



Rumba 9.2

A decorative graphic consisting of a thick, blue, glossy ribbon that curves and loops across the lower half of the page. The ribbon has a gradient from dark blue to light blue, giving it a three-dimensional appearance.

Screen Designer User Guide

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About This Guide

This guide provides a step-by-step introduction to the Micro Focus Rumba Screen Designer.

This guide shows you how to:

- Create a history file
- Use the Rumba Screen Designer to customize a set of screens
- Test the customized screens
- Use the customized screens in the Rumba Desktop.

In addition, there is a comprehensive reference section with further information about designing screens and information about exporting customized screens to Rumba+ Web and Rumba+ Mobile.

Who should read this guide

This guide is intended to be read by all those interested in customizing green screen applications to create applications with a modern look and feel.

It is expected that readers would mostly be system administrators or other IT personnel with a similar level of expertise.

Prerequisites

- Rumba Desktop 9.2
- Rumba+ Build Tool for export to Rumba+ Mobile and Rumba+ Web

Accompanying files

The package containing this document also contains the following files:

- `WebFrame_URL.txt`
- `welcome.jpg`

If you do not have these files, you will not be able to complete the exercises for the WebFrame and Image controls.

Introduction

You use the Screen Designer to provide a modern look and feel to green screen applications and make them easier to use. You do this without touching the application code.

This guide provides instructions for you to start using the Screen Designer to customize green screens.



Note: For the purposes of this user guide, only 3270 mainframe screens are used. However, you can also use the same principles to customize 5250 AS/400 (iSeries) screens.

Terminology

Screen Designer

The customization engine of Rumba+. It consists of two parts:

Screen Design

Used to add static controls on top of specific screens.

Rule Manager

Used to add dynamic or conditional controls which target an entire green screen application.

Control

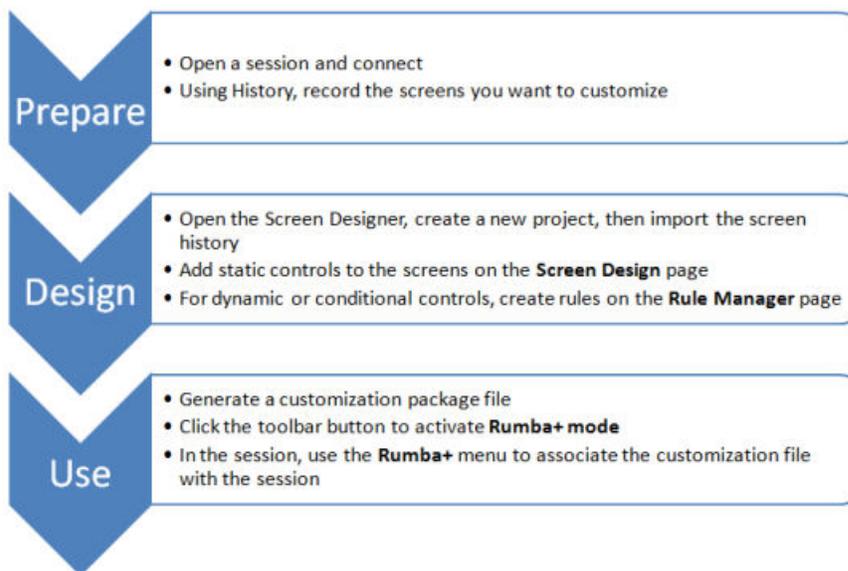
A modern visual element that interacts with a green screen.

Rule

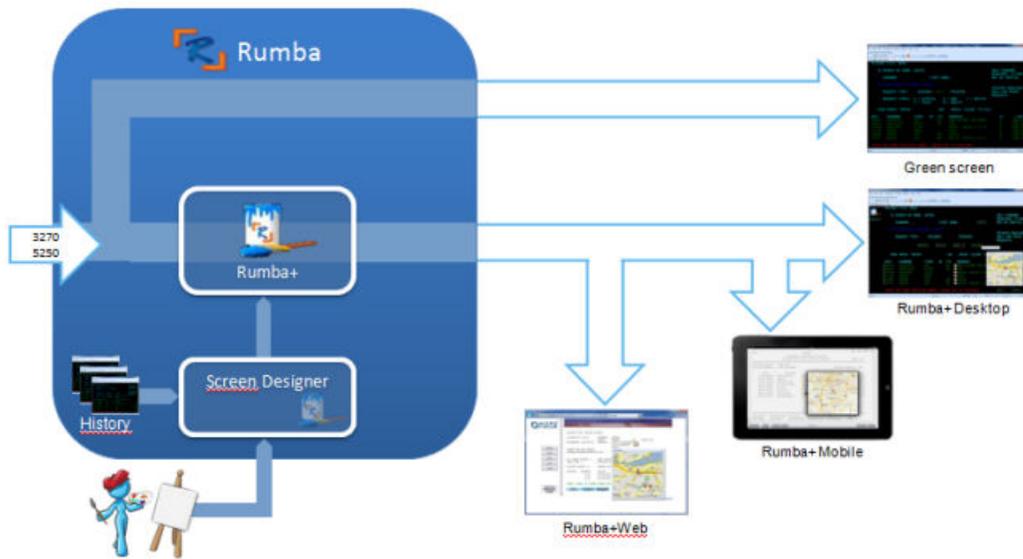
An automatic mechanism that creates one or more controls on one or several screens, with functions defined by conditions.

How it works

The figure below provides an overview of what you do to create and use customized screens:



Architecture



Getting Started

In this section, you:

- Extract the files that came with this document.
- Start a mainframe session.
- Change the color of the screen text to make it more visible.
- Connect to the Rumba Demo Host.

Extracting the package files

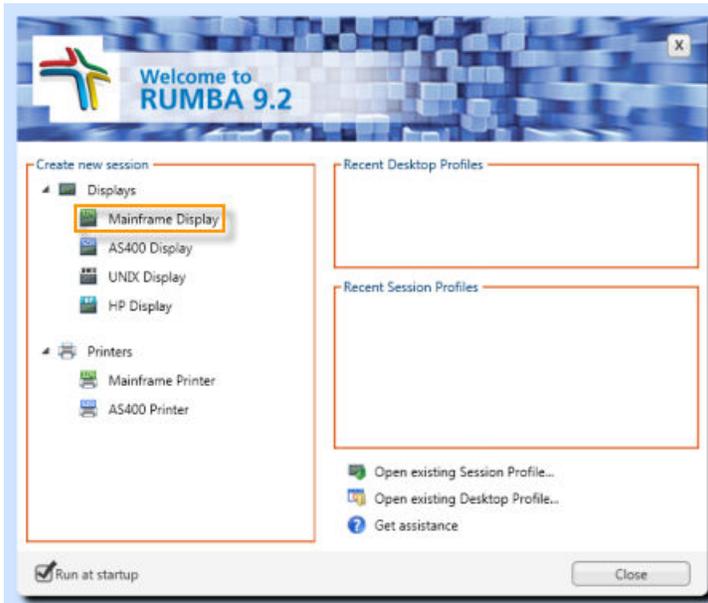
Extract the `WebFrame_URL.txt` and `welcome.jpg` files from the package .ZIP file to your local machine. Make a note of where you save them as you will need them later.

Starting a mainframe session

1. From the Windows **Start** menu, select:

Start > All Programs > Micro Focus Rumba > Micro Focus Rumba Desktop

The **Welcome** screen appears:



2. Click **Mainframe Display**.

A mainframe session window appears on the Rumba desktop.

Changing the display options

Some of the screens used by the Demo Host can be difficult to see because of the blue text color they use. The simple solution is to change the color.

To do this:

1. Select **Options > Display**.

The **Display Options** dialog box appears.

2. Click the **Color Attributes** tab.
3. In the **Multi Color Attributes** frame, click the button labeled **Protected**.

The color palette appears:



4. Click the light green box.

The blue **Protected** button changes to green.

5. In the **Extended Color Attributes** frame, click the button labeled **Blue**.

The color palette appears:



6. Click the light green box.

The blue button changes to green.

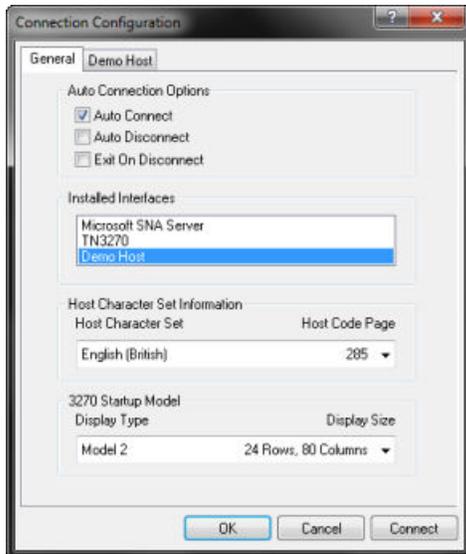
7. Click **OK**.

All dark blue text on screens will now appear as green.

Configuring the connection to the Demo Host

1. Select **Connection > Configure**.

The **Connection Configuration** window appears:



2. In the **Auto Connection Options** frame, check **Auto Connect**.

3. In the **Installed Interfaces** frame, select **Demo Host** from the list.

4. Click **OK**.

5. Select **File > Save session Profile As**.

The **Save Session Profile** dialog box appears.

6. In the **File name** field, type `DemoHost`.

7. Click **OK**.

The **Connection Configuration** window closes.

Creating a History File

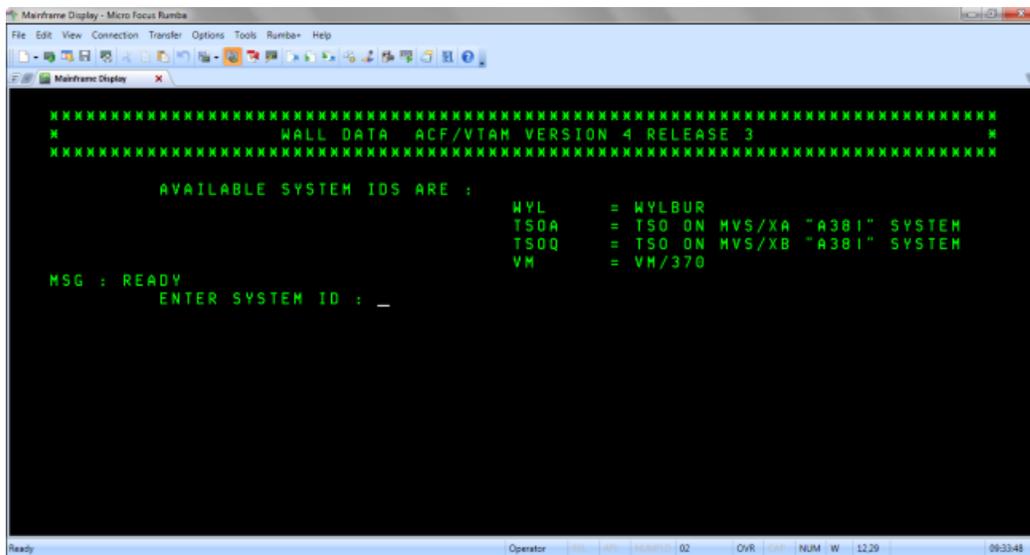
Before you start customizing screens, you need to capture a set of screens in a history file. This section describes how to record a sequence of screens to use in the Screen Designer.

Recording history

You need to create a history file so you have a set of screens to use in the Screen Designer. To do this:

1. Click the **History** icon  on the Rumba toolbar.
The **History** pane appears.
2. Click the **Record** icon  on the **History** pane toolbar.
3. Select **Connection > Connect**.

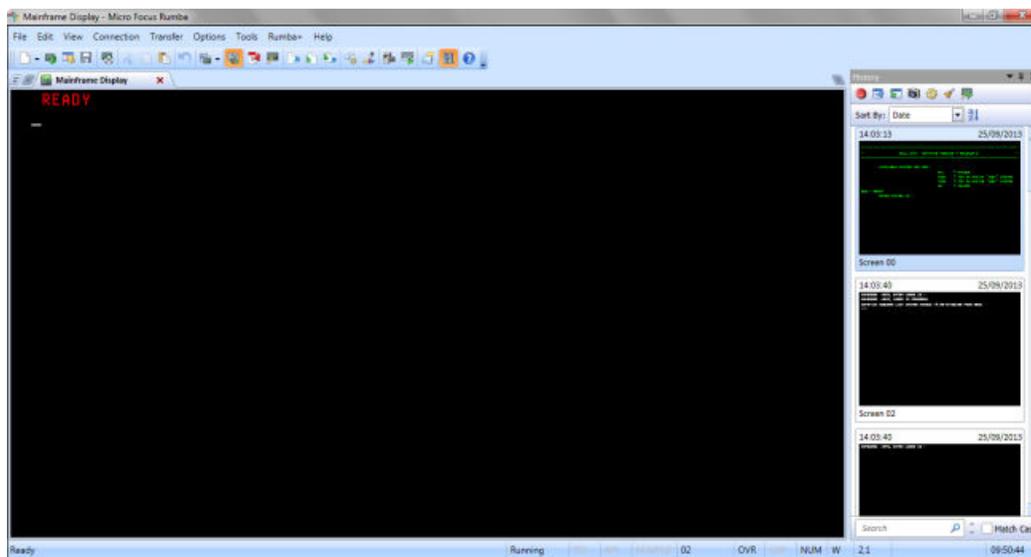
The Demo Host mainframe session starts:



4. You must capture the first screen manually. To do this, click the **manual capture** icon  on the **History** pane toolbar.
The screen appears in the **History** pane.
The rest of the screens will be captured automatically.
5. At the `ENTER SYSTEM ID :` prompt, enter:
TSOA
6. At the `ENTER LOGON ID :` prompt, press `ENTER`.
7. At the `LAST SYSTEM ACCESS` prompt, press `ENTER`.
8. At the `READY` prompt, enter:
TOYS
9. At the `TOPCO TOYS , INC` screen, press `ENTER`.

10. Enter O.
11. At the CUSTOMER SCREEN, press PF8.
12. At the DETAIL LINE ENTRY SCREEN, press ENTER.
13. At the READY prompt, enter:
E
14. At the TOP OF DATA screen, press ENTER.
15. At the READY prompt, enter:
R
16. At the TOPCO TOYS, INC screen, press PF3.
17. At the READY prompt, enter:
A
18. At the EXTEND ATTRIBUTE TEST screen, press PF3.
19. At the READY prompt, enter:
C
20. At the EUROPEAN CUSTOMER LIST screen, press PF1.
21. Click the **Record** icon  again to stop recording history.

Each screen has been added, in sequence, to the **History** pane:



Recording a single screen

You can also record screens one at a time. To do this:

1. At the READY prompt, enter:
Q
2. Click the **Manual capture** icon  on the **History** pane toolbar.
The screen is added to the list of screens in the **History** pane.

Saving the history to a file

To save the recorded history to a file:

1. Click the **Export history to file** icon  on the **History** pane toolbar.

The **History Export** dialog box appears.

2. Navigate to where you want to save the history file.
3. In the **File name** field, type `DemoHistory`.
4. Click **Save**.

You now have a number of screens to use in your customization project.

5. Click the **History** icon  on the Rumba toolbar.

The **History** pane closes.

6. Select **Connection > Disconnect**.

Opening the Screen Designer

To open the Screen Designer, do one of the following :

- On the menu bar, select **Rumba+ > Open Screen Designer**.
- On the toolbar, click the **Open Screen Designer** icon .
- On the **History** pane toolbar, click the **Customize captured screens** .

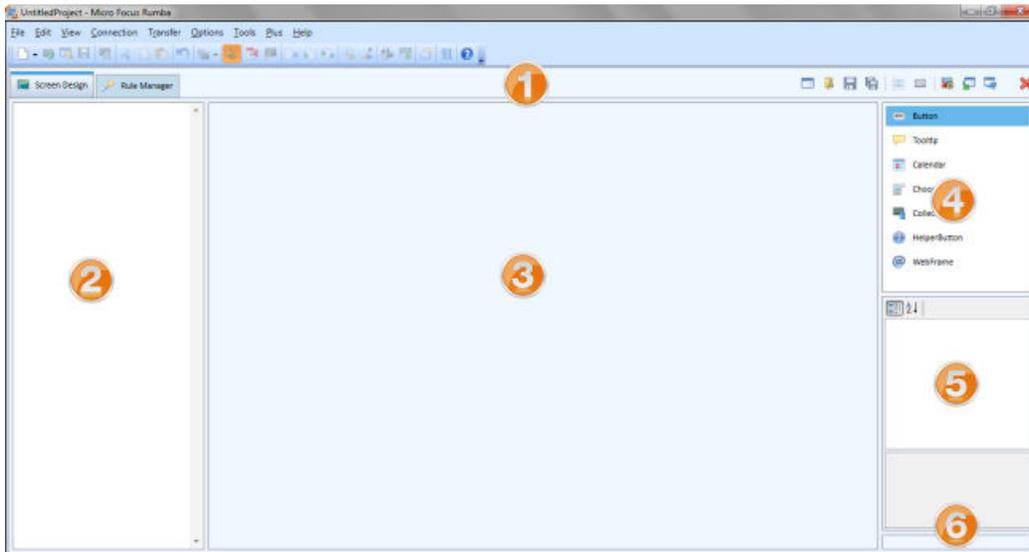
The **Screen Designer** window appears, with two tabbed pages, the **Screen Design** page and the **Rule Manager** page.

The project toolbar



	Start a new project.
	Open an existing project.
	Save a project.
	Save a project with a different name.
	Toggle the grid.
	Toggle between screen customization and screen identification modes.
	Select a theme.
	Import history.
	Generate a customization file.
	Close the Screen Designer.

The Screen Design page



1

Screen Designer tabs and toolbar.

2

History pane. Contains thumbnails of all the screens recorded in the imported history file.

3

Work area. Contains a full size version of the selected thumbnail. Shows the controls associated with the screen.

4

Control panel. Contains a list of available controls that can be applied to the screen in the work area.

5

Property grid. Contains a list of available properties for the selected control.

6

Cursor location. Displays the coordinates of the cursor. Useful when looking for coordinates of fields.

The Rule Manager page

For information about the Rule Manager and when to use it, see [Using the Rule Manager](#).

Starting a New Project

1. Click the **New project** icon  on the project toolbar.
2. Click the **Save Project** icon  on the project toolbar.
The **Save Rumba+ Project** dialog appears.
3. In the **Name** field, type a name for your project, such as `DemoHost`, then click **Save**.

