Can I add groups and switch columns between groups at runtime?

Reference: **DAT1125**

Yes. Use the **Add** method on groups and set the **Group** property of columns.

The following code sample demonstrates how to add three new groups to the DataGrid and then add two columns in the grid to these groups. The same code can be used for both the DataCombo and the DataDropdown.



Frequently Asked Questions (by topic)

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- What is different in version 2.0?
- What is the best method of learning Data Widgets 2.0?
- <u>Is there an automatic conversion utility available when converting from Data Widgets 1.0 to Data Widgets 2.0?</u>

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- How can I trap for messages through the DBEngine directly and display the Error Number and Error Description from DAO?
- When using SQLPassThrough, the DataCombo's ListAutoPosition and ListAutoValidate no longer work. Why?
- Why do I get an error when I bind the DataCombo's DataSource to a MSRDC control and perform a MSRDC1.ResultSet.Update?
- When I bind the SSDBCombo's DataSourceList to a DataControl and choose an item from the list, my other bound controls do not reflect the same record.

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- How would I color a row based upon what has been entered into a cell?
- <u>How can I format a cell within the DataGrid for a Zip Code without using the NumberFormat property of the column object?</u>
- How can I limit the number of characters typed in a cell in a DataGrid and accept only numeric values a valid entry?
- When starting the Custom DataGrid editor, why do I get an error 31037 "Error loading from file"?
- <u>How can I sort the Columns in an AddItem DataGrid since there is no "Ordered" property?</u>
- How can I place the Record number of the row in an Unbound Column of a bound SSDBGrid?
- When using the SSDBCombo in Visual C++ 4.X, why will a charcter typed in the edit portion appear for a second then disappear?

Search and Retrieval

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- How can I search for a string in a column of the SSDBGrid?
- How can I perform my own incremental search in an SSDBCombo?
- How can I create a DataCombo that acts as a "Quicken™" Combo box?

How can I put default search strings and selection criteria in the Find dialog without having to construct my own Find dialog?

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- How can I copy the contents of a bound DataGrid to an AddItem DataGrid?
- <u>How can I select a consecutive number of cells and copy their contents to the clipboard?</u>
- How can I copy text from cell to cell in an AddItem grid using the mouse without overwriting any existing text?

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- Can I add groups and switch columns between groups at runtime?
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- When using an unbound DataGrid, how can I display a value from my dynaset in a text box as I change rows?
- How can I compare the LastRow parameter in the RowColChange event with the current bookmark for the DataGrid?
- How can I lock a cell in a bound DataGrid?
- How can I total a column in a bound DataGrid?
- If I am loading an Additem DataGrid with a dynaset, how can I synchronize the dynaset with the DataGrid?
- How can I update a DataGrid without moving off the row or if the Grid loses focus?
- How can I synchronize the horizonal scrolling of two DataGrids?
- <u>How can I set focus to the next control in the tab order when I hit the tab key while the DataGrid has focus?</u>
- <u>How can I determine if I am loading an EvenRow or an OddRow in the Bound SSDBGrid?</u>
- How can I check if the current row in the grid is selected or deselected?
- How can I loop through the SelBookmarks collection in the order they appear on the DataGrid, not in the order they were selected?
- <u>How can I manually 'ListAutoPosition' through an AddItem combo list using all entered characters?</u>
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- When distributing my application that has a Data Widgets 2.0 control included, the Form will open, but will return an error "Can't Load Custom Control DLL".
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- Why isn't the SSDBCombo or SSDBDropdown dropping down?

Frequently Asked Questions (by control)

Grid | Combo/DropDown | EDC | General

To see this list categorized by **topic**, <u>click here</u>.

SSDBGrid

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- Can I add groups and switch columns between groups at runtime?
- When using an unbound DataGrid, how can I display a value from my dynaset in a text box as I change rows?
- <u>How can I compare the LastRow parameter in the RowColChange event with the current bookmark for the DataGrid?</u>
- How can I lock a cell in a bound DataGrid?
- How can I total a column in a bound DataGrid?
- How would I color a row based upon what has been entered into a cell?
- If I am loading an Additem DataGrid with a dynaset, how can I synchronize the dynaset with the DataGrid?
- How can I update a DataGrid without moving off the row or if the Grid loses focus?
- How can I write all of the data that resides in an Additem DataGrid into a database?
- How can I search for a string in a column of the SSDBGrid?
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- <u>How can I format a cell within the DataGrid for a Zip Code without using the NumberFormat property of the column object?</u>
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- <u>When starting the Custom DataGrid editor, why do I get an error 31037 "Error loading</u> from file"?
- How do I copy the SSDBGrid contents to the clipboard?
- <u>How can I place the Record number of the row in an Unbound Column of a bound SSDBGrid?</u>
- How can I check if the current row in the grid is selected or deselected?
- How can I loop through the SelBookmarks collection in the order they appear on the DataGrid, not in the order they were selected?
- <u>How can I drag an entire row from one AddItem DataGrid to another AddItem DataGrid?</u>
- How can I copy text from cell to cell in an AddItem grid using the mouse without overwriting any existing text?
- <u>How can I sort the Columns in an AddItem DataGrid since there is no "Ordered" property?</u>
- How do I know what row I am on in a DataGrid?

