George Shepherd's Windows Forms FAQ

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If you have a FAQ, or any other good Windows Forms resource, please email me. The Windows Forms FAQ forum is available if you need more information.

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1. Windows Forms Deployment

1.1 How can I run an EXE from within my application?

1.2 What are the common issues in redirecting assemblies using the publisher policy files?

1.3 How can I find all programs with a GUI (not just arbitrary windows) that are running on my local machine?

1.4 How can I get a list of all processes running on my system?

1.5 How can I make sure there is only one instance of my application running?

1.6 How do I determine which operating system is running?

1.7 How can I get all IP addresses for my local machine?

1.8 My user does not have .NET installed. Will he be able to run my Windows Forms application?

1.9 How do I get the path to my running EXE?

1.10 How can I programmatically obtain the name of the assembly that the code is executing in ?

1.11 How can I see what is installed in the Global Assembly on a machine?

1.12 How do I set the company name that is returned by System.Windows.Forms.Application.CompanyName?

2. Windows Forms Controls

2.1 How do you prevent serialization of certain child controls in your Composite Control?

2.2 How do I get hold of the currently focused Control?

2.3 Why do calling Focus() on a control not set focus on it?

2.4 How do I listen to windows messages in my Control?

2.5 How do I programatically change the color of a control?

2.6 How can I change the Border color of my control?

2.7 Why should I provide a Non-Client border to my Control derived class?

2.8 How do I provide a 2 pixel 3d border in the Non-Client area of my Control derived class?

2.9 How do I provide a 1 pixel border in the NonClient area of my Control?

2.10 How do I invalidate a control including it's NonClient area?

2.11 How can I implement a scrollable picture box?

2.12 How can I put Controls, a ProgressBar for example, into a StatusBar?

2.13 How do I implement an ownerdrawn statusbar so I can put a progressbar in it?

2.14 How would I change the icon that appears on the toolbox for a custom control?

2.15 A control's Validating event is hit even when the user clicks on the Close box. How can I avoid this behavior?

2.16 I would like to prevent validation in my textbox when the user clicks on my Cancel button, how do I do this?

2.17 Why does adding images to an ImageList in the designer cause them to lose their alpha channel?

2.18 Why do the XP Icons when drawn using Graphics.DrawImage not draw transparently?

2.19 Why do the XP Icons that have alpha channel not draw properly when associated with controls like ListView?

2.20 How do I prevent resizing of my Controls by the user, via Docking or anchoring or manual resizing during design-time?

2.21 What control do I use to insert Separator lines between Controls in my Dialog?

2.22 How can I make my controls transparent so the form's background image can show through them?

2.23 How do I create an editable listbox with an in-place TextBox and Button?

2.24 How do I determine the width/height of the Non-Client area (like the border in a textbox) of a Control?

2.25 How can I programmatically manipulate Anchor styles?

2.26 What is the best method to override in custom Controls to perform custom initialization during runtime?

2.27 I set a Control's Visible property to true and in the immediate next statement, it returns false. Why doesn't setting the Visible property 'take'?

2.28 I'm trying to make the background of my linklabel transparent so a picturebox will show through it. However, if I set the link label's BackColor property to Transparent the label still has a white background. Why?

2.29 How do I dynamically load a control from a DLL?

2.30 What is the (DynamicProperties) item listed on a control's property page in VS.NET?

2.31 How can I make a Panel or Label semi-transparent on a Windows Form?

2.32 How can I add a control to a Window Form at runtime?

2.33 How do I make the arrow keys be accepted by a control (such as a button) and not handled automatically by the framework's focus management?

2.34 In the property browser for a custom control, how do I disable a property initially, but enable it later based on some other property changing?

2.35 How can I have the control designer create the custom editor by calling the constructor with the additional parameters rather than the default constructor?

2.36 How do I listen to the screen resolution change in my control?

2.37 How do I determine which button in a Toolbar is clicked?

3. Windows Forms Books

3.1 Windows Forms Programming in C#?

3.2 Programming Microsoft Windows with C#?

3.3 C# Design Patterns?

4. Windows Forms Data Binding

4.1 Does MySql work with ADO.NET?

4.2 Where can I find a discussion of databinding and windows forms?

4.3 How do I test for a null value in DataView.RowFilter?

4.4 I don't have SQL Server. Is there any way to run the samples that need SQL server?

4.5 How can I programmatically move through a dataset that has bound controls?

4.6 When I try to update a dataset I get an error that the system is unable to find "Table"?

4.7 How can I bind an ArrayList to a DataGrid?

4.8 When I try to bind two comboboxes to the same datatable, both boxes show the same values, changing one changes the other. How do I make them have distinct values?