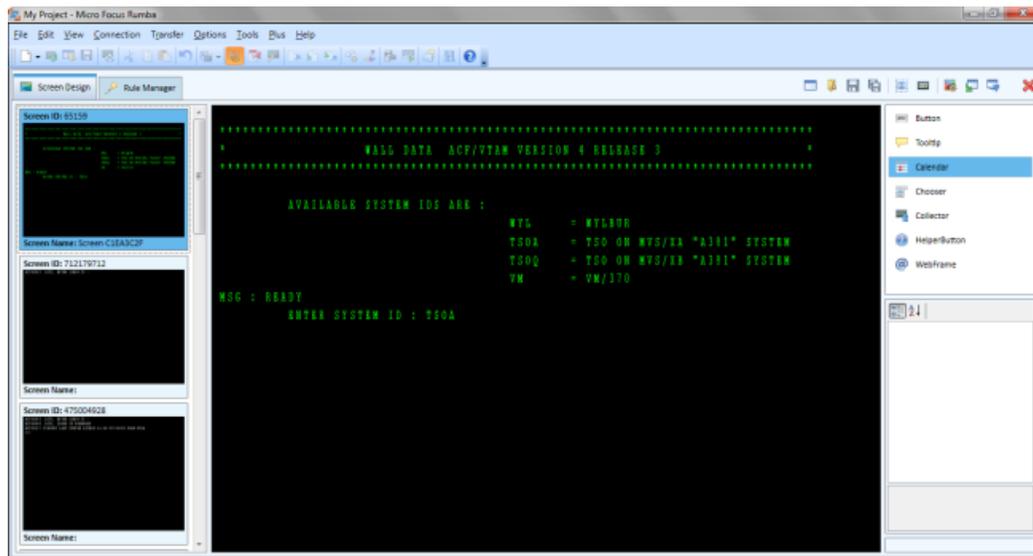
Importing History

1. Click the **Import History** icon  on the project toolbar.

The **History Import** dialog box appears.

2. Choose your history file, then click **Open**.

Thumbnails of the recorded screens appear in the history pane. Each screen has a unique screen ID, generated by Rumba. It can also have a screen name which you set up using the screen identification feature. The first screen is selected by default and a larger version of it appears in the work area:



3. Click the **Save Project** icon  on the project toolbar.

 **Note:** It is always good practice to save your project after you have some changes to it.

Selecting a Theme

A theme defines the layout of the screen and the look of each control across all screens in a customization project.

It is best to choose a theme early in the customization project.

To select a theme:

1. Click the **Select a theme** icon  on the project toolbar.
The **Choose Rumba+ theme** dialog box appears.
2. Select the last thumbnail, **Rumba+ Windows Theme**.
3. Click **OK**.

The theme is applied to all the screens in your project.

For more information about themes, see [Using themes](#).

Adding Controls

You will now use the **Screen Design** page to add controls to your screens.

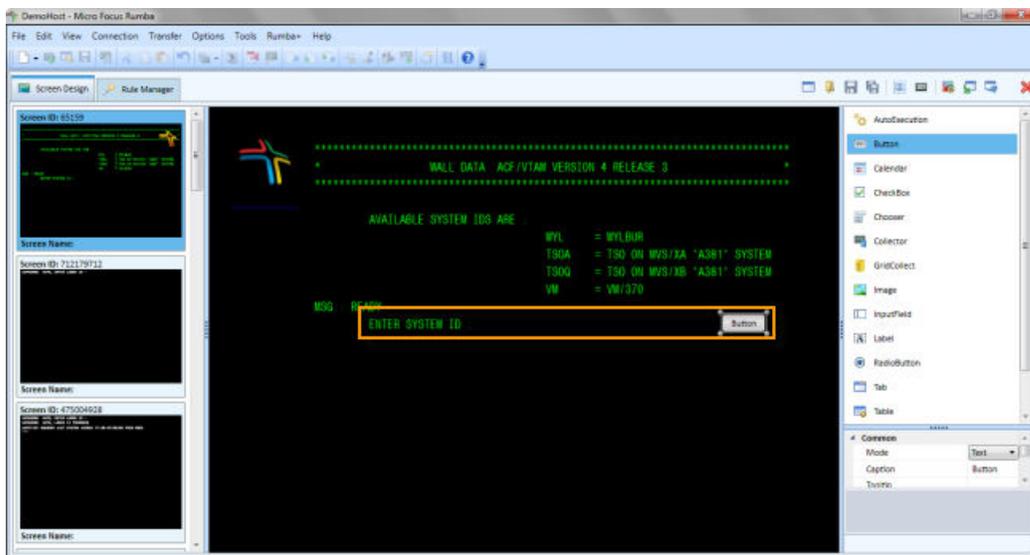
The **Screen Design** page is used to add controls to specific screens. To add controls that repeat on multiple screens or many times on a single screen, you use the Rule Manager. For information about the Rule Manager, see [Using the Rule Manager](#).

As you go through this section, you add controls to your captured screens progressively. We recommend that you add the controls in the order they are described to build a completed project.

Adding a Button control

Button triggers an action or a sequence of actions when clicked.

1. Ensure the first thumbnail is selected.
2. Drag the Button control icon from the control panel on to the work area and drop it on the far right of the ENTER SYSTEM ID: row:



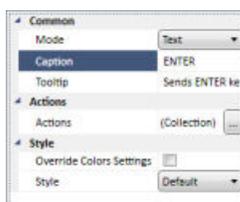
 **Note:** When you drop the control on the screen, the property grid is populated.

3. In the property grid, click in the **Caption** field and delete the text `Button`.
4. Type `ENTER`.

When you click elsewhere on the screen, the text changes on the control:

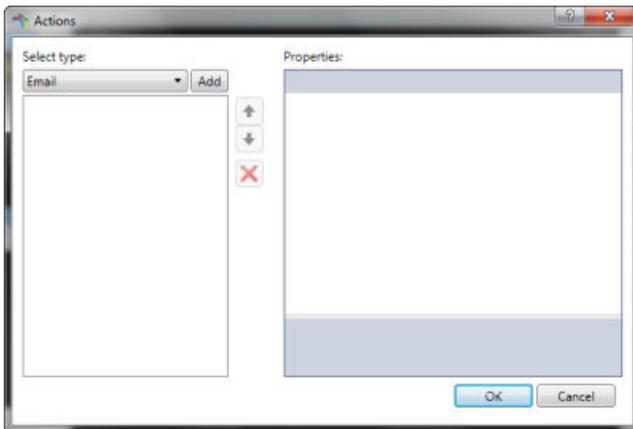


5. Click in the **Tooltip** field and type `Sends ENTER key`.



- Click the accelerator button  next to the **Actions** field.

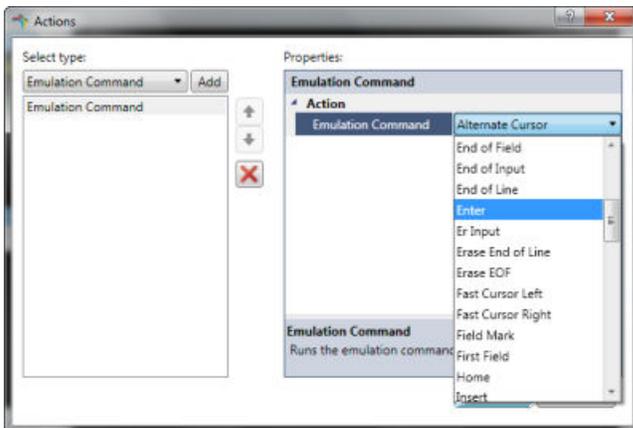
The **Actions** dialog box appears:



- Under **Select type**, select **Emulation Command** from the drop-down list.
- Click **Add**.

A new action appears in the **Actions** frame and its properties appear in the **Properties** frame.

- In the **Properties** frame, select **Enter** from the drop-down list:

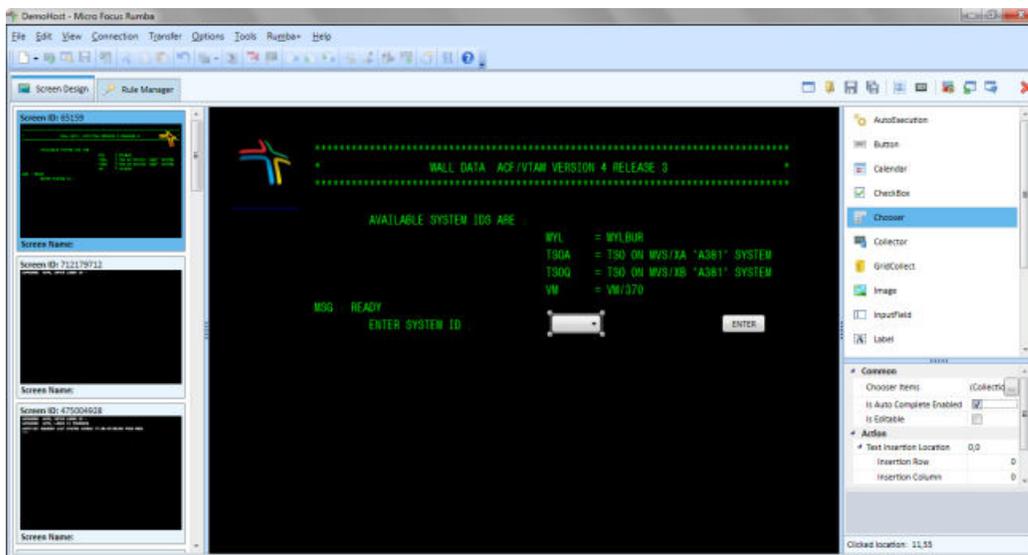


- Click **OK**.
- Click the **Save** icon  on the project toolbar.

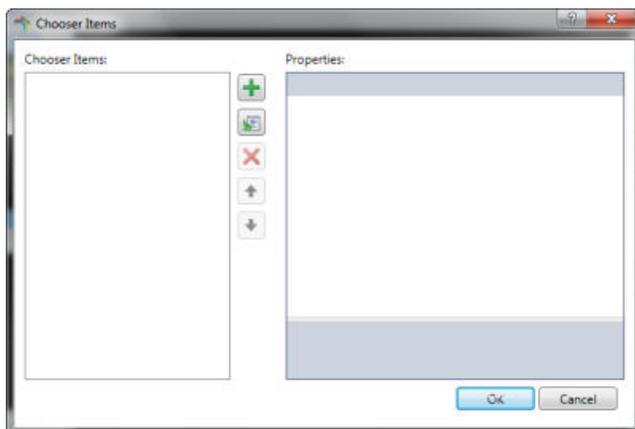
Adding a Chooser control

Chooser appears on the screen like a drop-down list. Chooser is used to insert data into a field on the screen by selecting an item from the list.

- Drag the Chooser control icon from the control panel on to the work area and drop it next to `ENTER SYSTEM ID :`



- In the property grid, click the accelerator button  next to **Chooser items**.
The **Chooser Items** dialog box appears:



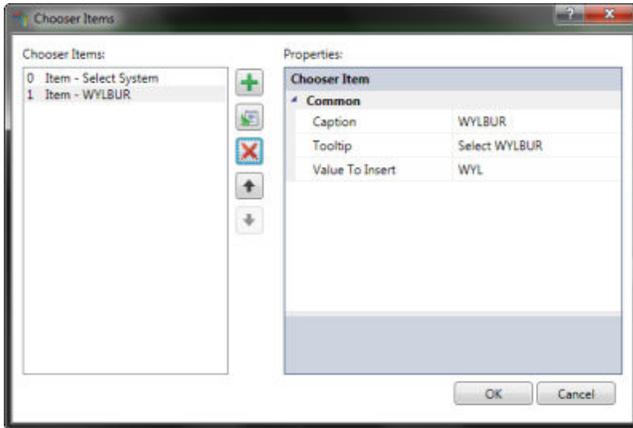
- Click the **Add** button .
- In the **Properties** frame, type `Select System` in the **Caption** field.
- In the **Tooltip** field, type `Select system`.

This text will appear as you hover over the selection. Tooltip text can be used for tips and helpful information on the selection.

- Leave the **Value to Insert** field empty.
- Click the **Add** button .
- In the **Properties** frame, type `WYLBUR` in the **Caption** field.
- In the **Tooltip** field, type `Select WYLBUR`.
- In the **Value to Insert** field, type `WYL`.

This is the text that will be placed in the entry field and must match the commands you would normally manually type in the field.

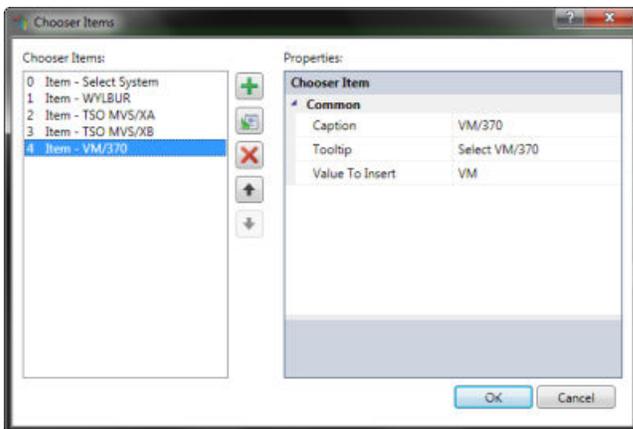
The **Chooser Items** dialog box looks like this:



11. Repeat the above steps to add the following Chooser items:

Caption	Tooltip	Value To Insert
TSO MVS/XA	Select TSO MVS/XA	TSOA
TSO MVS/XB	Select TSO MVS/XB	TSOQ
VM/370	Select VM/370	VM

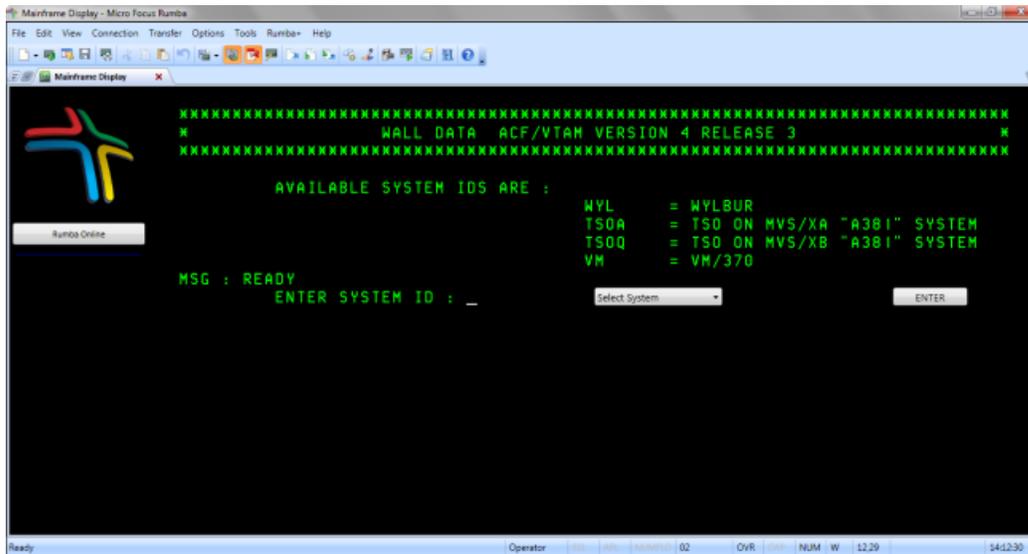
When complete, the **Chooser Items** dialog box looks like this:



12. When you have finished, click **OK**.

13. Use the handles on the control to size so that the text shows correctly.

Your screen should look like this:

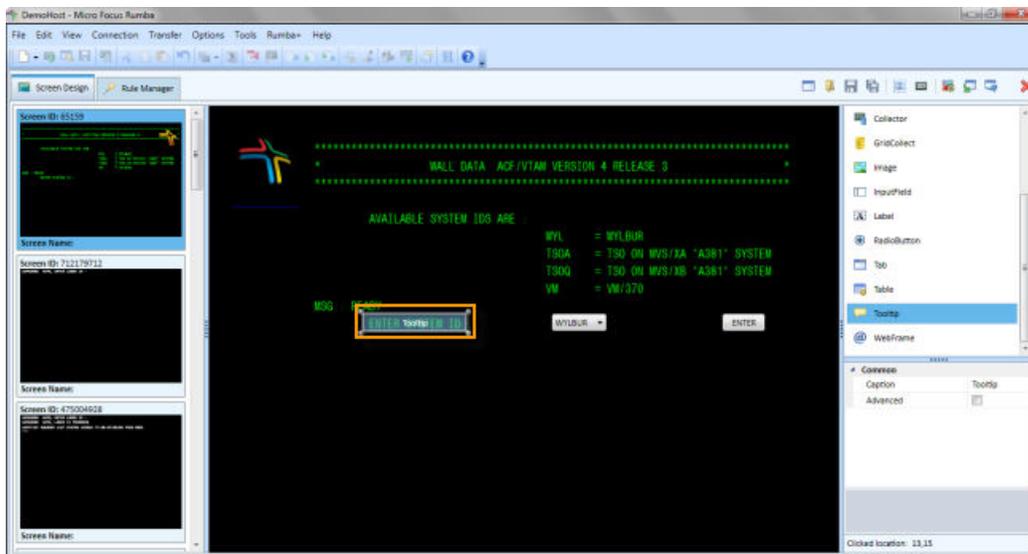


14. Click the **Save** icon  on the project toolbar.

Adding a Tooltip control

Tooltip displays text when the mouse hovers over the screen area that Tooltip occupies.

1. Drag the Tooltip control icon from the control panel on to the work area and drop it on top of ENTER SYSTEM ID:
2. Drag the handles on the control so the control covers the screen text:

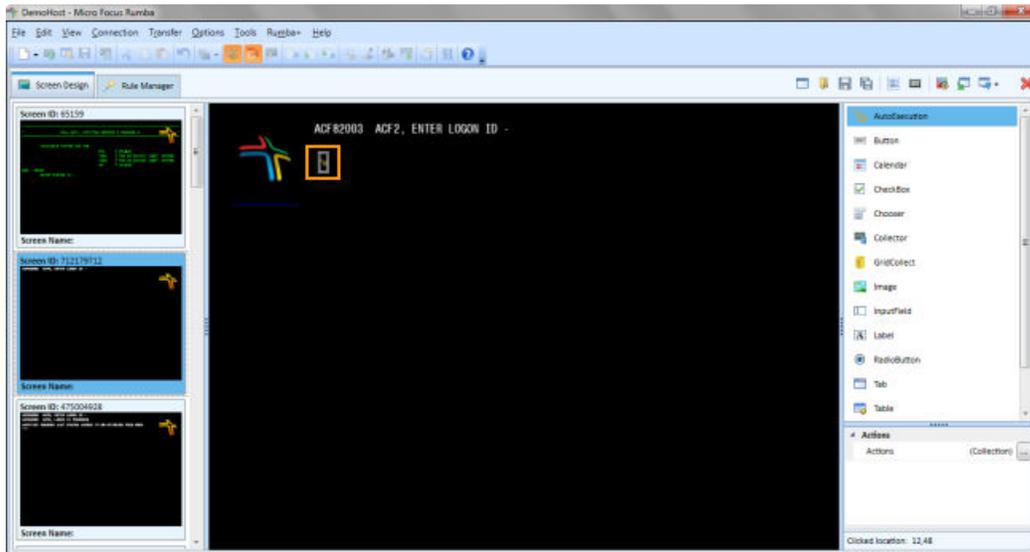


3. In the property grid, type the following in the **Caption**:
Use drop-down list to select system
4. Click the **Save** icon  on the project toolbar.

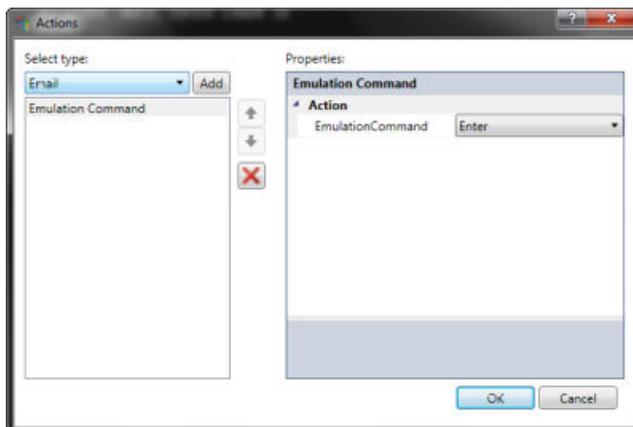
Adding an AutoExecution control

After you log into Demo Host, you need to press ENTER twice before the READY prompt appears. You can use an AutoExecution control to automate this sequence. To do this:

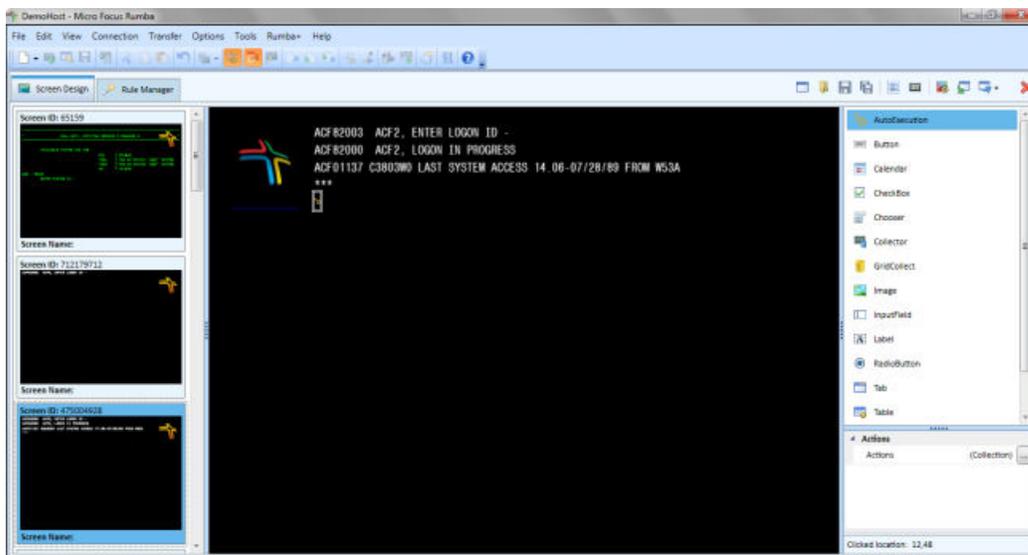
1. In the left pane, select the second screen.
A larger version of the screen appears in the work area.
2. Drag the AutoExecution control from the control panel and drop it to the right of the Rumba icon:



3. In the property grid, click the accelerator button  next to the **Actions** field.
4. From the **Select type** list, select **Emulation Command**.



5. From the **Action** list, select **Enter**:
6. Click **OK**.
7. Select the third screen in the left pane:
8. Add another AutoExecution control and give it the same properties:



9. Click the **Save** icon  on the project toolbar.

Adding an Image control

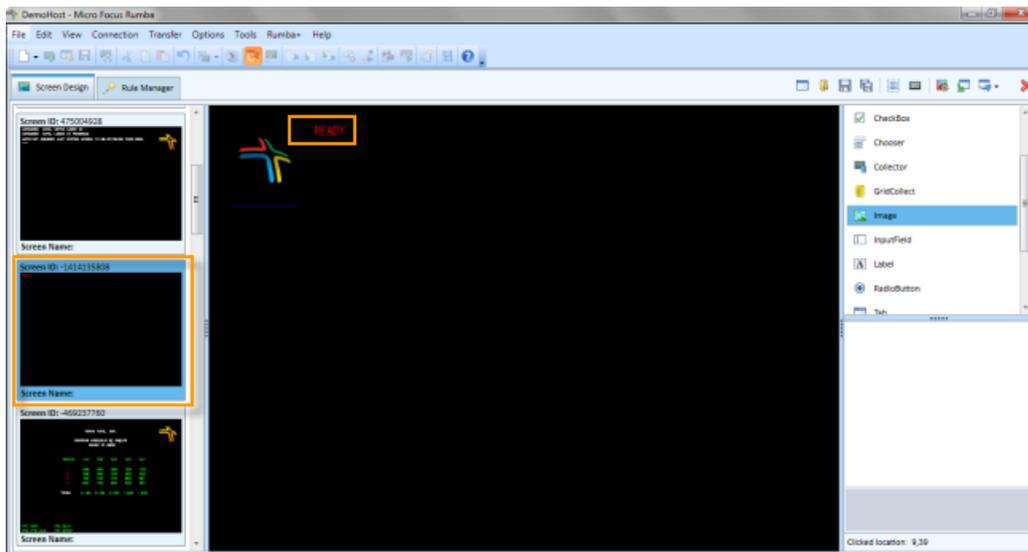
Image masks an area of a screen with either a color or an image.



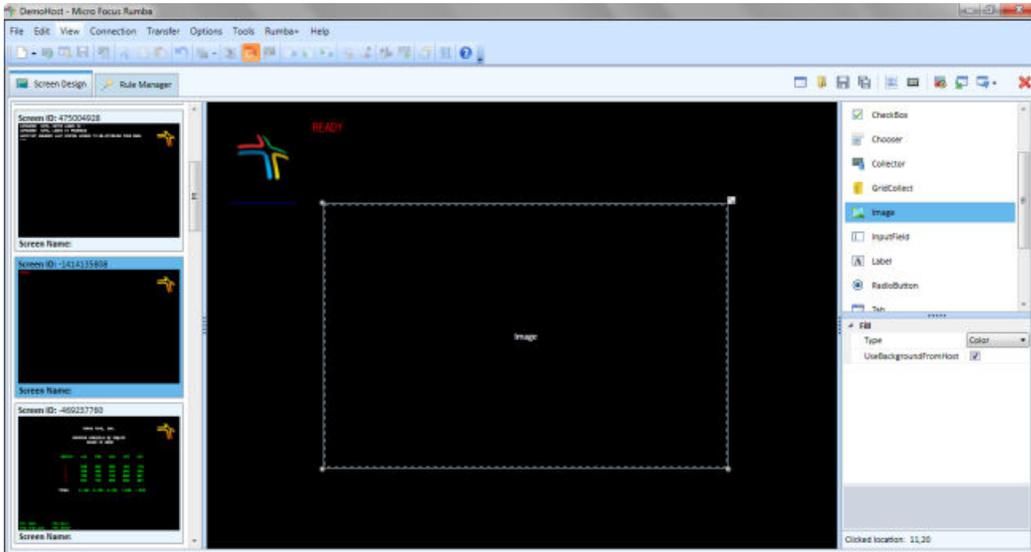
Note: In this section you use the `welcome.jpg` file supplied with this document.

1. In the history pane, scroll down and select the fourth thumbnail. This shows the `READY` prompt.

A larger version of the screen appears in the work area:



2. Drag the Image control icon from the control panel onto the work area, then size it to 15x66:



3. In the property grid, select **Image** from the **Type** drop-down list.
The **ImagePath** field appears.
4. Click the accelerator button  next to the **ImagePath** field.
The **Open** dialog box appears.
5. Navigate to where you have saved the `welcome.jpg` file, select the file, and click **Open**.
The selected image now fills the control on the screen:



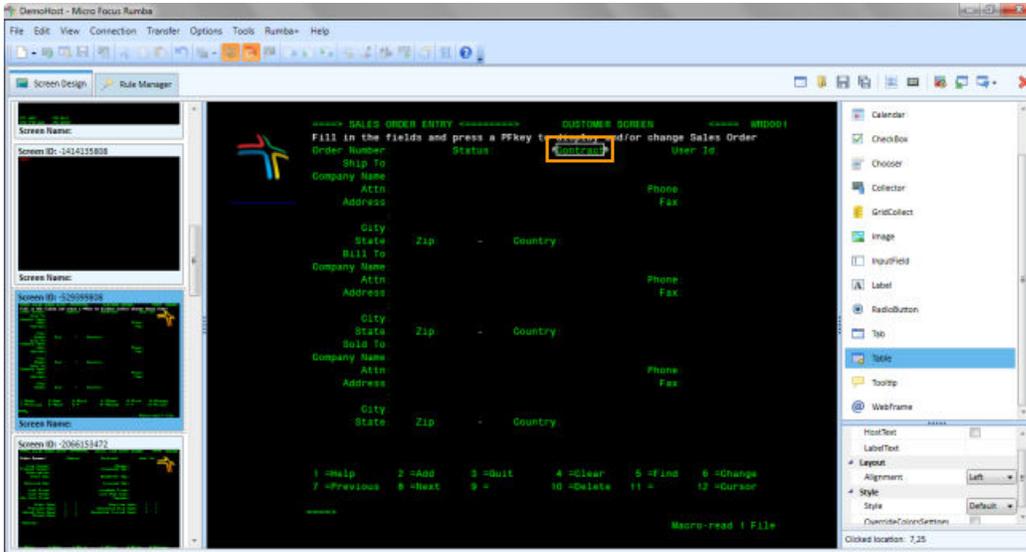
6. Click the **Save** icon  on the project toolbar.

Adding a Label control

This section describes how to change the text of a screen field label so it can be used for something else. In this case, a date.

1. In the history pane, select the `SALES ORDER ENTRY - CUSTOMER SCREEN`.
A larger version of the screen appears in the work area.
2. Drag the Label control icon from the control panel on to the work area and drop it on top of the Contract field.

3. Size the control so it covers the field completely:



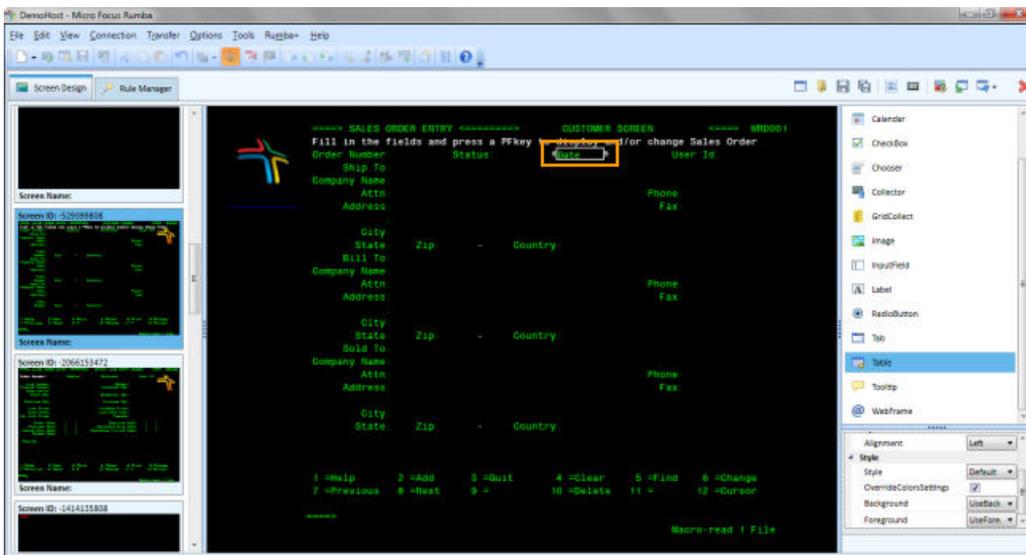
4. In the property grid, uncheck **HostText**.

The **LabelText** field appears.

5. In the **LabelText** field, delete the default text `Label` and type `Date`:

6. Check **OverrideColorsSettings**.

The control now uses the screen background and foreground colors for the label background and the text. The label text is now visible in the control:

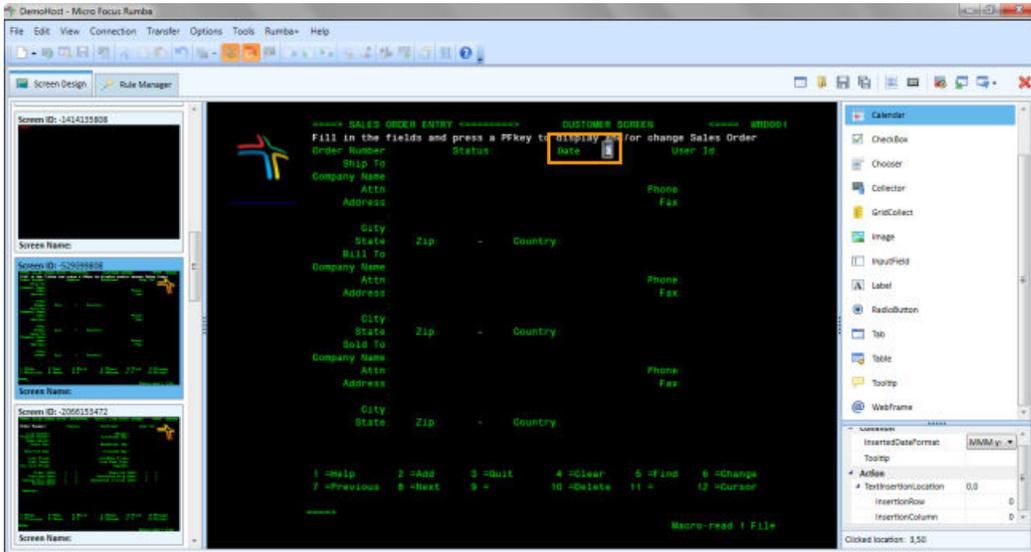


7. Click the **Save** icon  on the project toolbar.

Adding a Calendar control

Calendar inserts a selected date at a specified point on the screen.

1. Ensure the `SALES ORDER ENTRY - CUSTOMER SCREEN` screen is still displayed in the work area.
2. Drag the Calendar control icon from the control panel on to the work area and drop it to the right of the (new) `Date` field:

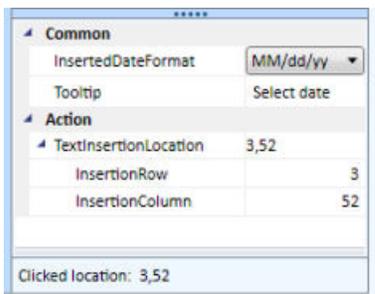


3. In the property grid, in the **Inserted Date Format** field, select **MM/dd/yy** from the drop-down list.
4. In the **Tooltip** field, type `Select date`
5. Click one space to the right of the Calendar control.

The coordinates of the screen location appear in the status bar, below the property grid. In this case, 3, 52.

6. In the property grid, delete the **0** in the **Insert Row** field, then type 3.
7. Delete the **0** in the **Insert Column** field, then type 52.
8. Click once in the **TextInsertionLocation** field.

When complete, the property grid page looks like this:



9. Click the **Save** icon  on the project toolbar.

Adding a GridCollector control

GridCollector gathers information from a specific screen location and displays the information in a table.

1. In the left pane, scroll down and select the `EUROPEAN CUSTOMER LIST` screen.



2. Drag the GridCollector control from the control panel and drop it at the start of the first row:

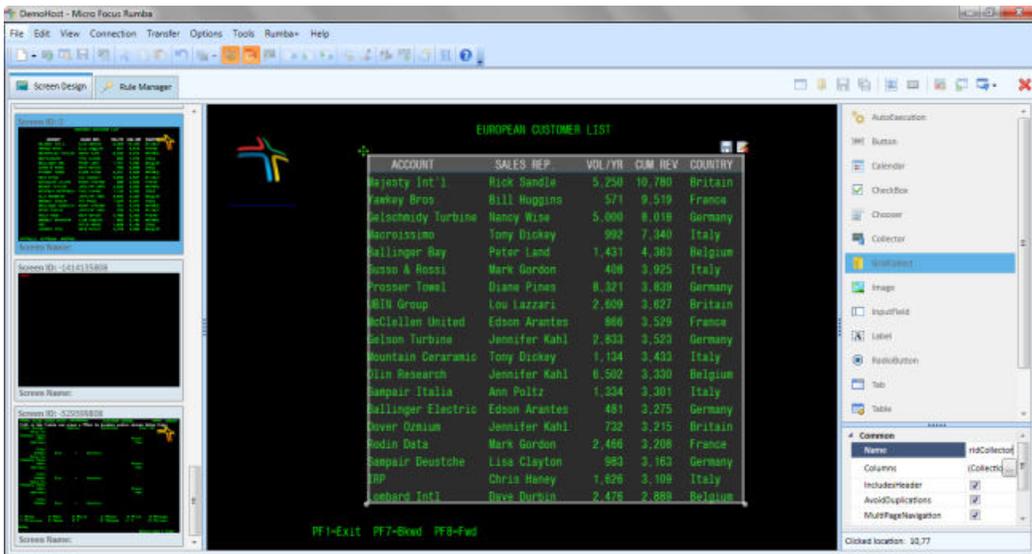


3. Click the **Edit** icon  on the control.

The GridCollector frame appears:



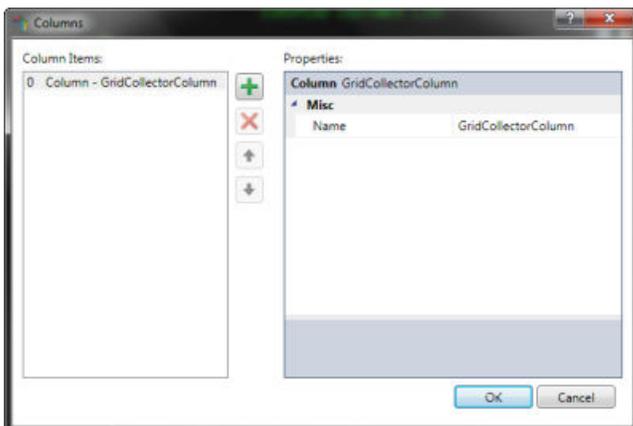
4. Move and size the GridCollector frame so that it overlays the screen data:



5. In the property, in the **Name** field, delete **GridCollector** and type **CustomerList**.

6. Click the accelerator button  next to the **Columns** field.

The **Columns** dialog box appears:



7. In the **Name** field, delete GridCollectorColumn, and type Account.

8. Click the **Add** button .

Another item appears in the **Column Items** frame.

9. In the **Name** field, type Sales Rep.

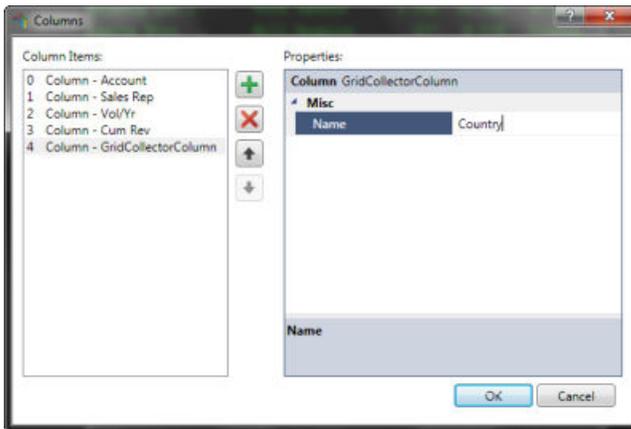
10. Click the **Add** button .

Another item appears in the **Column Items** frame.

11. Continue to add columns for:

- Vol/Yr
- Cum Rev
- Country

The dialog box should look like this:

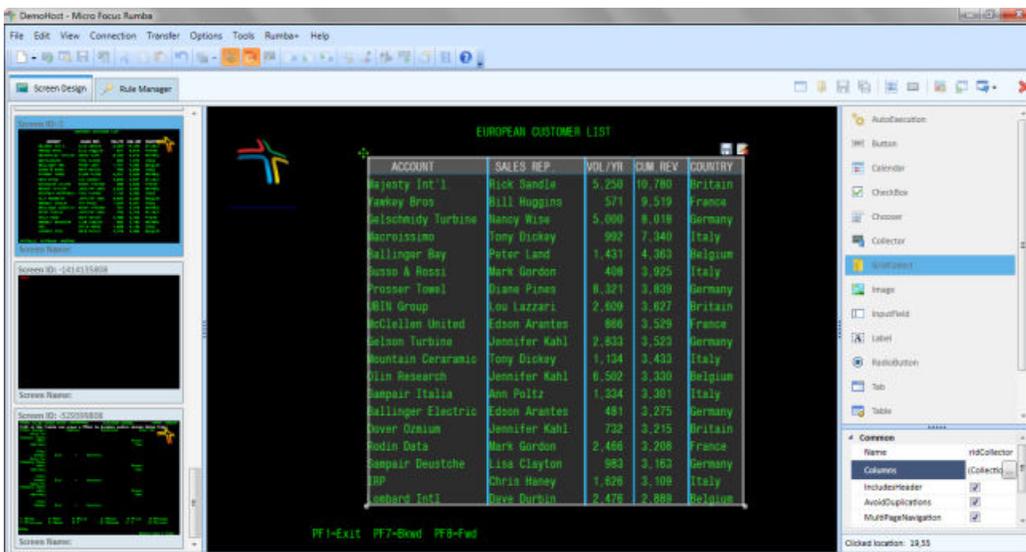


12. Click **OK**.

The GridCollector frame now contains a number of blue vertical lines. These represent column dividers.

13. Drag each column divider to the left of each column.

The GridCollector should look like this:



Tip: In some cases, such as Web applications, system parameters do not look for leading spaces. It is therefore best to start a column on the first character of data.

14. At the top right of the GridCollector, click the **Save** icon .

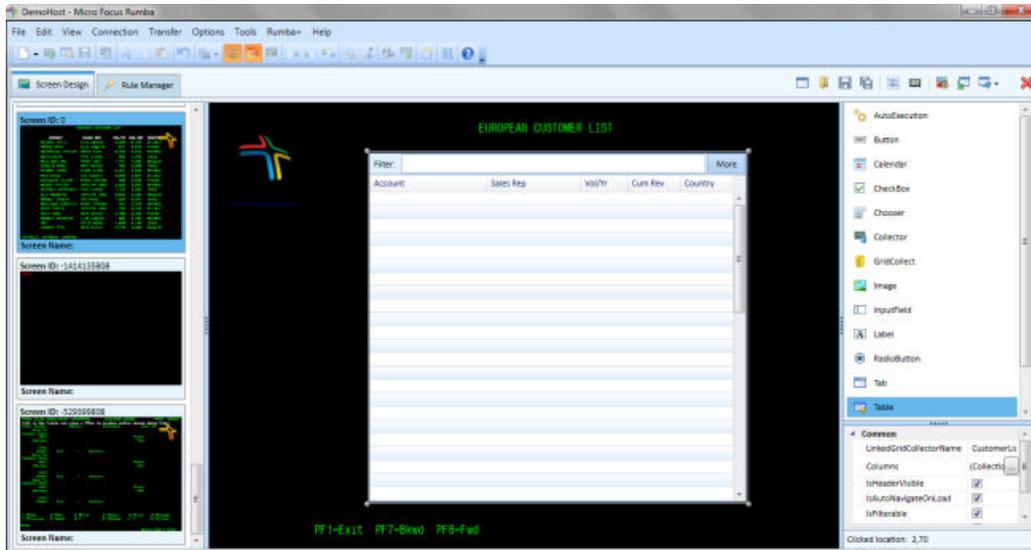
15. Click the **Save** icon  on the project toolbar.

Adding a Table control

This section describes how to add a Table control and link it to the GridCollector control.

1. Drag the Table control from the property grid and drop it on the GridCollector control.

The table automatically links to the GridCollector control and maps on to the area defined by the GridCollector.



 **Note:** The **LinkedGridCollectorName** field in the property is completed automatically, and the table header and columns properties are taken from the linked GridCollector properties.

2. Uncheck **IsAutoNavigateOnLoad**.

3. Uncheck **IsMoreButtonVisible**.

4. Click the **Save** icon  on the project toolbar.

Adding a Collector control

Collector controls gather screen data for use in other functions. In this case you will add a Collector control to collect data to generate a pie chart for January.

1. In the history pane, select the TOPCO TOYS, INC screen.

A larger version of the screen appears in the work area.

2. Drag the Collector control icon from the control panel on to the work area and drop it on top of 305 in the JAN column for region 1.

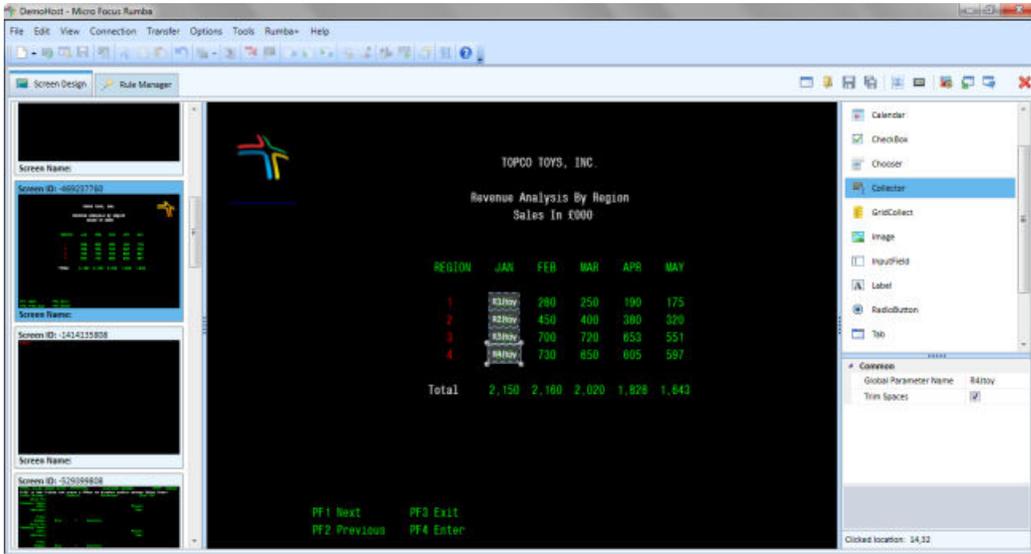
3. In the property grid, type `R1Jtoy` in the **Global Parameter Name** field.

This is the variable where the value will be referenced.

4. Leave **Trim Spaces** checked.

5. Add Collector controls for the three other regions. Use `R2Jtoy`, `R3Jtoy`, and `R4Jtoy` as global parameter names.

The Screen Design page looks like this:

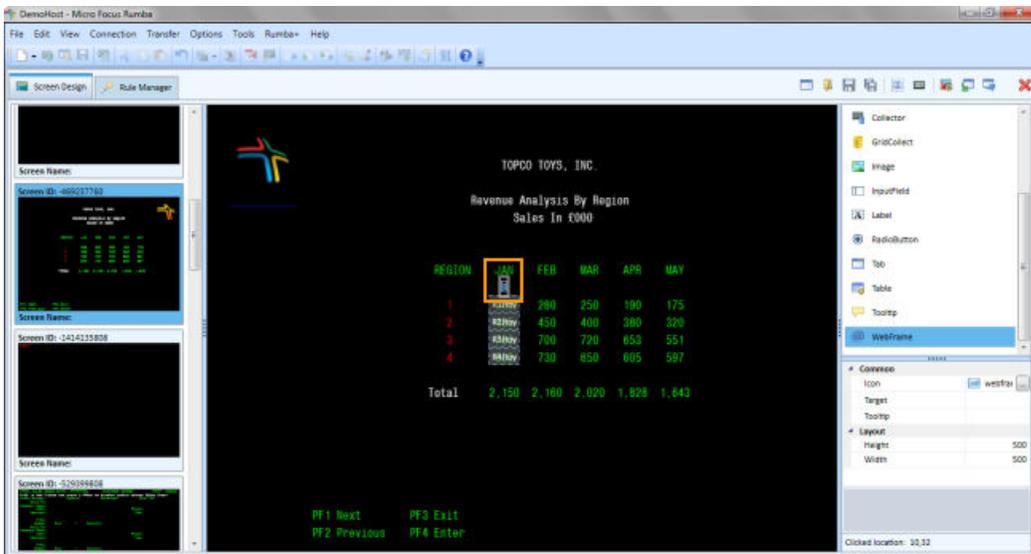


6. Click the **Save** icon  on the project toolbar.

Adding a WebFrame control

In the previous section, you added four Collector controls to collect data for a pie chart. You will now add a WebFrame control to use the variables of the Collector controls to generate the pie chart.

1. Drag the WebFrame control icon from the control panel on to the work area and drop it just underneath JAN:



2. Open the WebFrame_URL.txt file that came with this document.

The file contains the following URL:

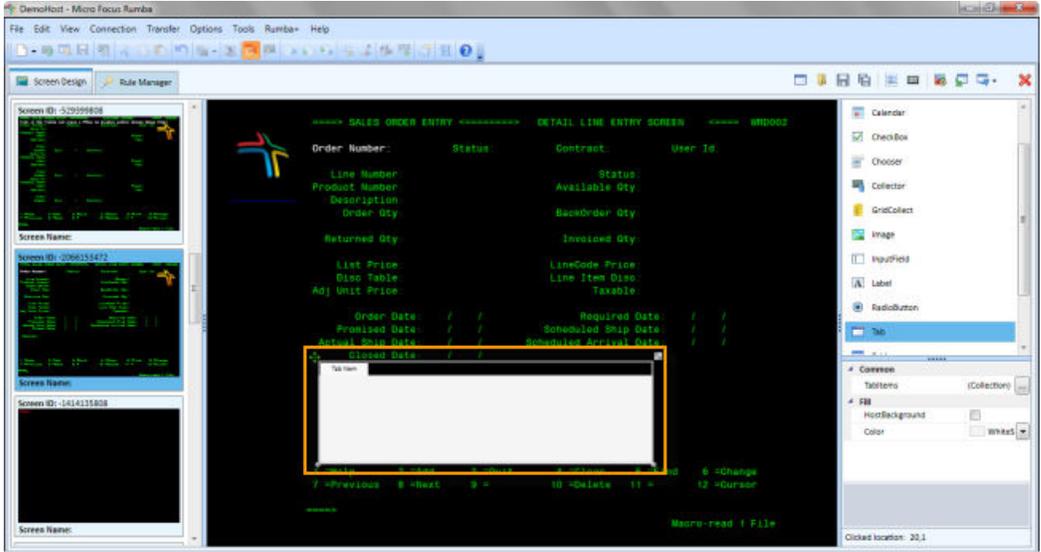
```
http://chart.googleapis.com/chart?chs=300x150&cht=p3&chco=0000FF|00FF00|FF0000|FFFF00&chds=0,1000&chd=t:%%R1Jtoy%%,%%R2Jtoy%%,%%R3Jtoy%%,%%R4Jtoy%%&chdl=Region1|Region2|Region3|Region4&chtt=TOYS
```

3. Copy the content of the file and paste it in the **Target** field of the property grid.
4. Click the **Save** icon  on the project toolbar.

Adding a Tab control

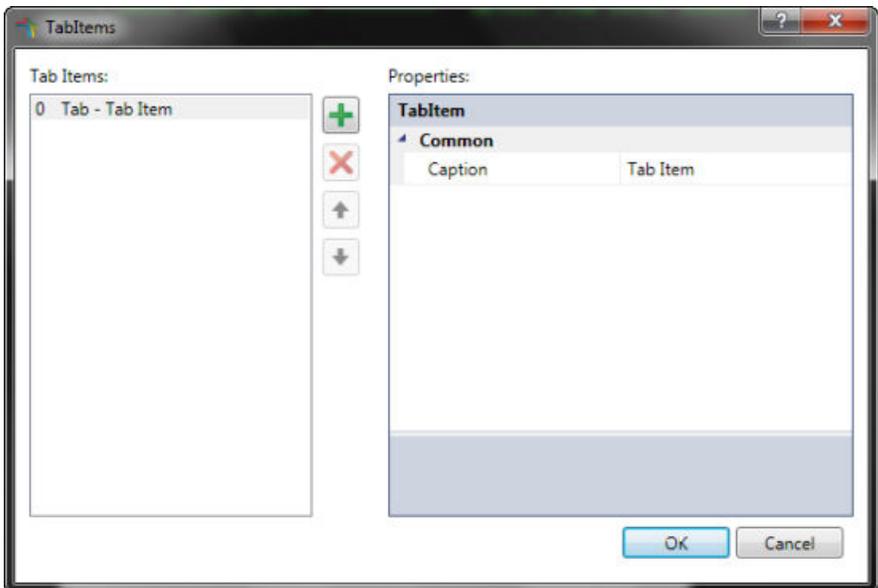
Tab provides an area of the screen to which you can assign other controls. You can have multiple Tab controls on a screen, with multiple tab items within a Tab control.

1. In the history pane, select the SALES ORDER ENTRY - DETAIL LINE ENTRY SCREEN.
A larger version of the screen appears in the work area.
2. Drag the Tab control icon from the control panel to work area and drop it on the Remarks area on the screen:



3. In the property grid, click the accelerator button  next to the **TabItems** field.

The **TabItems** dialog box appears:



4. In the **Caption** field, delete Tab Item and type Order.
5. Click the **Add** button .

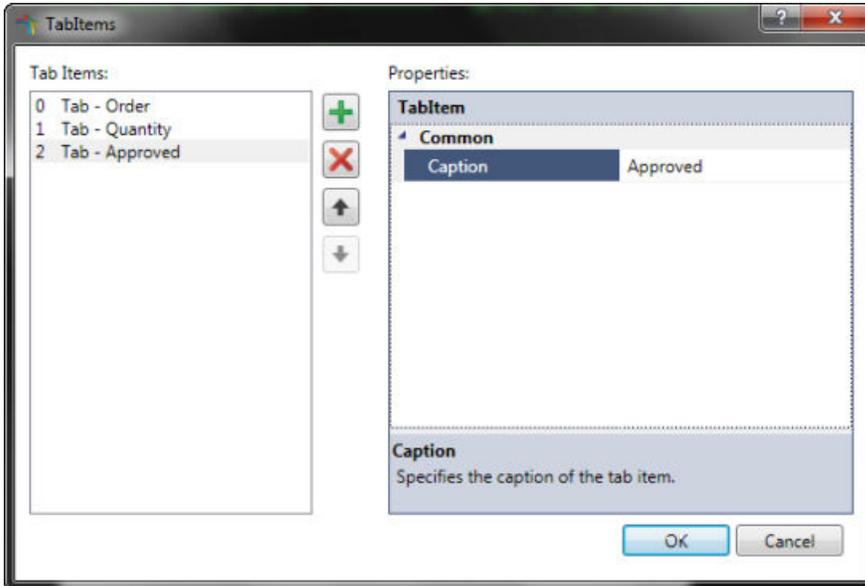
Another item appears in the **Properties** frame.

6. In the **Name** field, delete Tab Item and type Quantity.
7. Click the **Add** button .

Another item appears in the **Properties** frame.

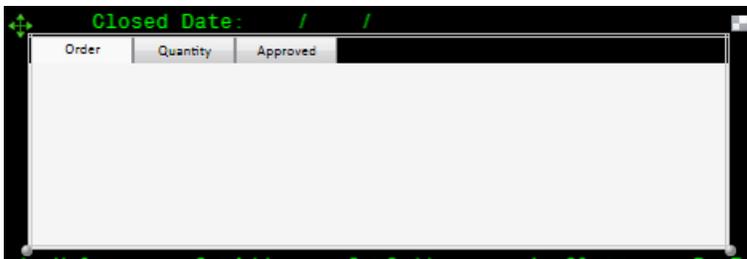
8. In the **Name** field, delete Tab Item and type Approved.

The dialog box looks like this:



9. Click **OK**.

The Tab control now as three Tab items:



10. In the property grid, click the down button  next to the **Color** field.

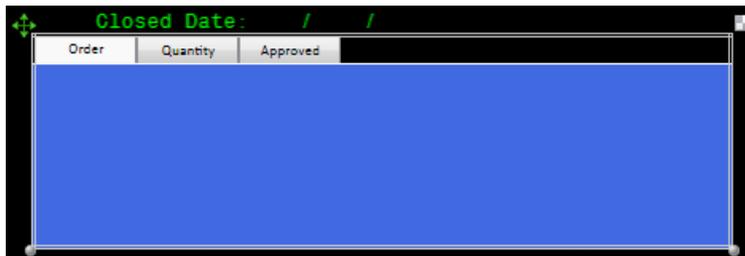
The **Available Colors** palette appears:



11. Select RoyalBlue:



The color fills the Tab control and its Tab items:



12. Click the **Save** icon  on the project toolbar.

Adding an InputField control

InputField provides a text input field in which you type text which is inserted at a specified screen location.

1. An input field requires a label. Drag the Label control icon from the control panel and drop it onto the Tab control you have created:



2. In the property grid, uncheck **HostText**.

The **LabelText** field appears.

3. In the **LabelText** field, delete the default text `Label` and type `Order Number :`.
4. Add another Label control below the first and call it `Status :`.
5. Size both labels:



- Drag the InputField control icon from the control panel and drop it on the Order Number row:



- On the green screen, click one space to the right of the Order Number field.

The coordinates of the screen location appear in the status bar, below the property grid. In this case, 3,16.

- In the property grid, delete the 0 in the **Insert Row** field, then type 3.

- Delete the 0 in the **Insert Column** field, then type 16.

- Click once in the **TextInsertionLocation** field.

- Check **OverrideColorsSettings**.

The Tab item currently looks like this:



- Click the **Quantity** tab.

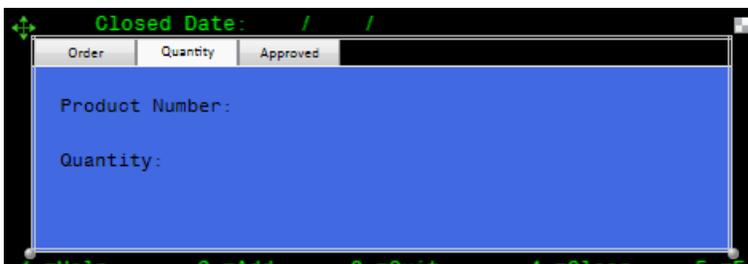
- Drag the Label control icon onto the tab item.

- Uncheck **HostText** and call the label `Product Number:`.

- Size the label.

- Add another label below the first, call it `Quantity:`, then size it.

The Tab item should look like this:



- Add an InputField control on each row with the following specifications:

Property	First control	Second control
InsertionRow	6	8
InsertionColumn	18	18
OverrideColorsSettings	Checked	Checked

The Tab item should look like this:



18. Click the **Approved** tab.

19. Uncheck **HostText**, call the label `Approval :`, and size the label:



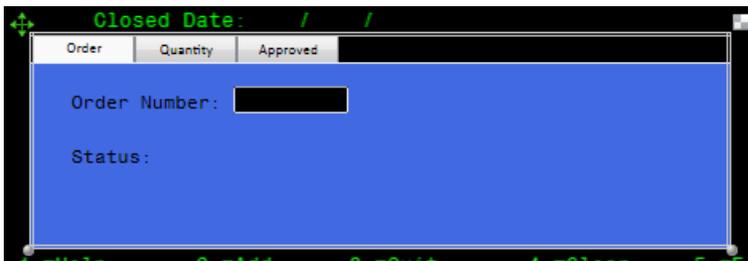
20. Click the **Save** icon  on the project toolbar.

Adding a RadioButton control

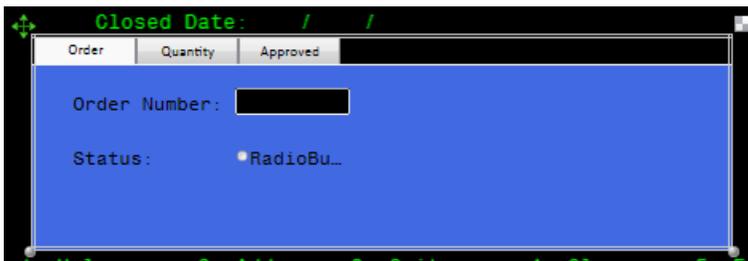
RadioButton adds text at a specified screen location.

This section uses the Tab control you created previously.

1. Click the **Order** tab:

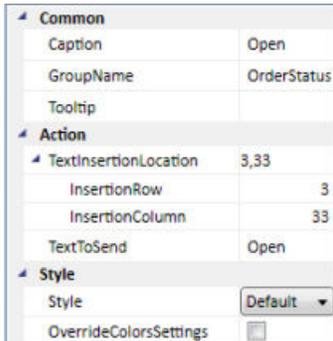


2. Drag the **RadioButton** icon from the control panel and drop it on the `Status :` row:

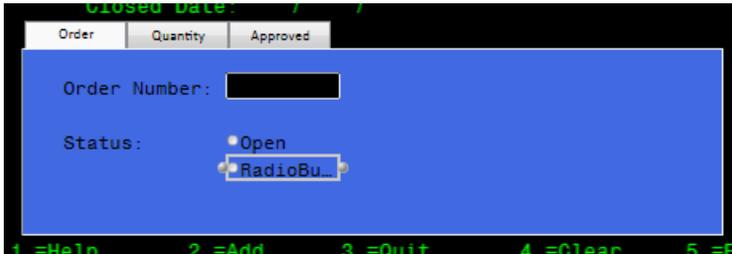


3. In the property grid, delete RadioButton from the **Caption** field and type Open.
4. In the **GroupName** field, type OrderStatus.
5. In the **InsertionRow** field, type 3.
6. In the **InsertionColumn** field, type 33.
7. In the **TextToSend** field, type Open.

The property grid should look like this:

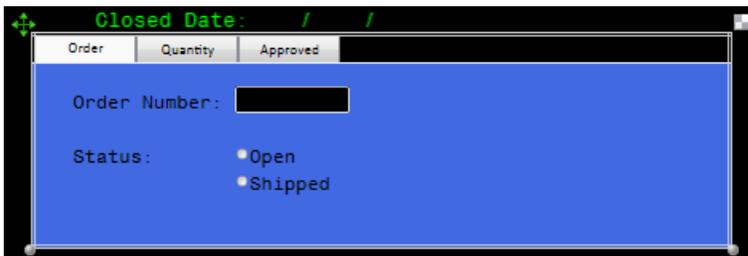


8. Drag the RadioButton icon from the property grid and drop it below the **Open** radio button:



9. In the property grid, delete RadioButton from the **Caption** field and type Shipped.
10. In the **GroupName** field, type OrderStatus.
11. In the **InsertionRow** field, type 3.
12. In the **InsertionColumn** field, type 33.
13. In the **TextToSend** field, type Shipped.

The Tab item should look like this:



14. Click the **Save** icon  on the project toolbar.

Adding a CheckBox control

CheckBox acts like an on/off toggle in the same way as a typical check box. This section uses the Tab control you created previously.

1. Click the **Approved** tab:

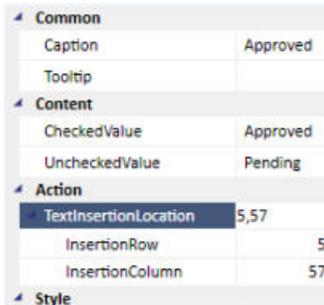


2. Drag the CheckBox icon from the control panel and drop it on the Approval: row:



3. In the property grid, delete CheckBox in the **Caption** field and type `Approved`.
4. In the **CheckedValue** field, type `Approved`.
5. In the **UncheckedValue** field, type `Pending`.
6. In the **InsertionRow** field, type 5.
7. In the **InsertionColumn** field, type 57.

The property grid should look like this:



The Tab item should look like this:



Exporting a Customization File

You must now export all the controls and rules you have created to a customization file. You will then link the file to a mainframe session.

To generate the customization file:

1. Click the **Export customization file** icon  on the project toolbar.
The **Save Rumba Designer Archive** dialog appears.
2. In the **File name** field, type a name for the file, such as DemoHost.
3. Click **Save**.

Closing the Screen Designer

To close the Screen Designer, click the **Exit customization** icon  on the project toolbar.

Associating the Customization File with a Host Session

The final step is to associate the customization file with a host session. To do this:

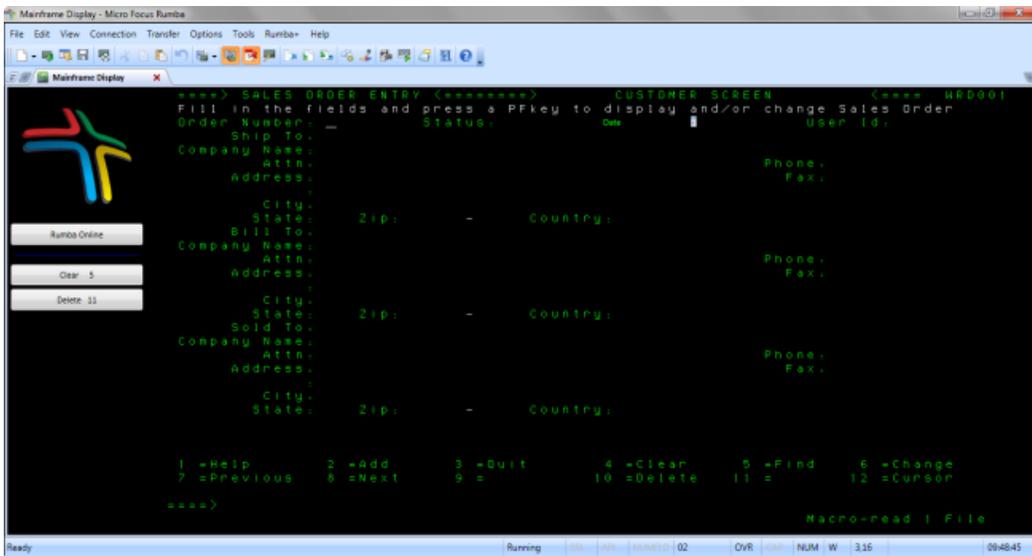
1. On the Rumba desktop, select **Rumba+ > Rumba+ Mode**.
2. Select **Rumba+ > Settings**.
The **Rumba+ Settings** window appears.
3. Next to the **Associate Rumba Designer Archive** field, click **Browse**.
The **Associate Customization File** dialog box appears.
4. Choose the customization file you created, then click **Open**.
5. In the **Rumba+ Settings** window, click **OK**.



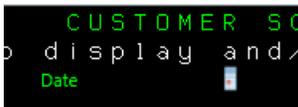
5. At the READY prompt, enter:

0

The SALES ORDER ENTRY CUSTOMER SCREEN appears:



This screen contains the Date label and Calendar control you created:



6. Hover your mouse over the Calendar control.

The tooltip text you entered appears:



7. Click the Calendar control.

A calendar appears:



8. Select today's date, then click **Set Date**.

The date appears:



9. Press PF3.

10. At the READY prompt, enter C.

The EUROPEAN CUSTOMER LIST screen appears, showing the table you created with the GridCollector and Table controls:



11. Press PF1.

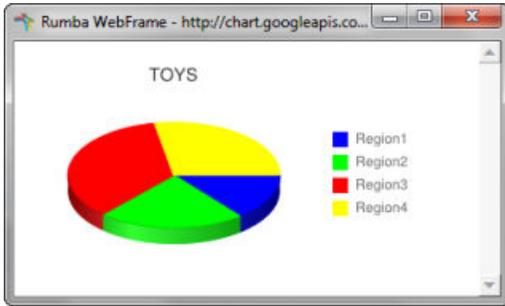
12. At the READY prompt, enter:

TOYS

13. At the TOPCO TOYS, INC screen, press ENTER.

14. Click the WebFrame control under JAN.

The pie chart you created appears in a separate window:



15. Close the pie chart window.

16. In the TOPCO TOYS, INC screen, press ENTER.

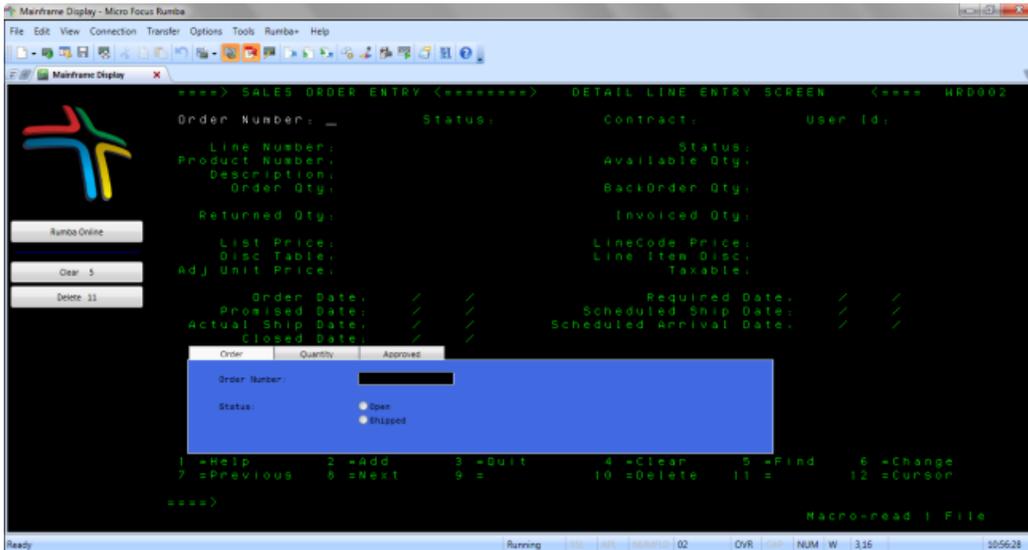
17. At the READY prompt, enter:

O

The SALES ORDER ENTRY CUSTOMER SCREEN appears.

18. Press PF8.

The SALES ORDER ENTRY DETAIL LINE ENTRY SCREEN appears, showing the Tab control you created:



19. On the **Order** Tab item, in the **Order Number** field, type 12345.

The number appears in the Order Number field on the green screen.

20. Select the **Open** radio button.

The text Open appears in the Status field next to the order number.

21. Select the **Shipped** radio button.

The text Shipped replaces Open in the Status field:

```
Order Number: 12345      Status: Shipped
```

22. Click the **Quantity** tab.

23. In the **Product Number** field, type ABC77701.

The text appears in the Product Number field.

24. In the **Quantity** field, type 25.

The text appears in the Order Qty field:

```
Product Number: ABC77701
Description:
Order Qty: 25
```

25. Click the **Approved** tab.

26. Select the **Approved** check box.

The check box is unchecked and the text `Pending` appears in the second `Status` field.

27. Check **Approved**.

The check box is checked and the text `Approved` appears in the second `Status` field.

The screen looks like this:

```
Status: Approved
Available Qty:
```

28. Select **Connection > Disconnect**.

Reference

This section contains additional, reference information about the Screen Designer, controls, and rules.

Controls

AutoExecution

AutoExecution is used to trigger a sequence of actions when a green screen appears. The control is invisible at run time. Only one AutoExecution control is allowed per screen.

Properties:

Name	Default value	Description
Actions	Empty list	One or many actions are executed sequentially from the top to the bottom in the specified list.

Button

Button is used to trigger a sequence of actions when clicked. The control can include text or an image.

Properties:

Name	Default value	Description
Mode	Text	Specifies the type of content for the control. Can be Text or Image .
Caption	Button	The text to be displayed on the button.
ImagePath	Question mark (?)	The image to be displayed on the button.
ImagePosition	Stretch	Specifies the position of the image inside the button: Stretch (default) Fill Fit Center
Tooltip		The tooltip is displayed when the mouse pointer hovers over the button. If empty, the button's caption is displayed.
Actions	Empty list	One or many actions which are executed sequentially from the top to the bottom in the specified list.
Style	Default	The button style,

Name	Default value	Description
OverrideStyleSettings	Unchecked	When checked, the background and foreground color options are made available, overriding the Style property.
Background	UseBackgroundFromHost	A list box containing two options: <ul style="list-style-type: none"> • UseBackgroundFromHost (the host screen text color is used as the background color) • CustomColors Available only if OverrideStyleSettings is checked.
Foreground	UseForegroundFromHost	A list box containing two options: <ul style="list-style-type: none"> • UseForegroundFromHost (the host screen text color is used as the foreground color) • CustomColors Available only if OverrideStyleSettings is checked.

Calendar

Calendar is used to pick a date and is initially displayed on the screen as an icon. Calendar opens when you click the icon. It closes on losing focus, or when you click **Set Date** or **Cancel**.

When you click **SetDate**, the text presenting the date is inserted into the **TextInsertionLocation** (**InsertionRow**, **InsertionColumn**) according to the **InsertedDateFormat**.

If the field occupied by Calendar contains `date`, the field is used by Calendar when it opens. Otherwise, Calendar uses the current date.

Properties:

Name	Default value	Description
TextInsertionLocation	(0,0)	The (row,column) where the value of the control is inserted on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
InsertionRow	0	Specifies a row, where the inserted date text begins on the screen. Zero means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
InsertionColumn	0	Specifies a column, where the inserted date text begins on the screen. Zero means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.

Name	Default value	Description
InsertedDateFormat	Empty string	Specifies the format of the text representing the date format. If empty, the default date format is used: MM/dd/yyyy hh:mm:ss For example, 09/21/2012 12:00:00.
Tooltip	Empty string	If empty, no tool tip is displayed.

CheckBox

The CheckBox control acts as an on/off toggle control in the same way as a typical check box.

CheckBox provides the user a method of choosing between two options, such as Yes and No.

Properties:

Name	Default value	Description
TextInsertionLocation	(0,0)	The (row,column) where the value of the control is inserted. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
InsertionRow	0	The row where the inserted text begins on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
InsertionColumn	0	The column where the inserted text begins on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
CheckedValue	Empty string	The value that will be used at the text inserted at the specified screen location, if the check box is checked.
UncheckedValue	Empty string	The value that will be used at the text inserted at the specified screen location, if the check box is unchecked.
Caption	Check Box	The label text that appears next to the check box.
Tooltip	Empty string	The tool tip text that appears when the mouse hovers over the control.
OverrideStyleSettings	Unchecked	When checked, the background and foreground color options are made available which, when selected, override the Style property.
Background	UseBackgroundFromHost	A list box containing two options:

Name	Default value	Description
Foreground	UseForegroundFromHost	<ul style="list-style-type: none"> • UseBackgroundFromHost (the host screen background color is used as the background color) • CustomColors <p>Available only if OverrideStyleSettings is checked.</p> <p>A list box containing two options:</p> <ul style="list-style-type: none"> • UseForegroundFromHost (the host screen text color is used as the foreground color) • CustomColors <p>Available only if OverrideStyleSettings is checked.</p>
BackgroundColor	Black	A color palette for choosing the background color. Only available if Background is set to CustomColors .
ForegroundColor	White	A color palette for choosing the text color. Only available if Foreground is set to CustomColors .

Chooser

Chooser is displayed on the screen as a drop-down control. Chooser is used to insert data into a field on the screen by selecting an item from the list.

Auto-complete is supported.

Properties:

Name	Default value	Description
TextInsertionLocation	(0,0)	The (row,column) where the value of the control is inserted on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
InsertionRow	0	The row where the inserted text begins on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
InsertionColumn	0	The column where the inserted text begins on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
ChooserItems	Empty list	The list of items displayed by the drop-down list when clicking the down arrow. The list of items can be

Name	Default value	Description
		imported from a .csv file (see below). Each item is specified by Caption , Tooltip , and ValueToInsert .
	Caption	The text to be displayed on the drop-down list item.
	Tooltip	The text to be displayed by Tool Tip when the mouse cursor hovers over the drop-down list item.
	ValueToInsert	Specifies the text to be inserted when selecting an item from the list.
IsAutoCompleteEnabled	Checked	When checked, Chooser automatically offers a case-insensitive matching item to be selected from the list. If the user is not typing in the screen field occupied by Chooser, no suggestions are made.
IsEditable	Checked	When checked, data can be typed into the field that Chooser is using. If unchecked, data can only be selected from the drop-down list.
OverrideStyleSettings	Unchecked	When checked, the background and foreground color options are made available, overriding the Style property.
Background	UseBackgroundFromHost	A list box containing two options: <ul style="list-style-type: none"> • UseBackgroundFromHost (the host screen text color is used as the background color) • CustomColors Available only if OverrideStyleSettings is checked.
Foreground	UseForegroundFromHost	A list box containing two options: <ul style="list-style-type: none"> • UseForegroundFromHost (the host screen text color is used as the foreground color) • CustomColors Available only if OverrideStyleSettings is checked.

Importing items from a .csv file

To use this feature successfully, the contents of the .csv file must be in the following format:

```
<CAP><DEL><TIP><DEL><VAL>
```

where:

This ...	Denotes this ...
<CAP>	Caption.
	Delimiter (;). This is the only supported delimiter.

This ...	Denotes this ...
<TIP>	Tool tip.
<VAL>	Value to insert.

For example:

```
#First block
AAA;BBB;CCC
AAA;BBB;CCC
DDD;EEE;ZZZ
GGG;HHH;III
JJJ;KKK;LLL
MMM;NNN;OOO
```

To import a `.csv` file:

1. Click the accelerator button next to **ChooserItems** in the property grid.
2. In the **ChooserItems** dialog box, click the **Import** icon.
3. Select the `.csv` file.
4. Click **OK**.

Collector

Collector is a control invisible at run time. It is used to copy text from the Collector's screen location to the session database. The Collector's screen location is defined by the two pairs (Row Offset, Column Offset), (Row Span, Column Span).

The database lifetime is the whole session. Data is collected when host screen appears as a list of (key, value) pairs of strings. The data can be used by other controls only from the current session. When the Collector's screen location spans screen rows, appropriate line breaks are inserted into the collected data.

For example, a Button control looking like a small handset icon can be set up with an action **Run_Application** to run Skype. **Additional_Arguments** of this action can use a phone number stored by the Collector located in a phone number field on another screen of the session.

Properties:

Name	Default value	Description
GlobalParameterName	Empty string	<p>Specifies a key to be used by Collector when copying data from the Collector's screen location to the database.</p> <p>Data stored with the same key more than once is overwritten.</p> <p>Data can be accessed later in the session by using the syntax:</p> <pre>%%PhoneNumber%%</pre> <p>where <code>PhoneNumber</code> is the global parameter name.</p>
TrimSpaces	Checked	<p>When checked, whitespace characters are not copied to the database. When unchecked, whitespace characters are included in the data.</p>

GridCollector

The GridCollector control is an extended version of the Collector control. Collector collects data as text from a specific screen location. GridCollector collects data as a table (grid).

The control stores the collected information in a database for the lifetime of the current session. The information can be used by any other control.

To configure GridCollector properties, click the **Edit Mode** button at the top right corner of the control. When you have finished, click either the **Save and Exit** button or the **Cancel Edit Mode** button.

Properties:

Name	Default value	Description
Name	GridCollector	The name for a GridCollector. Must be unique.
Columns		Columns collection. Each column has one property: Name: Non-empty string. The default name is GridCollector Column.
IncludesHeader	Checked	When checked, the selection includes the table header.
AvoidDuplications	Checked	When checked, duplicate rows are not collected.
MultiPageNavigation	Checked	When checked, the following properties are enabled: MaxPages AIDKey EndCondition
MaxPagesToLookUp	1	Integer. The number of pages that are fetched each time the Fetch operation is triggered by one of the controls that uses the GridCollector data. The GridCollector implements the fetching mechanism (not the control that uses the GridCollector) .
NavigationAidKey	PF8	The AID key for fetching the next page.
EndOfDataCondition		
	SameData	When selected, data collection stops if duplicate data is found.
	EmptyLine	When selected, data collection stops if an empty line is found.
	Text	When selected, data collection stops if: either: The specified non-empty string is found at the specified screen location. or:

Name	Default value	Description
EndOfDataText		The specified string is empty and nothing is found at the specified screen location.
EndOfDataTextRow		The text to search. Available if Text is selected.
EndOfDataTextColumn		The row of the text.
EndOfDataTextLocation		The column of the text.
		Location of the text.

Any control that wants to use the data from the GridCollector can get the data by using the following syntax:

```
%%GridCollector_Name[Row_Number,Column_Name]%%
```

Examples:

%%Customers[5,Address]%%	Defines getting the address of the entry 5.
%%Customers[* ,Address]%%	Defines getting the address of all customers. This can be useful for setting a list control's items source.
%%Customers[3,*]%%	Defines getting all data for the customer at the third row.
%%Customers[*,*]%%	Defines getting GridCollector data for all customers.

On a Rumba+ screen, each time new data appears on the screen, the data is added to the GridCollector table.

Image

Image control is used to mask an area on the screen. It appears at run-time without a frame, and can be filled with one of the following:

Color If **UseBackgroundFromHost** is checked, Image is filled with with the host background color. If **UseBackgroundFromHost** is unchecked, you can select the fill color from the palette. The default color is black. If you select a transparent fill, the Image control is invisible on the screen.

Image If you do not specify a path to the image, or the path is not valid, the Image control is invisible on the screen.

You can change the opacity of the Image control on the **Screen Design** page to show the contents of the screen behind the control. To do this, select the control, then click the icon on the top right corner of the control's frame.

Properties:

Name	Default value	Description
Type	Color	Can be either Color or Image .
UseBackgroundFromHost	Checked	Only available if Type is Color .
Color	Black	Fill color. Only available if Type is Color and UseBackgroundFromHost is unchecked.
ImagePath	Empty string	Fully qualified path of an image file. Only available if Type is Image .

Name	Default value	Description
		<p>The image URI can be one of the following:</p> <ul style="list-style-type: none"> • Path to file: An image file with a format of JPG, GIF, or PNG. • HTTP: The Web address of an image. You can also use the Collector control to provide the image path.
ImagePosition	Stretch	<p>Position and size of the selected image. Can be one of the following:</p> <p>Stretch (default) Fill Fit Tile Center</p>

InputField

The InputField control provides a text input field into which the user types text which is inserted at a specified screen location.

For example, InputField can be used to modernize or rationalize the layout of a screen with a number of input fields. InputField controls can be placed where they are most useful. The information the user types into them is then inserted in the screen locations of the traditional editable areas.



Note: When the control is used in a Rumba+ screen, the input field displays the value from the screen location, at the specified length. However, if the screen location is a protected field, no data is read and no typing is allowed in the InputField control..

In addition, if the length is 0 (the default value), data is read until the end of the green screen field the control refers to, and the number of characters is limited by the length of the green screen.

Properties:

Name	Default value	Description
TextInsertionLocation	(0,0)	The (row,column) where the text is inserted on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
InsertionRow	0	The row where the inserted text begins on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
InsertionColumn	0	The column where the inserted text begins on the screen. 0 means the location of the control as specified on the Screen Design page, or the

Name	Default value	Description
Length	0	location of the logical marker defined by the SearchFor condition. The maximum number of characters that the input field can contain. A value of 0 means the number of characters is limited by the length of the green screen field.
Tooltip	Empty string	A tool tip that describes the control.
IsNumeric	False	Specifies whether the input is numeric or for al characters.
OverrideStyleSettings	Unchecked	When checked, the background and foreground color options are made available, overriding the Style property.
Background	UseBackgroundFromHost	A list box containing two options: <ul style="list-style-type: none"> • UseBackgroundFromHost (the host screen text color is used as the background color) • CustomColors Available only if OverrideStyleSettings is checked.
Foreground	UseForegroundFromHost	A list box containing two options: <ul style="list-style-type: none"> • UseForegroundFromHost (the host screen text color is used s the foreground color) • CustomColors Available only if OverrideStyleSettings is checked.
BackgroundColor	Black	A color palette for choosing the background color. Only available if Background is set to CustomColors .
ForegroundColor	White	A color palette for choosing the text color. Only available if Foreground is set to CustomColors .
IsPassword	Unchecked	When checked, an asterisk (*) is used to masked the typed characters.

Label

The Label control is a single line control which is used to place any static text at a specified location on a screen.

Properties:

Name	Default value	Description
HostText	Checked	When checked, the host text located at (StartRow , StartColumn) is used as the label text. When unchecked, LabelText is made available.

Name	Default value	Description
LabelText	Label	If HostText is unchecked, this specifies the custom text to be displayed on the label.
Alignment	Left	Specifies the alignment of the label text: Left Center Right
LabelLocation		Shows the starting row and column for the label text. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition. See note below.
	StartRow 0	Specifies a row, where the label text begins on the screen.
	StartColumn 0	Specifies a column, where the label text begins on the screen.
Length	0	Length of the content in characters defines the length of the tool tip on the screen.
OverrideStyleSettings	Unchecked	When checked, the background and foreground color options are made available, overriding the Style property.
Background	UseBackgroundFromHost	A list box containing two options: <ul style="list-style-type: none"> • UseBackgroundFromHost (the host screen text color is used as the background color) • CustomColors Available only if OverrideStyleSettings is checked.
Foreground	UseForegroundFromHost	A list box containing two options: <ul style="list-style-type: none"> • UseForegroundFromHost (the host screen text color is used as the foreground color) • CustomColors Available only if OverrideStyleSettings is checked.



LabelLocation: When the emulation screen is loaded, and **HostText** is checked, the Label control displays the value from the **LabelLocation** coordinates.

In addition, you can pick the location's color preferences and bind them to the Label control. To do this, the following values must be set:

Property	Setting
OverrideStyleSettings	Checked.

Property	Setting
Background	UseBackgroundFromHost
Foreground	UseForegrounfFromHost

RadioButton

The RadioButton control is used to add text at a specified screen location.

Properties:

Name	Default value	Description
TextInsertionLocation	(0,0)	The (row,column) where the value of the control is inserted. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
InsertionRow	0	The row where the inserted text begins on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
InsertionColumn	0	The column where the inserted text begins on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.
Caption	RadioButton	The text to be displayed on the control.
Tooltip	Empty string	The tool tip text that appears when the mouse hovers over the control.
GroupName	Empty string	The radio button group this radio button belongs to.
TextToSend	Empty string	The text to send to the host.
OverrideStyleSettings	Unchecked	When checked, the background and foreground color options are made available, overriding the Style option.
Background	UseBackgroundFromHost	A list box containing two options: <ul style="list-style-type: none"> • UseBackgroundFromHost (the host screen background color is used as the background color) • CustomColors Available only if OverrideStyleSettings is checked.
Foreground	UseForegroundFromHost	A list box containing two options: <ul style="list-style-type: none"> • UseForegroundFromHost (the host screen text color is used as the foreground color) • CustomColors

Name	Default value	Description
BackgroundColor	Black	Available only if OverrideStyleSettings is checked. A color palette for choosing the background color. Only available if Background is set to CustomColors .
ForegroundColor	White	A color palette for choosing the text color. Only available if Foreground is set to CustomColors .

Tab

Tab provides an area of the screen to which you can assign other controls. You can have multiple Tab controls on a screen, with multiple tab items within a Tab control.

To assign a control to a tab item, drag the control on to the appropriate tab item.

When you select another tab item, that tab item is shown, together with its controls.



Notes:

- Deleting a tab item deletes all its assigned controls.
- Deleting a Tab control deletes all its tab items and their assigned controls.

Properties:

Name	Default value	Description
TabItems	Empty collection	Lists all tab items and their controls. Each tab item has a caption.
HostBackground	Unchecked	When checked, the Tab control uses the background color of the host screen. When unchecked, the control uses the color defined by the Color property.
Color	White Smoke	Specifies the background color of the Tab control.

Table

The Table control formats data from multiple screens as a scrollable table with filtering and sorting capabilities.

The Table control uses a pre-defined GridCollector control as its data source. If there is already one, single GridCollector on the screen, the Table control links to it automatically. If there is no GridCollector on the screen, you must link to a GridCollector manually using the **LinkedGridCoillectorName** property.

Properties:

Name	Default value	Description
LinkedGridCoillectorName		Name of the GridCollector control to which the Table control is linked.
Columns		Collection of columns.
	Title	Name of the linked GridCollector column. The visible column title.

Name	Default value	Description
IsVisible	Checked	When checked, the control is visible on a Rumba+ screen.
ColumnAliasInGridCollector		Name of the GridCollector column from where the data will be taken.
ColumnType	String	Can be one of: String Number Date
ColumnDateFormat		Format of dates in the selected column.
IsHeaderVisible	Unchecked	When checked, the table shows the column headers.
IsAutoNavigateOnLoad	Checked	When checked, the Table control triggers the GridCollector to fetch the next pages automatically when the Table control is activated.
IsFilterable	Checked	When checked, adds a Filter field to the table.
IsMoreButtonVisible	Checked	When checked, the More button is enabled on the table.
ColumnAlignment	Left	Aligns the cell text. Can be one of: Left Center Right
DefaultRowCommand		Actions performed when the user double-clicks a row. The syntax for taking the text from the clicked row is: ##DGC_column_name_linked_to_the_column##
LinkedGridCollectorName		The name of the linked GridCollector control.

Tooltip

The Tooltip control is activated when the mouse pointer hovers over the screen area that Tooltip occupies.

There are two modes for Tooltip:

Static mode Where the content of Tooltip is a free string. The string can include global collect variables.

Advanced mode Where Tooltip can read text from screen location and use it as the displayed text.

Properties:

Name	Default value	Description
Caption	Empty string	Specifies the text displayed by Tooltip. Data stored by Collectors can be used.

Name	Default value	Description
Advanced	Unchecked	When checked, activates advanced mode.
Tooltips		Advanced mode only.
Tooltip Location		Shows the starting row and column for the Tooltip text..
	StartRow 0	Specifies a row, where the Tooltip text begins on the screen. Advanced mode only.
	StartColumn 0	Specifies a column, where the Tooltip text begins on the screen. Advanced mode only.

Importing items from a .csv file

To use this feature successfully, the contents of the .csv file must be in the following format:

```
<KEY><DEL><TIP>
```

where:

This ...	Denotes this ...
<KEY>	Key representing on-screen emulation text.
	Delimiter (;). This is the only supported delimiter.
<TIP>	Tooltip text.

For example:

```
#Tool Tip values
TSO;TSO log on
Password;Enter your password
Application required;Enter your CICS application name
Userid;Enter your user ID
```

To import a .csv file:

1. Click the accelerator button next to **Tooltips** in the property grid.
2. In the **Tooltips** dialog box, click the **Import** icon.
3. Select the .csv file.
4. Click **OK**.

WebFrame

Web Frame is an icon which, when clicked, opens a separate window in the default Web browser at a specified Web address. For example, an icon looking like a small globe can be set to open a map based on the postal address displayed in the host screen field.

Properties:

Name	Default value	Description
Target	Empty string	Any valid Web address. The data stored by Collectors can be used in specifying the target.
Icon	Empty string	Can be one of the following:

Name	Default value	Description
		<ul style="list-style-type: none"> Full path to an image to be used as an icon. Windows XP: Relative path to: C:\Documents and Settings\<i><User></i>\Application Data\Micro Focus\Rumba\Plus\Icons Windows Vista, Windows7: Relative path to: C:\Users\<i><User></i>\AppData\Local\Micro Focus\Rumba\Plus\Icons
Width	500	Window width in pixels.
Height	500	Window height in pixels.
Tooltip		If empty, no tool tip is displayed. Otherwise, specifies the text that Tooltip displays when the mouse hovers over the WebFrame icon.

Shared properties

Each of the following properties may be used by more than one type of control:

Name	Default value	Description
ControlTarget	RumbaMainArea	The control target is the region specified in the currently selected theme, where the control is placed. RumbaMainArea is the region occupied by the green screen.
Style	Empty string	Style defines the look of a control. Its possible values are displayed in the list of items taken from the currently selected theme. If not specified, the default style is used.
UseBackgroundFromHost	Unchecked	When checked, a control acquires its background color coming from host. When unchecked, the background color defined by the control's style is used.
UseForegroundFromHost	Unchecked	When checked, a control acquires its foreground color coming from host. When unchecked, the foreground color defined by the control's style is used.
RowOffset	0	Vertical offset relative to the row where the logical marker is located. Logical markers are defined by the SearchFor condition. A positive or negative value defines the screen location as the number of rows down or up the logical marker.

Name	Default value	Description
ColumnOffset	0	<p>A wrong offset value can adversely displace the control.</p> <p>Horizontal offset relative to the column where the logical marker is located. Logical markers are defined by the SearchFor condition. A positive or negative value defines the screen location as the number of columns from the right or left of the logical marker.</p>
RowSpan	0	<p>A wrong offset value can adversely displace the control.</p> <p>If not zero, overrides the height of a logical marker defined by the SearchFor condition.</p>
ColumnSpan	0	<p>If not zero, overrides the width of a logical marker defined by the SearchFor condition.</p>

Actions

Action	Description	Values
SetText	<p>Inserts text into the specified screen location of an unprotected field.</p> <p>If the specified location is not in any unprotected field, no action is performed.</p>	<p>InsertionRow A row, where the inserted text begins on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the SearchFor condition.</p> <p>InsertionColumn A column, where the inserted text begins on the screen. 0 means the location of the control as specified on the Screen Design page, or the location of the logical marker defined by the</p>

Action	Description	Values
		SearchFor condition.
		ActionTarget The text to be inserted.
EmulationCommand	Runs the emulation command.	EmulationCommand Possible values are shown in a list.
WebSite	Runs the user's default browser to navigate to a specified Web site.	ActionTarget Web site address. Data stored by Collectors can be used to specify arguments.
RunApplication	Run a specified application on the user's machine.	ActionTarget Command line to run. Data stored by Collectors can be used to specify arguments. AdditionalArguments Application arguments.
RunMacro	Runs a specified macro with the Rumba Engine.	ActionTarget Full path to the macro file to run, or the path relative to the Rumba macros folder. Data stored by Collectors can be used to specify arguments.
RunScript	Runs a specified script with the Rumba Script Engine.	ActionTarget Full path to the script file to run, or the path relative to the Rumba scripts folder. Data stored by Collectors can be used to specify arguments.
Email	Sends an email to a specified address.	Action Target The recipient's email address.

Identifying screens

About screen IDs and names

A screen ID is a numeric identifier, calculated from screen properties by the Rumba engine. Unfortunately, a screen ID might not be unique.

To ensure that a screen can be identified uniquely, you can select one or more text portions on the screen, which then distinguishes the screen uniquely across a session.

Based on the screen ID and on the text portions selected on the screen, Rumba automatically generates a screen name. You can change the name if you want. This name is applied to all screens with the same ID, and with the same selected text portions across all sessions.

When working on your customization project, it is therefore important to follow these guidelines:

1. First, check that the screen names are unique. If they are not unique, select more text portions on the screens with the same name to differentiate between them.
2. Avoid renaming screens which are used by different customization projects.

Changing text selections

If you change the text selections on a screen, all the rest of the screens, which have the same name, will have their names removed. You must therefore be careful if you change text selections on screens.

Renaming screens

If you rename a screen in one of your customization projects, be aware of the side effect the change might have on other projects using screens with the same name.

Using screen history

If you use Rumba screen history, you might see some captured screens automatically use names you have used in a customization project. This happens when a captured screen has the same ID, and the same selected text portions you have defined in your customization project.