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- How would I limit the number of characters in the text portion of the DataCombo?
- How would I use one drop down to update several columns on a grid?
- When using SQLPassThrough, the DataCombo's ListAutoPosition and ListAutoValidate no longer work. Why?

- How can I perform my own incremental search in an SSDBCombo?
- Why do i get an error when I bind the DataCombo's DataSource to a MSRDC control and perform a MSRDC1.ResultSet.Update?
- How can I create a DataCombo that acts as a "Quicken™" Combo box?
- <u>How can I manually 'ListAutoPosition' through an AddItem combo list using all entered characters?</u>
- Why isn't the SSDBCombo or SSDBDropdown dropping down?
- <u>When I bind the SSDBCombo's DataSourceList to a DataControl and choose an item</u> from the list, my other bound controls do not reflect the same record.
- When using the SSDBCombo in Visual C++ 4.X, why will a charcter typed in the edit portion appear for a second then disappear?

Enhanced Data Control

- <u>The Enhanced Data Control displays a message box when the Find function does not find anything. How can I post my own message instead of the default message?</u>
- How can I put default search strings and selection criteria in the Find dialog without having to construct my own Find dialog?

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- Why can't Data Widgets controls be bound in Visual C++ 4.0?
- What is different in version 2.0?
- Is there an automatic conversion utility available when converting from Data Widgets 1.0 to Data Widgets 2.0?
- How can I trap for messages through the DBEngine directly and display the Error Number and Error Description from DAO?
- <u>How can I select a consecutive number of cells and copy their contents to the clipboard?</u>
- What is the best method of learning Data Widgets 2.0?
- When distributing my application that has a Data Widgets 2.0 control included, the Form will open, but will return an error "Can't Load Custom Control DLL".
- How can I programmatically select a row?

How can I check if the current row in the grid is selected or deselected?

Reference: DAT1204

The following code determines the selection state of the current row.

```
Dim Selected as boolean

For i = 0 to SSDBGrid1.Selbookmarks.count -1
    If CStr(SSDBGrid1.Bookmark) = CStr(SSDBGrid1.SelBookmarks(i) then
        msgbox "Row is Selected"
        Selected = true
    End if
Next
If Selected = False then
    msgbox "Row is Not Selected"
End If
```

How can I compare the LastRow parameter in the RowColChange event with the current bookmark for the DataGrid?

Reference: **DAT1136**

Use the following procedure:

Private Sub SSDBGrid1_RowColChange(ByVal LastRow As Variant, ByVal LastCol As Integer)

```
Dim bm As String
bm = CStr(SSDBGrid1.Bookmark)
If bm <> CStr(LastRow) Then
    Form1.Print "new row"
Else
    Form1.Print "same row"
End If
End Sub
```

How can I copy text from cell to cell in an AddItem grid using the mouse without overwriting any existing text?

Reference: **DAT1223**

Use the following in an AddItem grid with 3 columns and FieldSeparator of comma:

```
(General) (declarations)
 Dim tempstr$
Private Sub SSDBGrid1 InitColumnProps()
 For i = 0 To 20
    SSDBGrid1.AddItem "Data Widgets," & i
End Sub
Private Sub SSDBGrid1 DragDrop (Source As Control, X As Single, Y As Single)
 Dim dropcol%
 dropcol = SSDBGrid1.ColContaining(X)
 If SSDBGrid1.Columns(dropcol).Text <> "" Then
    MsgBox ("something here: Cancel")
 Else
    SSDBGrid1.Bookmark = SSDBGrid1.RowContaining(Y)
    SSDBGrid1.Columns(dropcol).Text = tempstr
    SSDBGrid1.Update
 End If
End Sub
Private Sub SSDBGrid1 MouseDown (Button As Integer, Shift As Integer, X As
Single, Y As Single)
 If Button = 2 Then ' Right mouse button clicked
    SSDBGrid1.DragIcon = LoadPicture("c:\vb4\icons\arrows\point04.ico")
    SSDBGrid1.Drag 1 ' Set drag action to drag
    SSDBGrid1.Bookmark =
SSDBGrid1.AddItemBookmark(SSDBGrid1.RowContaining(Y))
                                                       ' Set the bookmark
of the row
    tempstr = SSDBGrid1.Columns(SSDBGrid1.ColContaining(X)).CellText(bm)
 End If
End Sub
```

How can I copy the contents of a bound DataGrid to an AddItem DataGrid?

Reference: **DAT1165**

The following procedure copies the entire contents of a data-bound grid to an AddItem grid.