4.9 How do I bind a mdb file to a datagrid?

4.10 How do I bind a listbox or a combobox to a MDB file?

4.11 In my databound ComboBox, how do I set the SelectedItem property?

4.12 Are server side cursors supported in .NET?

4.13 I am populating a ListBox by binding it to an ArrayList. The initial display is OK, but later changes to my ArrayList are not shown in my ListBox. How can I get the changes to show properly?

4.14 My SQL server runs on a non-default port. How can I specify this port in my connection string?

4.15 What is a DataSet?

4.16 How do I add updating support to a dataset?

4.17 How can I import a CSV file into a DataTable?

4.18 How can I prevent a ComboBox and DataGrid bound to the same DataTable from sharing the same current position?

4.19 I get a 'This would cause two bindings in the collection to bind to the same property' error message. What might cause this?

4.20 How do I bind a TextBox to a nested relation?

4.21 How do I call a SQL stored procedure?

4.22 I programatically change a bound TextBox value, but the value does not get pushed back into the bound datasource. How can I make sure the DataSource is updated?

4.23 Why does the CheckedListBox lose checked state when placed in a tab page that gets hidded and shown?

5. Windows Forms Datagrid

5.1 How can I programatically set the rowheight of a row in my DataGrid?

5.2 How can I autosize the rowheights in my datagrid?

5.3 How do I prevent sorting a single column in my DataGrid?

5.4 How do I programmatically select a row in DataGrid?

5.5 How can I translate a point to a cell in the datagrid?

5.6 I lost the settings in my DataGrid set during design-time?

5.7 How do I prevent a click into the grid highlighting a cell?

5.8 How do I prevent the datagrid from displaying its append row (the row at the end with an asterisk)?

5.9 How can I put a combobox in a column of a datagrid?

5.10 How can I catch a double-click into a column header cell?

5.11 How can I select the entire row when the user clicks on a cell in the row?

5.12 How can I get text from a column header in a MouseUp event?

5.13 How do I hide a column?

5.14 How do I color a individual cell depending upon its value or some external method?

5.15 How can I put a checkbox in a column of my DataGrid?

5.16 How can I restrict the keystrokes that will be accepted in a column of my datagrid?

5.17 How do I make a field auto increment as new rows are added to my datagrid?

5.18 How can I prevent a particular cell from being editable?

5.19 How do I move columns in a datagrid?

5.20 How can I do cell by cell validation in a datagrid?

5.21 How do I programmatically determine the selected rows in a datagrid?

5.22 How can I move rows by dragging the row header cell?

5.23 I want to do custom handling of special keys such as the Tab key or F2 in the TextBox of a column in the DataGrid. How do I subclass this TextBox to get at it virtual members?

5.24 How can I have a column of icons in my datagrid?

5.25 How can I tell if the current row has changed and whether I am on the AddNew row or not?

5.26 How do I hide the gridlines or set them to a particular color?

5.27 How can I get the selected text in an active gridcell?

5.28 How do I determine whether a checkbox in my datagrid is checked or not?

5.29 How can I bind the datagrid to a datasource without using any wizards?

5.30 How can I bind two datagrids in a Master-Detail relationship?

5.31 How do I get the row or column that has been clicked on?

5.32 How do I add an unbound column to my bound datagrid?

5.33 How do I get the row and column of the current cell in my datagrid?

5.34 How can I prevent the Enter key from moving to the next cell when the user is actively editing the cell and presses Enter?

5.35 How do I set the width of a column in my DataGrid?

5.36 How can I implement OLE Drag & Drop between a DataGrid and another OLE DnD object that supports the Text format?

5.37 How can I make my DataGrid support a single select mode, and not the default multiselect mode?

5.38 How can I get celltips or tooltips to vary from cell to cell in my DataGrid?

5.39 How can I get notification of the changing of a value in a column of comboboxes within my datagrid?

5.40 How can I make the datagrid have no currentcell?

5.41 How can I make my grid never have an active edit cell and always select whole rows (as in a browser-type grid)?

5.42 I have hidden (column width = 0) columns on the right side of my datagrid, but tabbing does not work properly. How can I get tabbing to work?

5.43 How can I get the number of rows in my DataGrid?

5.44 How do I format a date column in a datagrid?

5.45 How can I change the width of the row headers or hide them?

5.46 How do I catch a doubleclick in my datagrid?

5.47 How can I make my last column wide enough to exactly occupy all the client area of the datagrid?

5.48 How can I prevent my user from sizing columns in my datagrid?

5.49 How can I catch the bool values changing in a DataGridBoolColumn?

5.50 When I click on a row header, the row is selected and no cell is active. How can I do this programmatically?

5.51 How can I force the vertical scrollbar in my DataGrid to always be visible?

5.52 How can I autosize a column in my datagrid?

5.53 How can I get rid of the error icon that appears when there is an editing error?

5.54 How do I find the top-left visible cell in a datagrid?

5.55 I want to display negative values with a CR suffix, instead of a minus sign. How can I perform custom formatting on the cells in my datagrid?

5.56 I want to do sort of a database join of two tables. How can I use data from two DataTables in a single DataGrid?

5.57 How do I display a column of buttons such as pushbuttons or combobox buttons?

5.58 How can I put up a confirmation question when the user tries to delete a row in the datagrid by clicking on the row header and pressing the Delete key?

5.59 How can I enable column selections in my datagrid?

5.60 How do I programmatically scroll the datagrid to a particular row?

5.61 How can I place text in the rowheader column of my datagrid?

5.62 How do I set default values for new rows in my datagrid?

5.63 How do I iterate through all the rows and columns in my datagrid?

5.64 How can I specially color only the currentcell of my readonly datagrid?

5.65 How can I make the Enter Key behave like the Tab Key and move to the next cell?

5.66 How do I use the DataColumn.Expression property to add a computed/combined column to my datagrid?

5.67 How can I change the font used in a grid cell on a cell by cell or row by row basis?

5.68 How can I use a mouse to select cell ranges in my datagrid?

5.69 How can I control the cursor over my DataGrid?

5.70 How can I programatically add and remove columns in my DataGrid without modifying the DataTable datasource?

5.71 How can I have a column of bitmaps in a DataGrid?

5.72 How can I add my custom columnstyles to the designer so I can use them in my DataGrid at design time?

5.73 After scrolling with the mouse wheel on a selected row in a DataGrid I cannot get it back into view. Is there a work around?

5.74 How can I make the DataGrid column be blank and not display (null) as the default value?

5.75 How can I add a DateTimePicker column style to the DataGrid?

5.76 How do I determine the DataGridTableStyle MappingName that should used for a DataGrid to make sure the grid uses my tablestyle?

5.77 I have a derived DataGridColumnStyle. From within my Paint override, how can I get at other values in the DataGrid?

5.78 How do I retrieve the current row from a DataTable bound to a DataGrid after the grid has been sorted?

5.79 How can I catch when the user clicks off the grid, say to close the form?

5.80 How can I get a CheckBox column in a DataGrid to react to the first click?

5.81 How can I use events to restrict key input to grid cells?

5.82 How can I format columns in my DataGrid without explicilty adding DataGridColumnStyles?

5.83 How can I auto-adjust keyboard input? For example, make typing 12312002 be taken as a valid date, 12/31/2002.

5.84 Can I display the rows in my datagrid in a free-form layout using textboxes on a panel?

5.85 How can I tell whether a scrollbar is visible in my DataGrid is visible?

5.86 How do I autosize the columns in my DataGrid so they always fill the the grid's client area?

5.87 How can I prevent all the cells in my DataGrid from being edited without deriving GridColumnStyle?

5.88 How can I prevent the plus-minus icon that appears next to the row header when I have a datagrid displayed bound to a datasource that has a relation defined?

5.89 How can I display master-details-details in three separate grids?

5.90 In my datagrid, if I press tab to enter a column using a derived columnstyle, the column does not receive focus. Why?

5.91 How can I detect when a cell starts being edited, not when it becomes current?