Creating text selection

1. Open the screen by selecting its thumbnail in the left pane.
2. Click the toggle button on the project toolbar to switch to screen identification mode.
3. Select the text portion on the screen by drawing a rectangular border within a single screen row with a mouse.

Removing text selection

1. Open the screen by selecting its thumbnail in the left pane.
2. Click the toggle button on the project toolbar to switch to screen identification mode.
3. Right-click the selection, then select **Remove This Selection** from the pop-up menu.

Alternatively, you can click the selection to highlight it, then press `DELETE`.

Naming screens

1. Open the screen by selecting its thumbnail in the left pane.

2. Click the toggle icon on the project toolbar to switch to screen identification mode.
3. Specify the screen name as the value of the **Screen Name** property in the property grid.

 **Note:** We recommend you give each screen in a session a unique name.

Using themes

A theme defines the layout of the screen and the look of each control across all screens in a customization project.

The screen layout is defined as having a rectangular main area in the center, which might be surrounded by rectangular areas (margins).

The following themes are included in Rumba:

- Rumba Green Screen
- Rumba+ Green Screen
- Rumba+ Windows

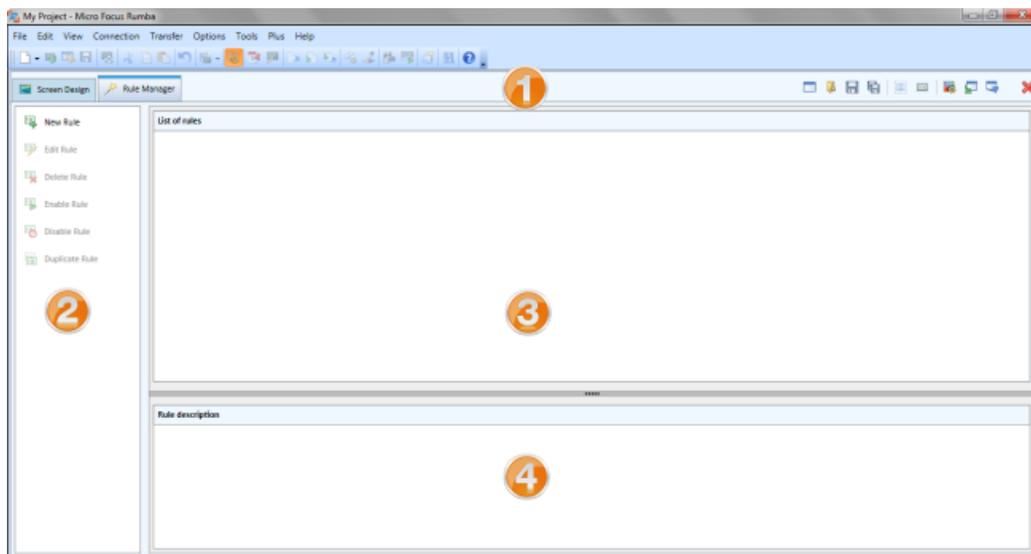
The main area of a screen can contain any type of control. However, margins can contain only buttons. Margins are defined by the theme you use.

If you change a theme, the margins of the previous theme disappear, together with all the button controls they contain. It is therefore best to choose a theme early in the customization project.

Using the Rule Manager

Use the Rule Manager to add controls that repeat on multiple screens or many times on a single screen.

The Rule Manager page



1

Screen Designer tabs and toolbar.

2

Control panel. Contains a list of the following actions:

New Rule

Opens the Rule Wizard to create a new rule.

Edit Rule	Opens the selected rule in the Rule Wizard for editing.
Delete Rule	Deletes the selected rule.
Enable Rule	Enables the selected rule, if disabled.
Disable Rule	Disables the selected rule.
Duplicate Rule	Creates a copy of the selected rule.

3

List of rules pane. Contains a list of configured rules. Each rule consists of:

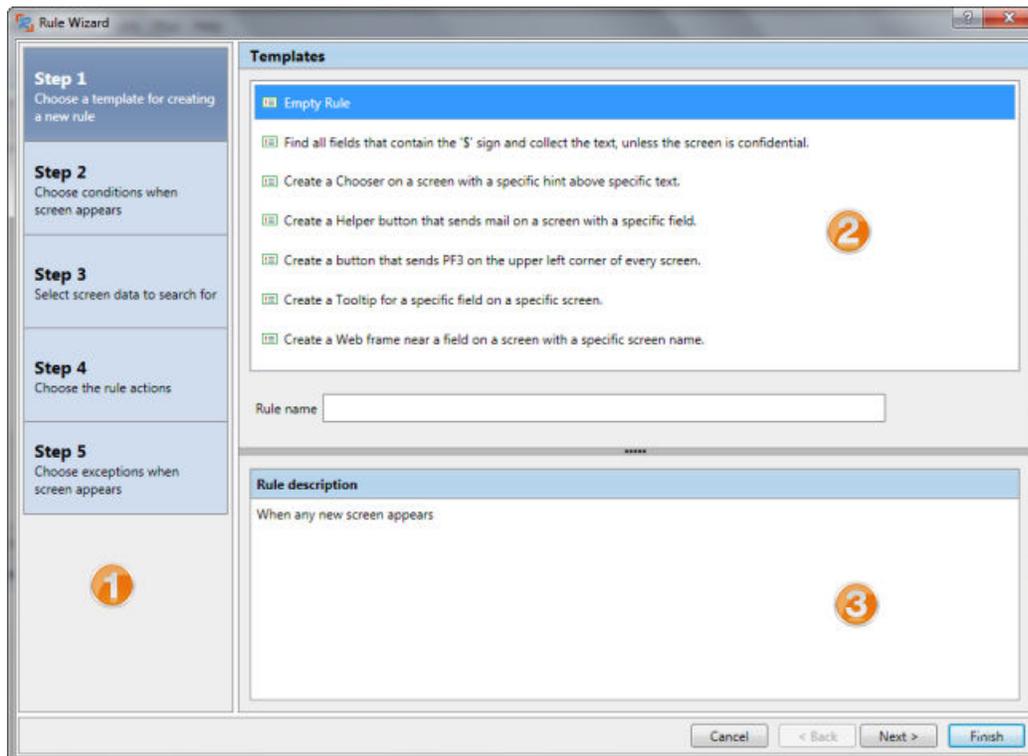
- A description.
- An icon to show whether the rule is enabled 
- An icon to show whether the rule is disabled 
- An icon to edit the rule 
- An icon to delete the rule 

4

Rule description pane. Displays a natural language version of the rule.

The Rule Wizard

The Rule Wizard help you to define rules and conditions that govern what actions occur on a screen ad when.



1

Steps pane. Contains the steps you need to go through to create a rule. The current step is highlighted.

2

Options pane. Contains the options available for the selected step:

When this step is highlighted ...	The options pane contains ...
Step 1	A list of templates that you can use to build a rule.
Step 2	Conditions that identify the screen the rule will apply to.
Step 3	The field, location, or text to look for on the screen.
Step 4	The controls to create according to the rules.
Step 5	Exceptions to the rules that select screens.



Rule description pane. Contains a natural language version of the rule.

The Rule Wizard also contains the following command buttons:

Click this ...	To do this ...
Cancel	Close the Rule Wizard without saving any changes.
Back	Go back to the previous step.
Next	Go to the next step.
Finish	Finish creating the rule and return to the Rule Wizard main screen.

When to use the Rule Manager

The following basic scenarios describe when to use the Rule Manager instead of the **Screen Design** page.

- Adding Tooltip or Button controls to entire applications.

Fields with specialized Tooltip controls or assistance which remain consistent within the application. Especially useful to explain account, customer, and status information that is abbreviated or appears in abbreviated form on the screen.

Buttons such as **Exit**, **Clear** (screen), and **Reset** (keyboard).

- Adding controls to screens within subsystems.

Controls which are consistent with major subsystems such as accounts payable, help ticket systems, or customer lookup. A subsystem might consist of five to ten screens, but operator functions are consistent throughout.

Screen content can change, but header information needs to offer similar modernization control.

- Data scroll areas with modernizations that repeat on each line.

One Rumba+ rule can generate multiple modernizations.

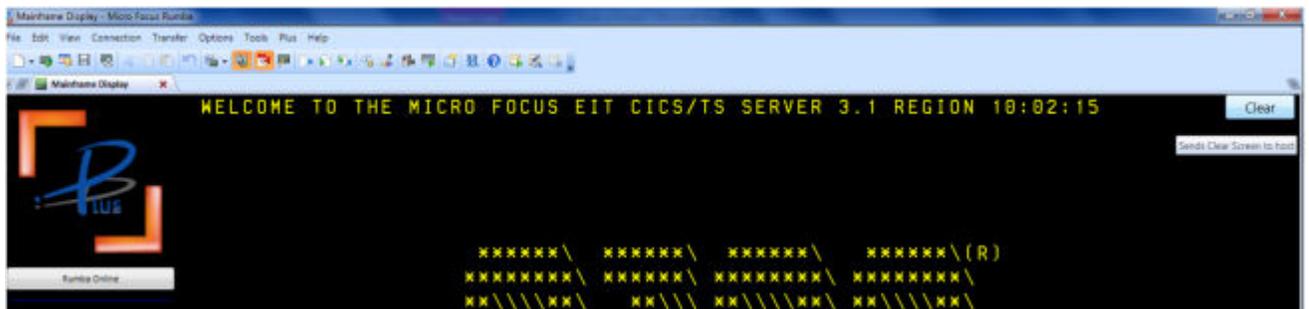
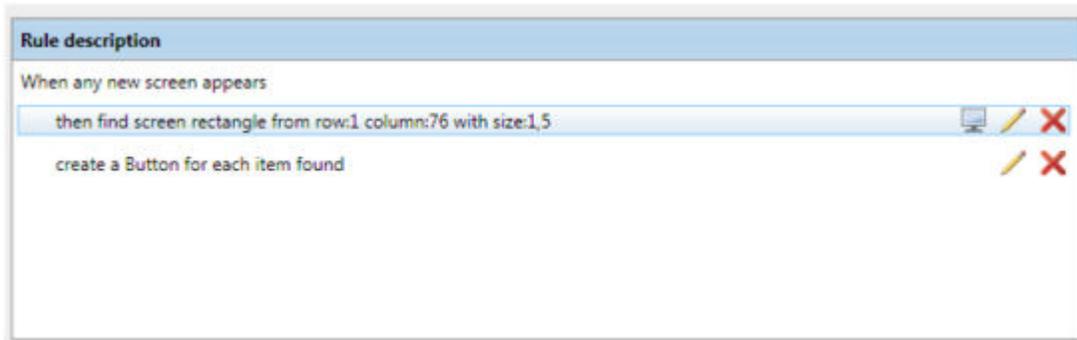


Tip: If you find that a control on the **Screen Design** page might be used better as a rule, right-click the control and select **Move to Rule Manager** from the pop-up menu. The Screen Designer moves the control to the Rule Manager where you can edit it.

Adding Tooltip or Button controls to entire applications

A simple system **Clear** button is designed with a rule that places it on every screen of the application in the top right corner.

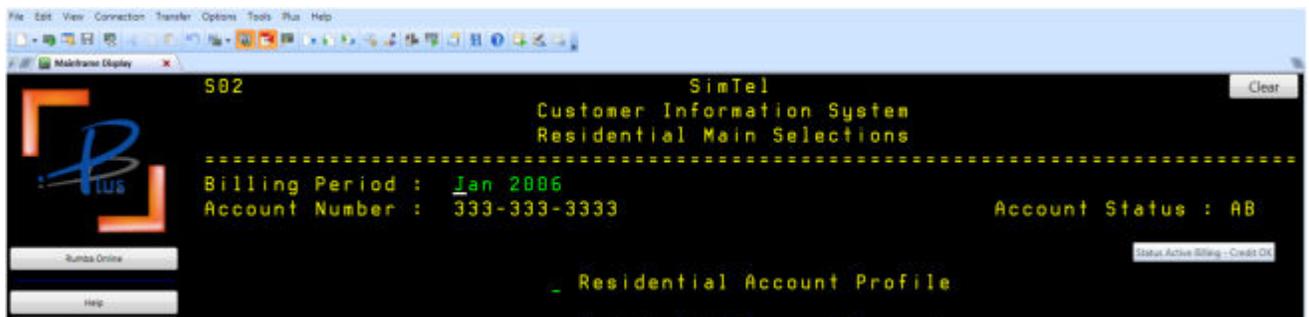
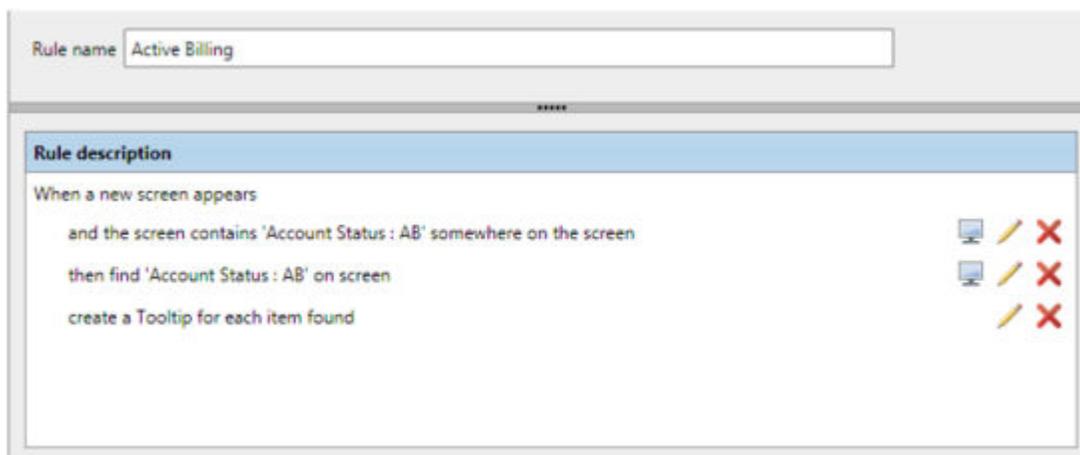
Button controls like this help users who are not used to the rules that apply to 3270 / 5250 protocols.



Adding controls to screens within subsystems

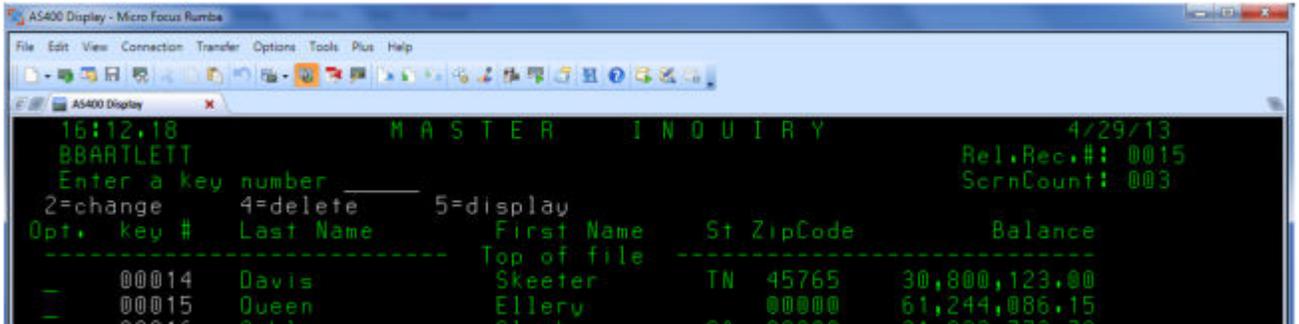
In this example, the administrator wants to help users identify an account status. Anywhere in the application where the string `ACCOUNT STATUS : AB` appears, a tooltip appears so that the operator knows that the account status is active with credit approved.

The rule first finds the character string, then places a tooltip over the entire string. Moving the mouse over the abbreviated field provides in a more detailed description.

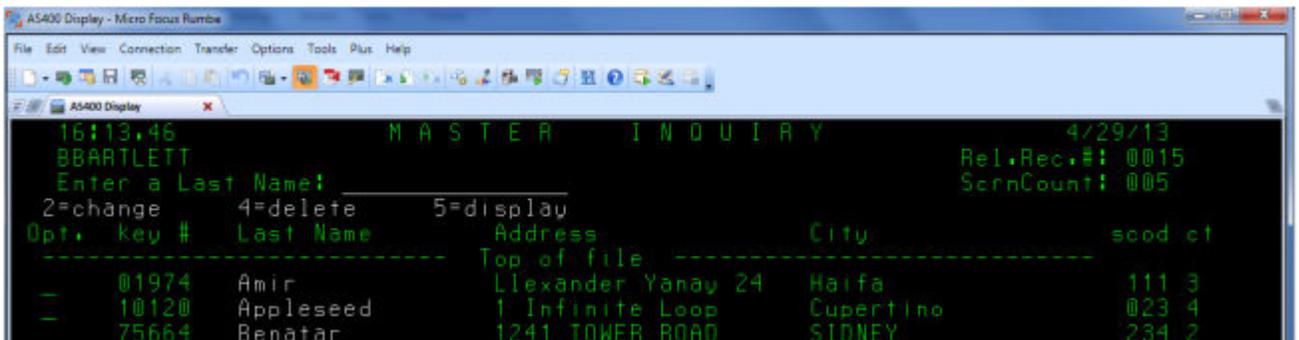


Adding rules to be used on a set of screens

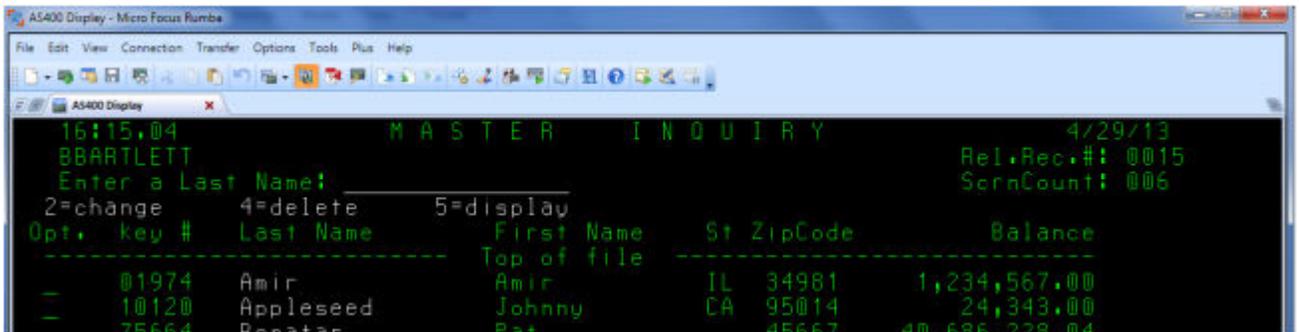
This example shows three screens in an application called **Master Inquiry**. The screens are similar, but have different input prompts and different data headings. Each screen would be identified automatically as a different screen.



```
AS400 Display - Micro Focus Rumba
File Edit View Connection Transfer Options Tools Plus Help
AS400 Display
16:12.18 MASTER INQUIRY 4/29/13
BBARTLETT Rel.Rec.#: 0015
Enter a key number ScrnCount: 003
2=change 4=delete 5=display
Opt. key # Last Name First Name St ZipCode Balance
----- Top of file -----
- 00014 Davis Skeeter TN 45765 30,800,123.00
- 00015 Queen Ellery 00000 61,244,086.15
- 00016 00000 00000 00000 00000.00
```



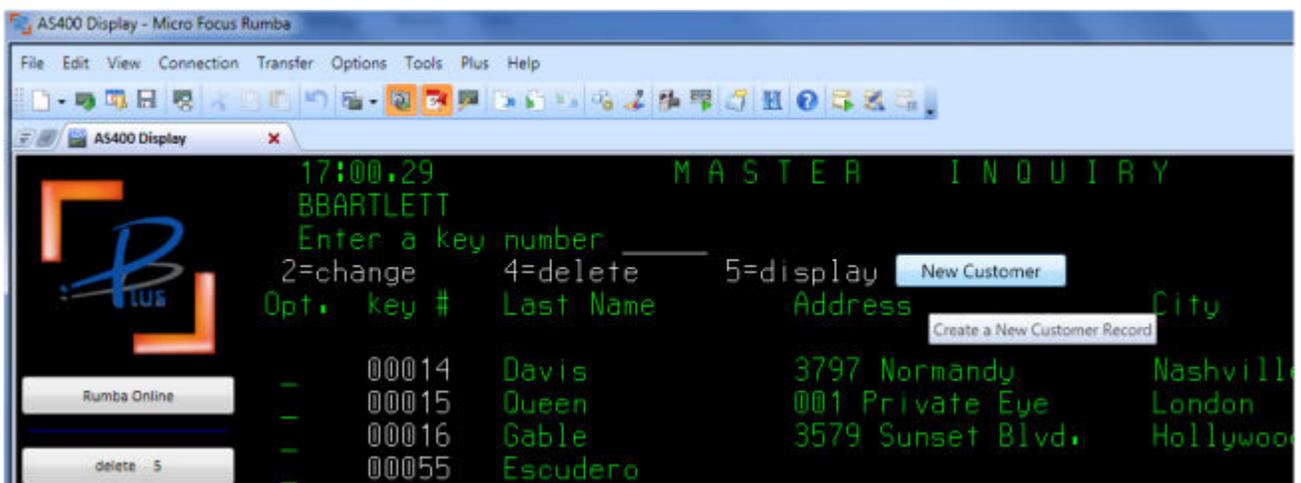
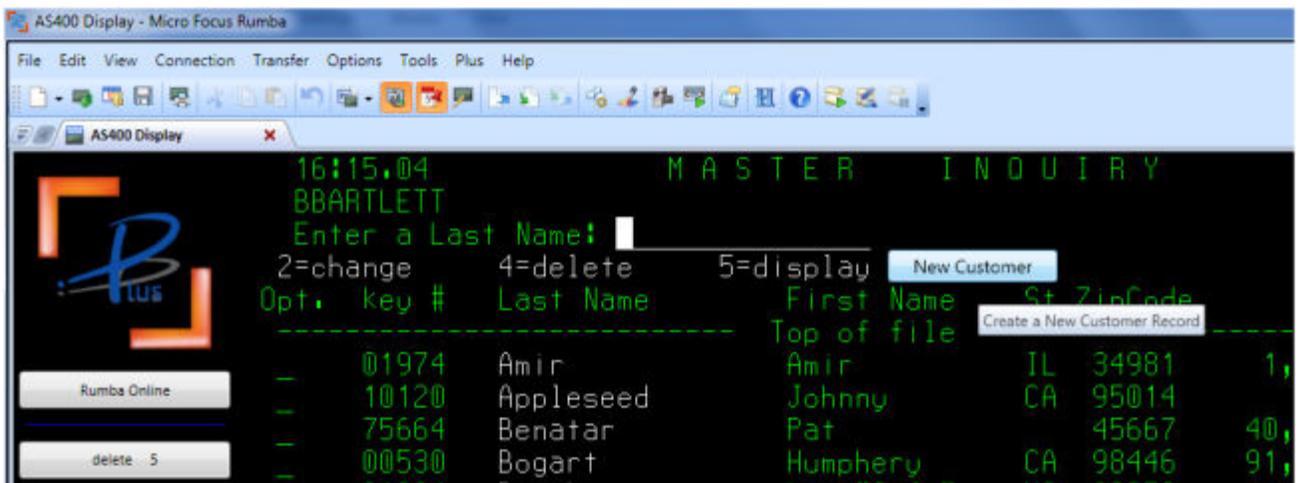
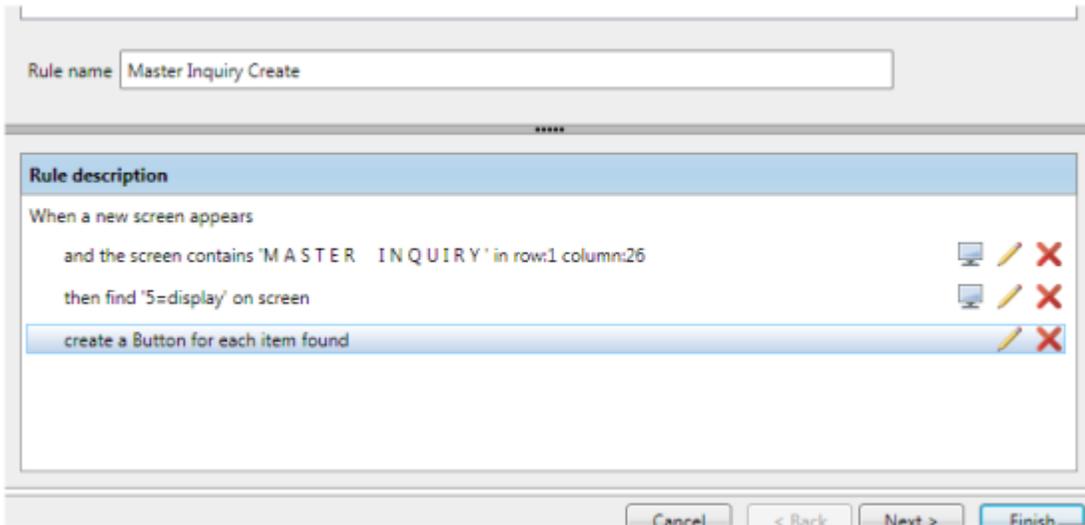
```
AS400 Display - Micro Focus Rumba
File Edit View Connection Transfer Options Tools Plus Help
AS400 Display
16:13.46 MASTER INQUIRY 4/29/13
BBARTLETT Rel.Rec.#: 0015
Enter a Last Name: ScrnCount: 005
2=change 4=delete 5=display
Opt. key # Last Name Address City scod ct
----- Top of file -----
- 01974 Amir Alexander Yanay 24 Haifa 111 3
- 10120 Appleseed 1 Infinite Loop Cupertino 023 4
- 75664 Benatar 1241 TOWER ROAD SIDNEY 234 2
```



```
AS400 Display - Micro Focus Rumba
File Edit View Connection Transfer Options Tools Plus Help
AS400 Display
16:15.04 MASTER INQUIRY 4/29/13
BBARTLETT Rel.Rec.#: 0015
Enter a Last Name: ScrnCount: 006
2=change 4=delete 5=display
Opt. key # Last Name First Name St ZipCode Balance
----- Top of file -----
- 01974 Amir Amir IL 34981 1,234,567.00
- 10120 Appleseed Johnny CA 95014 24,343.00
- 75664 Benatar Pat 45667 40,686,328.04
```

The example creates a rule that puts a **Create New Customer** button near the first entry field.

The rule for this button is based on the **Master Inquiry** screen designation. If the screen identifies itself as Master Inquiry and the string 5=display is found, the rule automatically puts a button by the 5=display field. On screens that do not match the criteria, no button is created. The button is programmed with the keystrokes to initiate the creation of a customer record within the application.



Adding controls to each line on a screen

This example uses screens containing tables of data and adds the same controls to each line on the display. If you were to use the **Screen Designer** page you would need to add a separate control for each line of each table. However, instead, you can use rules to replicate controls on each line.

To select a customer, the user types 1, then presses `ENTER`. The example sets up a rule that replaces these actions.



Note: The number of data entries per page varies. The rule creates 10 static selections per page. As a result, the last page will only have three buttons because only three selections are valid.

Parts Order Entry

```

                                Select Customer

Type choices, press Enter.
  1=Select

Opt Customer
  _ BLANKERTZ, Wilfried
  _ RASANEN, Pentti S
  _ NARTOVICH, Aleksandr
  _ PAQUAY, Camille E
  _ FAIRALL, David
  _ WILLIS, Janet Y
  _ Abdel Karim, Nagi
  _ OAKLEY, Annie R
  _ ASCHEMAN, Dean
  _ NUUTINEN, Petri

                                More...

F12=Cancel

```

Order Entry

```

                                Select Customer

Type choices, press Enter.
  1=Select

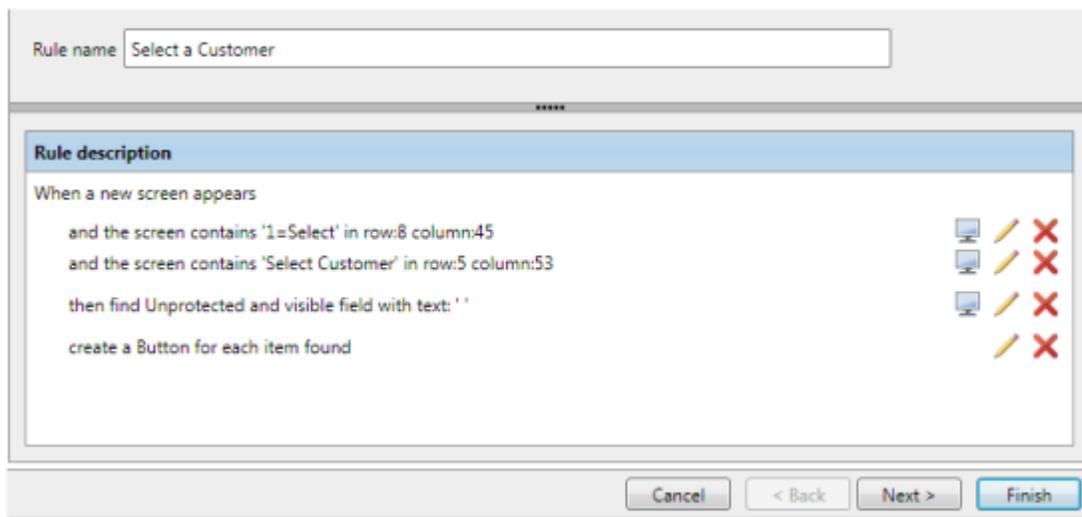
Opt Customer
   ZULIANI, FERNANDO R
  _ Ascheman, Dean R
  _ yy8+896+89+6, +788+87+8+779+ y

                                Bottom

F12=Cancel

```

The rule looks for the character strings `Select Customer` and `1 Select`. It then replaces the single character input field with a button labeled **SEL**. This button replaces the two actions of typing `1` in the data field and pressing `ENTER` with a simple point and click.



Because the rule looks for the input field, if that input field is not found, the control is not added to the screen.

Parts Order Entry

Select Customer

Type choices, press Enter.

1=Select

Opt Customer

- SEL BLANKERTZ, Wilfried
- SEL RASANEN, Pentti S
- SEL NARTOVICH, Aleksandr
- SEL PAQUAY, Camille E
- SEL FAIRALL, David
- SEL WILLIS, Janet Y
- SEL Abdel Karim, Nagi
- SEL OAKLEY, Annie R
- SEL ASCHEMAN, Dean
- SEL NUUTINEN, Petri

More...

F12=Cancel

pt Order

Parts Order Entry

Select Customer

Type choices, press Enter.

1=Select

Opt Customer

- SEL ZULIANI, FERNANDO R
- SEL Ascheman, Dean R
- SEL yy8+896+89+6, +788+87+8+779+ y

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Using Web components in Rumba

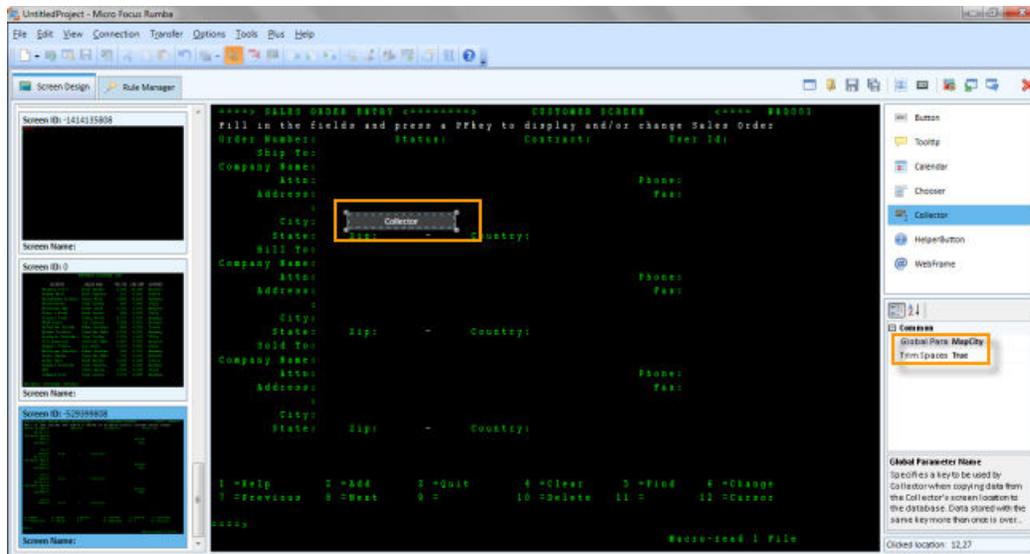
Rumba can call both applications and Web components using one or more of the following controls:

- Button** A labeled UI control. It can call an application, script, URL, or Web page.
- WebFrame** Creates an icon using an image. You can set the size of the frame. Only valid for Web browser URLs. No address bar is displayed.

Passing parameters to an application or Web page

You pass parameters to an application or Web page using the Collector control. Collector is placed over the data fields that Rumba+ uses to capture data. When the application runs, there is nothing to show on the screen that indicates this is a data collection field.

You add Collector controls on the **Screen Design** page:



 **Note:** The Collector control should cover the entire data field to accommodate long strings.

When you configure a Collector control, you give it a global parameter name in the property grid. This name must be unique in the customization file. You can refer to the data stored in the parameter as `%Parameter Name%`. In the figure above the **Global Parameter** is **MapCity** and its reference is `%MapCity%`.

The **Trim Spaces** property resizes the length of the data string by removing trailing spaces. In most applications, this option should be **True**.

Creating Web objects and URLs

The first thing to do is to create a working URL using a known set of parameters for a known address. For example, this Google Maps parameter is for an Office Park in Maryland:

<http://maps.google.com/maps?q=700 King Farm,Rockville,MD>

Copy the working URL to an editor such as Notepad so you can edit it for use in the Screen Designer. For example, the following string re-creates the address string:

`%%MapAddr%%, %%MapCity%%, %%MapState%%`

Note that the commas (,) used as delimiters in the Google command, are still in place in the Rumba+ string. The command to copy and paste into the Screen Designer is:

```
http://maps.google.com/maps?q=%MapAddr%,%MapCity%,%MapState%
```

As the character strings get more complex, testing becomes more important. For example, the following string calls a Google charting facility for a pie chart. Notice that the original URL contains a section that deals with both chart labels (AREA-A, etc) and chart data (T=:100,300,200,50). Other editable data includes colors, format, and sizing:

```
http://chart.googleapis.com/chart?chs=300x150&cht=p3&chco=0000FF|00FF00|FF0000|
FFFF00&chds=0,1000&chd=t:100,300,200,50&chdl=AREA-A|AREA-B|AREA-C|AREA-D&chtt=TOYS
```

As in the Google Maps example, we need to replace the data portion of this URL with variables collected from the Rumba+ screen. In this case, the data portion (specified by chd), becomes:

```
chd=t:%R1Jtoy%,%R2Jtoy%,%R3Jtoy%,%R4Jtoy%
```

And the new URL to include in the Screen Designer becomes:

```
http://chart.googleapis.com/chart?chs=300x150&cht=p3&chco=0000FF|00FF00|
FF0000|FFFF00&chds=0,1000&chd=t:%R1Jtoy%,%R2Jtoy%,%R3Jtoy%,%R4Jtoy%
&chdl=Region1|Region2|Region3|Region4&chtt=TOYS
```

In a real application, you might also want to modify the label data dynamically as well. A label section might therefore look like this:

```
chdl=%Label1%|Label2%|Label3%|Label4%
```

You can experiment with the Google pie chart URL using the TOYS screen on the Rumba Demo Host. For information about connecting to the Demo Host and accessing the TOYS screen, see [Connecting to the Demo Host](#).

Exporting a customization file to Rumba+ Web and Rumba+ Mobile

The Rumba+ Server Build Tool allows you to build Rumba+ Web and Rumba+ Mobile application deployment packages.

The tool uses the customization output from the Rumba Screen Designer to create a Web Application archive (.war) file. The .war file contains a rules file and other resources, such as images, macros, and scripts.

The file is then deployed to an application server for implementation.



Note: The Rumba+ Server Build Tool is supplied with Micro Focus Rumba+ Web and Micro Focus Rumba+ Mobile.

Exporting a customization file

For information about exporting a customization file, refer to the *Rumba+ Server Build Tool 1.1: Help*.

Deploying a .war file

For information about deploying a .war file to an application server, refer to the *Rumba+ Server 1.1: Administrator Guide*.

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Information needed by Micro Focus SupportLine

When contacting Micro Focus SupportLine, please include the following information, if possible. The more information you can give, the better Micro Focus SupportLine can help you.

- The name and version number of all products that you think might be causing an issue.
- Your computer make and model.
- System information such as operating system name and version, processors, and memory details.
- Any detailed description of the issue, including steps to reproduce the issue.
- Exact wording of any error messages involved.
- Your serial number. To find this number, look in the subject line and body of your Electronic Product Delivery Notice e-mail that you received from Micro Focus.

Additional information needed by Micro Focus SupportLine

If reporting a protection violation, you might be asked to provide a dump (.dmp) file. To produce a dump file, use the **Unexpected Error** dialog box that is displayed when a protection violation occurs.

Unless requested by Micro Focus SupportLine, leave the dump setting as `Normal` (recommended), click **Dump**, then specify a location and name for the dump file. Once the dump file has been written, you can e-mail it to Micro Focus SupportLine.

You may also be asked to provide a log file created by the Consolidated Tracing Facility (CTF) - a tracing infrastructure that enables you to quickly and easily produce diagnostic information detailing the operation of a number of Micro Focus software components.

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