Place a bound SSDBGrid on a form. Place a seccond SSDBGrid on a form and set the following properties:

DataMode = 2 - AddItem

Place a command button on the form and put the following code in the **Click** event. This code copies the grid data to the clipboard:

```
Private Sub Command1 Click()
 Dim bm As Variant
 Dim datastr As String
    MousePointer = 11
    For i = 0 To SSDBGrid1.Columns.Count - 1
       SSDBGrid2.Columns.Add i
       SSDBGrid2.Columns(i).Caption = SSDBGrid1.Columns(i).Caption
    Next i
    For X = 0 To SSDBGrid1.Rows - 1
       bm = SSDBGrid1.GetBookmark(X)
       datastr = ""
       For i = 0 To SSDBGrid1.Columns.Count - 1
          datastr = datastr & SSDBGrid1.Columns(i).CellText(bm)
          If i < SSDBGrid1.Columns.Count - 1 Then</pre>
             datastr = datastr & vbTab
          End If
       Next i
       SSDBGrid2.AddItem datastr
    Next X
    MousePointer = 0
End Sub
```

How can I create a DataCombo that acts as a "Quicken™" Combo box?

Reference: **DAT1218**

A "Quicken" combo fills in the edit portion based on the letters the user types. For example, if the user types "A" the combo fills in the text of the first value that begins with the letter A. When they type the second letter, the combo fills in the text of the first value that begins with the two letters typed. For example, if the combo were attached to a list of foods, typing A might fill the edit portion of the combo with the word "apple." If the user then typed the letter "V" the combo would be filled with "avocado."

Use the following procedure to emulate a "Quicken" combo box:

```
(General) (declarations)
 Private ComboSelstart As Integer
Private Sub SSDBCombol Click()
 ComboSelstart = 0
End Sub
Private Sub SSDBCombol KeyUp (KeyCode As Integer, Shift As Integer)
 If KeyCode >= 65 And KeyCode <= 90 Then
    Datal.Recordset.FindFirst "author like "" & SSDBCombol.Text & "*'"
    If Not Data1. Recordset. NoMatch Then
       ComboSelstart = ComboSelstart + 1
       SSDBCombo1.Text = Data1.Recordset("author")
        SSDBCombol.SelStart = ComboSelstart
       SSDBCombo1.SelLength = Len(SSDBCombo1.Text) - ComboSelstart
    Else
       ComboSelstart = 0
        SSDBCombol.SelStart = ComboSelstart
       SSDBCombo1.SelLength = Len(SSDBCombo1.Text)
    End If
 End If
End Sub
Private Sub SSDBCombol LostFocus()
 If SSDBCombo1.IsItemInList = False then
    Msgbox "Item not in list"
    ComboSelstart = 0
 End If
End Sub
For a dropdown in column 1 of a grid, change KeyUp event to look like this....
Private Sub SSDBGrid1 KeyUp(KeyCode As Integer, Shift As Integer)
 If KeyCode >= 65 And KeyCode <= 90 And SSDBGrid1.Col = 1 Then
```

Datal.Recordset.FindFirst "author like '" & SSDBGrid1.Columns(1).Text &

How can I determine if I am loading an EvenRow or an OddRow in the Bound SSDBGrid?

Reference: **DAT1183**

Use the following code to determine the type of row being loaded.

First, add this statement to the (General) (declarations) section of the form containing the grid:

Dim rs as dynaset

Then enter the following event code:

```
Private Sub SSDBGrid1_InitColumnProps()

Set rs = Data1.Recordset.Clone
   SSDBGrid1.Columns.Add 0
   SSDBGrid1.Columns(0).Caption = "Record Number"

End Sub

Private Sub SSDBGrid1_RowLoaded(ByVal Bookmark As Variant)

rs.Bookmark = Bookmark

If rs.AbsolutePosition Mod 2 = 0 Then
   Debug.Print "evenrow"

Else
   Debug.Print "oddrow"
End If
End Sub
```

How can I drag an entire row from one AddItem DataGrid to another AddItem DataGrid?

Reference: **DAT1211**

The following procedure shows how to drag a selected row from one grid to another:

First, place two SSDBGrid's on a form - both in AddItem mode with AllowAddNew set to True. Then specify the following code for the events of each grid:

```
Private Sub SSDBGrid1 InitColumnProps()
 For i = 0 To 20
    SSDBGrid1.AddItem "Data Widgets," & i
 Next i
End Sub
Public Sub SSDBGrid1 MouseDown (Button As Integer, Shift As Integer, X As
Single, Y As Single)
 Dim bm As Variant
 If Button = 2 and SSDBGrid1.Whereis(X,Y) = ssWhereIsData Then 'Right
mouse button clicked
    ' Use the following line to specify a custom drag icon (optional)
    SSDBGrid1.DragIcon = LoadPicture("d:\vb4\icons\dragdrop\drag1pg.ico")
    SSDBGrid1.Drag 1 ' Set drag action to drag
    bookmark of the row
    SSDBGrid1.Bookmark = bm ' