object***.Scale2Type[**=*setting* **%]**
Remarks	Valid types are 0=Normal, 1=Indented and 2=Bevel
Data Type	Integer

Scale2Visible Property

Applies To   RSGauge, RSSlider

Description   Decides whether Scale 2 is visible or hidden.

Custom   Check Box on the Scale Tab.

Visual Basic   *object*.**Scale2Visible[**=*setting* **%]**

Remarks   True makes the scale visible. False hides it.

Data Type   Integer

Scale2Width Property

Applies To	RSGauge, RSSlider
Description	Sets the width of the scale markings for Scale 2.
Custom	General Section. Edit the picture directly in the setup area.
Visual Basic	*object*.**Scale2Width[**=*setting* **%]**
Data Type	Integer

ScaleBorderColor Property

Applies To	RSGauge, RSSlider
Description	Sets the scale marking border color.
Custom	Display section.
Visual Basic	*object*.**ScaleBorderColor[**=*setting* **%]**
Remarks	This property is active with a Scale Type of 1. Color can be chosen from the color palette or specified in RGB format.
Data Type	Color

ScaleHighlight Property

Applies To	RSGauge, RSSlider
Description	Set the scale marking highlight color.
Custom	Display section.
Visual Basic	*object*.**ScaleHighlight[**=*setting* **%]**
Remarks	This property is active with a Scale Type of 2. Color can be chosen from the color palette or specified in RGB format.
Data Type	Color

ScaleShadow Property

Applies To   RSGauge, RSSlider

Description   Displays a shadow of the scale.

Custom   Check Box in the General section.

Visual Basic   *object*.**ScaleShadow[**=*setting %*]

Remarks   This property is active when the Scale Type = 2. True displays the Shadow and
                        False disables Shadow display.

Data Type   Color

ScreenPriority Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Determines if the Windows dispatch commands called messages will be acted upon immediately or the Windows system will decide when to send the messages.

Visual Basic   *object*.**ScreenPriority[=***setting* **%]**

Remarks   When set to True the messages will be acted on immediately.   When set to False the Windows system decides the most appropriate time to send the message.

Data Type   Integer

Shadow Property

Applies To	RSCompare, RSGauge, RSSlider, RSVessel
Description	Specifies if the control's knob or graphic shadow is visible or hidden.
Custom	Check box in General section.
Visual Basic	*object*.**Shadow[**=*setting* %**]**
Remarks	True sets the shadow visible. False hides the shadow.
Data Type	Integer

ShadowOffsetX Property

Applies To   RSCompare, RSGauge, RSSlider, RSVessel

Description   Sets the horizontal offset of the control's knob or graphic shadow.

Custom   General section.   Edit the picture directly in the setup area.

Visual Basic   *object*.**ShadowOffsetX[=***setting* %**]**

Data Type   Integer

ShadowOffsetY Property

Applies To   RSCompare, RSGauge, RSSlider, RSVessel

Description   Sets the vertical offset of the control's   knob or graphic shadow.

Custom   General section. Edit the picture directly in the setup area.

Visual Basic   *object*.**ShadowOffsetY[=***setting* %**]**

Data Type   Integer

StartValue Property

Applies To	RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Specifies the starting value for the control.
Custom	Adjusted in the "Start Value" text box in the Value section of the custom properties page.
Visual Basic	*object*.**StartValue[=***setting* **%]**
Remarks	For the RSGauge and RSSlider controls, StartValue applies to both the Scale1 and Scale2 value ranges. For the RSCompare, RSData, and RSWheel controls, the StartValue will be ignored if the UseStartEndValue property is set to False.
Data Type	Double

Symbol Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Serves as an alias name for the server, topic and item to be used in a   DDE link.

Custom   LinkInfo Section.

Visual Basic   *object*.**Symbol[**=*setting* **%]**

Remarks   To establish a symbol go to the LinkInfo tab on the control's custom property page.   Select manage symbols and enter the symbol name, server, topic and item.   After applying this data to the control, enter the Symbol name on the property sheet.   The Linkserver, LinkTopic and LinkItem properties will be updated according to the symbol name entered.

See also: *LinkTip* property.

Data Type   String

TabIndex Property

Applies To	RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the tab index for the control.
Custom	No access via custom property page.
Visual Basic	*object***.TabIndex[**=*setting* **%]**
Remarks	TabIndex is always one less than the total number of controls.
Data Type	Integer

TabStop Property

Applies To   RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Adds or removes the control from the form's Tab order at run time.

Custom   No access via custom property page.

Visual Basic   *object*.**TabStop[**=*setting* **%]**

Remarks   Setting to True adds the control to the form's tab order. False removes the control from the tab order.

Data Type   Integer

Tag Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets or returns an expression that stores any extra data needed in the application.
Custom	No access via custom property page.
Visual Basic	*object*.**Tag[**=*setting* **%]**
Remarks	This is a user defined property that does not affect other VB properties.
Data Type	String

Top Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the distance between the top edge of a control and the top edge of its container.
Custom	No access via custom property page.
Visual Basic	*object*.**Top[**=*setting* **%]**
Data Type	Single

TopBorder Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the distance between the top external border of the control and the top of the control.
Custom	Adjusted in the General section of the custom properties page. Placing the mouse pointer over either of the control graphic's lower corners will cause a sizing pointer to appear. Clicking and holding the left mouse button allows the top border for the control to be adjusted to the appropriate position with respect to the top external border of the control. Releasing the mouse button will then set the TopBorder property.
Visual Basic	*object*.**TopBorder[**=*setting* **%]**
Data Type	Integer

TrailingZeros Property

Applies To	RSCompare, RSData, RSGauge, RSSlider, RSVessel
Description	Determines if the value is displayed with trailing insignificant zeros.
Custom	Check box in General section.
Visual Basic	*object***.TrailingZeros[**=*setting* **%]**
Remarks	True displays the value with trailing zeros. False displays the value without trailing zeros.
Data Type	Integer

UseInPoke Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	A flag to signify that the control should be used in a LinkPoke or DoPoke.
Custom	No access via custom property page.
Visual Basic	*object***.UseInPoke[**=*setting* **%]**
Remarks	True sets the control to be used in a poke. False sets the control not to be used. This property may be set for each element of a control array, which allows individual controls to be "skipped" in a block write action.
Data Type	Integer

UseInRequest Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	A flag to signify that the control should be used in a LinkRequest or DoRequest.
Custom	No access via custom property page.
Visual Basic	*object*.**UseInRequest[**=*setting* **%]**
Remarks	True sets the control to be used in a request. False sets the control not to be used. This property may be set for each element of a control array, which allows individual controls to be "skipped" in a block read action.
Data Type	Integer

UseStartEndValue Property

Applies To   RSCompare,   RSData,   RSWheel

Description   Enables / disables use of a minimum and maximum value range for the applicable controls, with the minimum and maximum being the values of the StartValue and EndValue properties.

Custom   Adjusted in the General section of the custom properties page with a checkbox in the Options window.

Visual Basic   *object***.UseStartEndValue[=***setting %***]**

Remarks   When set to True, the control will not allow its Value to fall outside of the StartValue to EndValue range. When set to False, the control will allow Values outside of that range.

Data Type   Integer

Value Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Contains the value of the control at runtime.
Custom	Value section.
Visual Basic	*object***.Value[=***setting* **%]**
Remarks	Since the RSTools controls are capable of displaying multiple LinkItem addresses with an array of controls, you can preview an array of controls at design time with the Value property by setting the Value to a comma-separated string of values. For instance, a Value setting of "0,1,2,3,4" will display an array of 5 controls within the one instance of the RSTools control, each with the corresponding Value displayed.
	See also: *Clip* property.
Data Type	String

ValueBackColor Property

Applies To	RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets the back color for the control's value.
Custom	Display section.
Visual Basic	*object*.**ValueBackColor[**=*setting* **%]**
Remarks	Is visible only if the VALUE is set to transparent.
Data Type	Color

ValueColor Property

Applies To   RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Sets the foreground color of the control's value.

Custom   Display section.

Visual Basic   *object***.ValueColor[**=*setting* **%]**

Data Type   Color

ValuePadDownLoad Property

Applies To	RSCompare, RSData, RSVessel
Description	Enables / disables the number entry pad from being activated when the control is clicked on at run time.
Custom	Check box in the General section.
Visual Basic	*object*.**ValuePadDownLoad[**=*setting %***]**
Data Type	Integer

ValueShadow Property

Applies To	RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Turns On/Off the value shadow.
Custom	Check box in General section.
Visual Basic	*object*.**ValueShadow[**=*setting* **%]**
Remarks	True displays the shadow and False hides it.
Data Type	Integer

ValueShadowColor Property

Applies To	RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines the color of the value's shadow.
Custom	Display section.
Visual Basic	*object*.**ValueShadowColor[=***setting* **%]**
Data Type	Color

ValueTransparent Property

Applies To	RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Determines if the value background is transparent or opaque.
Custom	Check box in General section.
Visual Basic	*object*.**ValueTransparent[**=*setting* **%]**
Remarks	True sets it to transparent. False sets it to opaque.
Data Type	Integer

ValueX Property

Applies To   RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Sets the horizontal position of the Value display within the control.

Custom   General section.   Edit the picture directly.

Visual Basic   *object***.ValueX[**=*setting* **%]**

Remarks   The position can be set from 0 to 100.   The CenterOnKnob property   of the
                       RSSlider should be False to display the value somewhere other than the knob.

Data Type   Integer

ValueY Property

Applies To   RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Sets the vertical position of the Value display within the control.

Custom   General section.   Edit the picture directly.

Visual Basic   *object*.**ValueY[**=*setting* **%]**

Remarks   The position can be set from 0 to 100.   The CenterOnKnob property for the
                       RSSlider should be False to display the value somewhere other than the knob.

Data Type   Integer

Visible Property

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Determines if the control is visible at run-time.

Visual Basic   *object*.**Visible[**=*setting* **%]**

Remarks   True sets the control to be visible and False hides it.

Data Type   Integer

WhatsThisHelpID Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets or returns the associated WhatsThisHelp context number.
Visual Basic	*object***.WhatsThisHelpID[=***number***]**
Remarks	These context numbers are associated with Windows help files.
Data Type	Long

Width Property

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Sets or returns the width of the control.
Custom	General section. Edit the picture directly.
Visual Basic	*object*.**Width***[=setting %]*
Data Type	Single

WriteStyle Property

Applies To	RSButton, RSGauge, RSSlider, RSWheel
Description	Sets the write style to the DDE server.
Custom	Value section.
Visual Basic	*object***.WriteStyle[=***setting* **%]**
Remarks	Options are: 0 - ReadOnly; 1- Continous, 2- Release.
Data Type	Integer

WriteValue Property

Applies To   RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Determines if the value will be downloaded to a database or LinkItem.

Custom   The WriteValue is used when a person programmatically changes a value.

Visual Basic   *object*.**WriteValue[**=*setting* %**]**

Data Type   Integer

Change Event

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Indicates that the contents of a control's Value property have changed.
Visual Basic	**Private Sub** *object*_**Change([***index* **As Integer])**
Remarks	The Change event procedure can synchronize or coordinate data display among controls.

For additional information, refer to the description of the **Change** event in the Microsoft Visual Basic Language Reference Manual.

Click Event

Applies To   RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occurs when the user presses and then releases a mouse button over an object.

Visual Basic   **Private Sub** *object*_**Click([***index* **As Integer])**

Remarks   Typically, you attach a Click event procedure to a CommandButton control, Menu object, or PictureBox control to carry out commands and command-like actions.   For the other applicable controls, use this event to trigger actions in response to a change in the control.

For additional information, refer to the description of the **Click** event in the Microsoft Visual Basic Language Reference Manual.

Clicks Event

Applies To   RSButton, RSCompare, RSVessel

Description   The Clicks event occurs when the user presses and releases the mouse button while the pointer is in the control's window and the control's ActsLikeButton property is set to True.

Visual Basic   **Sub RSButton1_Clicks** ([ByVal dValue As Double, ByVal iButtonIndex As Integer])

Remarks   Differs from the click event in that when the RSVessel (RSButton or RSCompare) control is linked to an array of data items, the index of the RSVessel that is clicked on within that array is passed to the event as well as that RSVessel's value.   The ActsLikeButton property must be set to True for this event to fire

DblClick Event

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occurs when the user presses and releases a mouse button and then presses and releases it again over an object.

Visual Basic   **Private Sub** *object*_**DblClick (**_index_ **As Integer)**

Remarks   The argument Index uniquely identifies a control if it's in a control array.   You can use a DblClick event procedure for an implied action, such as double-clicking an icon to open a window or document.

For additional information, refer to the description of the DblClick event in the Microsoft Visual Basic Language Reference Manual.

DragDrop Event

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occurs when a drag-and-drop operation is completed as a result of dragging a control over a form or control and releasing the mouse button or using the Drag method with its action argument set to 2 (Drop).

Visual Basic   **Private Sub** *object*_**DragDrop([***index* **As Integer,]***source* **As Control,** *x* **As Single,** *y* **As Single)**

Remarks   Use a DragDrop event procedure to control what happens after a drag operation is completed.

For additional information, refer to the description of the DragDrop event in the Microsoft Visual Basic Language Reference Manual.

DragOver Event

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occurs when a drag-and-drop operation is in progress.   You can use this event to monitor the mouse pointer as it enters, leaves, or rests directly over a valid target.   The mouse pointer position determines the target object that receives this event.

Visual Basic   **Private Sub** *object*_**DragOver([***index* **As Integer,]***source* **As Control,** *x* **As Single,** *y* **As Single,** *state* **As Integer)**

Remarks   Use a DragOver event procedure to determine what happens after dragging is initiated and before a control drops onto a target.

For additional information, refer to the description of the DragOver event in the Microsoft Visual Basic Language Reference Manual.

EndMove Event

Applies To   RSGauge, RSSlider

Description   Occurs when the user releases the mouse button after using the mouse pointer to position the RSGauge needle or RSSlider knob to a new value.

Visual Basic   **Private Sub** *object*_**EndMove ([byVal** *Value* **As Double, ByVal** *Index* **As Integer])**

Remarks   The EndMove event can be used to dictate what should happen after the RSGauge needle or RSSlider knob has been moved to a new value using the mouse pointer.

  Note: This event is unavailable when using a RSGauge type with fill boxes unless you apply a needle to it.

GotFocus Event

Applies To
RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description
Occurs when an object receives the focus, either by user action, such as tabbing to or clicking the object, or by changing the focus in code using the SetFocus method.

Visual Basic
Private Sub *object*_**GotFocus([***index* **As Integer])**

Remarks
Typically, you use a GotFocus event procedure to specify the actions that occur when a control or form first receives the focus.

For additional information, refer to the description of the GotFocus event in the Microsoft Visual Basic Language Reference Manual.

KeyDown, KeyUp Events

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occur when the user presses (KeyDown) or releases (KeyUp) a key while an object has the focus.

Visual Basic   **Private Sub** *object*__KeyDown([*index* **As Integer,]***keycode* **As Integer,** *shift* **As Integer)**

                     Private Sub *object*__KeyUp([*index* **As Integer,]***keycode* **As Integer,** *shift* **As Integer)**

Remarks   For both events, the object with the focus receives all keystrokes.   For additional information, refer to the description of the KeyDown,KeyUp events in the Microsoft Visual Basic Language Reference Manual.

KeyPress Event

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occurs when the user presses and releases an ANSI key.

Visual Basic   **Private Sub** *object*_**KeyPress([***index* **As Integer,]***keyascii* **As Integer)**

Remarks   The object with the focus receives the event.   For additional information, refer to the description of the KeyPress event in the Microsoft Visual Basic Language Reference Manual.

LinkError Event

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occurs when there is an error during a DDE conversation.   This event is recognized only as the result of a DDE-related error that occurs when no Visual Basic code is being executed.   The error number is passed as an argument.

Visual Basic   **Private Sub** *object*_**LinkError(ByVal** *iRet* **As Integer, ByVal** *ErrorString* **As String)**

Remarks   Use a LinkError event procedure to notify the user of the particular error that has occurred.   For additional information, refer to the description of the LinkError event in the Microsoft Visual Basic Language Reference Manual.

LinkItemNotSupported Event

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occurs when the control's LinkItem has an incorrect format.

Visual Basic   **Private Sub** *object*_**LinkItemNotSupported ( )**

LinkItemSupported Event

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Occurs when the control's LinkItem has a correct format.
Visual Basic	**Private Sub** *object***_LinkItemSupported ( )**

LinkNotify Event

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occurs when the source has changed the data defined by the DDE link if the LinkMode property of the destination control is set to 3 (Notify).

Visual Basic   **Private Sub** *object*_**LinkNotify([ByVal** *index* **As Integer])**

Remarks   Typically, in the LinkNotify event your code notifies the user, gets the new data immediately, or defers getting the data until later.   You can use the LinkRequest method to obtain the new data from the source.   For additional information, refer to the description of the LinkNotify event in the Microsoft Visual Basic Language Reference Manual.

LinkOutOfMemory Event

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occurs when the client (control) has exhausted its memory resources.

Visual Basic   **Private Sub** *object***_DblClick ([ByVal** *Index* **As Integer])**

LinkServerDisconnected Event

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	Occurs when the control is connected to a server and that server becomes unavailable..
Visual Basic	**Private Sub** *object***_LinkServerDisconnected ( )**

LinkUnableToConnectToServer Event

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occurs when the control attempts to connect to a server that is unavailable.

Visual Basic   **Private Sub** *object*__LinkUnableToConnectToServer__ ( )

LostFocus Event

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occurs when an object loses the focus, either by user action, such as tabbing to or clicking another object, or by changing the focus in code using the SetFocus method.

Visual Basic   **Private Sub** *object*_**LostFocus([***index* **As Integer])**

Remarks   A LostFocus event procedure is primarily useful for verification and validation updates.   Using LostFocus can cause validation to take place as the user moves the focus from the control.   For additional information, refer to the description of the Click event in the Microsoft Visual Basic Language Reference Manual.

MouseDown, MouseUp   Events

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   Occur when the user presses (MouseDown) or releases (MouseUp) a mouse button.

Visual Basic   **Private Sub** *object* **_MouseDown([***index* **As Integer,]***button* **As Integer,** *shift* **As Integer,** *x* **As Single,** *y* **As Single)**

                                Private Sub *object* **_MouseUp([***index* **As Integer,]***button* **As Integer,** *shift* **As Integer,** *x* **As Single,** *y* **As Single)**

Remarks   Use a MouseDown or MouseUp event procedure to specify actions that will occur when a given mouse button is pressed or released.   For additional information, refer to the description of the MouseDown, MouseUp events in the Microsoft Visual Basic Language Reference Manual.

MouseMove Event

Applies To
RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description
Occurs when the user moves the mouse.

Visual Basic
Private Sub *object* **_MouseMove([***index* **As Integer,]***button* **As Integer,** *shift* **As Integer,** *x* **As Single,** *y* **As Single)**

Remarks
The MouseMove event is generated continually as the mouse pointer moves across objects.   For additional information, refer to the description of the MouseMove event in the Microsoft Visual Basic Language Reference Manual.

PokeCompleted Event

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel

Description   The PokeCompleted event occurs when a poke action has completed

Visual Basic   **Private Sub** *object*_**PokeCompleted ([ByVal** *iRet* **As Integer])**

Remarks   The argument iRet returns error numbers

RequestCompleted Event

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSVessel, RSWheel
Description	The RequestCompleted event occurs when a request action has completed.
Visual Basic	**Private Sub** *object*_**RequestCompleted ([ByVal** *iRet* **as Integer])**
Remarks	The argument iRet returns error numbers

StartMove Event

Applies To   RSGauge, RSSlider

Description   Occurs when the RSSlider's knob or RSGauges Needle begins to move.

Visual Basic   **Private Sub** *object***_StarMove([ByVal** *Value* **As Double, ByVal** *Index* **as Integer])**

Container Method

Applies To   RSButton, RSCompare, RSData, EventMaster, RSGauge, RSSlider, RSWheel

Description   Returns or sets the container of a control.

Visual Basic   *object*.*Control*.**Container***[=setting]*

Remarks   Not available at design time.   A control's parent (container) may be changed at run time with the Container method.

DoPoke Method

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel

Description   Writes the values of all controls in an array to the server in a DDE conversation.   To work
successfully the control's UseInPoke property must be set to True.

Visual Basic   *object*.*Control*.**DoPoke**

Remarks   The control's LinkMode property must be set to 2 - Manual.

See also: *PokeStartIndex* and *PokeLength* properties, *LinkPoke* method.

DoRequest Method

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel

Description   Requests the source application in a DDE conversation to update an array of control values. LinkMode should be set to either None(0) or Manual(2).   To work successfully, the control's UseInRequest property must be set to True.

Visual Basic   *object*.*Control*.**DoRequest**

Remarks   The control's LinkMode property must be set to 2 - Manual.

                                        See also: *RequestStartIndex* and *RequestLength* properties, *LinkRequest* Method.

Drag Method

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel

Description   Begins, ends, or cancels a drag operation of any control except the Line, Menu, Shape, Timer, or CommonDialog controls.

Visual Basic   *object*.**Drag** action

Settings   The settings for action are:

Constant	Value	Description
vbCancel	0	Cancels drag operation.
vbBeginDrag	1	Begins dragging object.
vbEndDrag	2	Ends dragging and drop object.

Remarks   Using the Drag method to control a drag-and-drop operation is required only when the DragMode property of the object is set to Manual (0).   However, you can use Drag on an object whose DragMode property is set to Automatic (1 or vbAutomatic).

For more information refer to the Microsoft Visual Basic Language Reference.

LinkPoke Method

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel

Description   Transfers the value of a control to the source application in a DDE conversation.   To work successfully the control's UseInPoke property must be set to True.

Visual Basic   *object*.**LinkPoke**

Remarks   Typically, information in a DDE conversation flows from source to destination.   However, LinkPoke allows a destination object to supply RSData to the source.

See also: *PokeStartIndex* and *PokeLength* properties, *DoPoke* method.

LinkRequest Method

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel

Description   Requests the source application in a DDE conversation to update the value of the control. LinkMode should be set to either None(0) or Manual(2).   To work successfully the control's UseInRequest property must be set to True.

Visual Basic   *object*.**LinkRequest**

Remarks   LinkRequest causes the source application to send the most current RSData to object.

See also: *RequestStartIndex* and *RequestLength* properties, *DoRequest* method.

Move Method

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel
Description	Moves an MDIForm, Form, or control.
Visual Basic	*object*.**Move** left, top, width, height
Remarks	Only the left argument is required. However, to specify any other arguments, you must specify all arguments that appear in the syntax before the argument you want to specify.
	For more information refer to the Microsoft Visual Basic Language Reference.

Object Method

Applies To   RSButton, RSCompare, RSData, RSGauge, RSWheel, RSVessel, RSSlider

Description   Returns an object in a control.

Visual Basic   *object*.*Control*.**Object**[.property|.method][=value]

Remarks   For more information refer to the Microsoft Visual Basic Language Reference.

Parent Method

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel

Description   Returns the container on which an object is located.

Visual Basic   *object*.*Control*.**Parent**

Remarks   For more information refer to the Microsoft Visual Basic Language Reference.

SetFocus Method

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel
Description	Moves the focus to the specified control or form.
Visual Basic	*object*.**SetFocus**
Remarks	The object (control) that can receive the focus. After invoking the SetFocus method, any user input is directed to the specified control.

For more information refer to the Microsoft Visual Basic Language Reference.

ShowWhatsThis Method

Applies To   RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel

Description   Displays a selected topic in a Help file using the What's This popup provided by Windows 95 Help.

Visual Basic   *object*.**ShowWhatsThis**

Remarks   The ShowWhatsThis method is very useful for providing context-sensitive Help from a context menu in your application.   The method displays the topic identified by the WhatsThisHelpID property of the object specified in the syntax.

ZOrder Method

Applies To	RSButton, RSCompare, RSData, RSGauge, RSSlider, RSWheel, RSVessel
Description	Places a specified MDIForm, Form, or control at the front or back of the z-order within its graphical level.
Visual Basic	*object*.**ZOrder** position
Remarks	The ZOrder method syntax has these parts:

Part	Description
object	Optional. An object expression that evaluates to an object in the Applies To list. If object is omitted, the form with the focus is assumed to be object.
position	Optional. Integer indicating the position of object relative to other instances of the same object. If position is 0 or omitted, object is positioned at the front of the z-order. If position is 1, object is positioned at the back of the z-order.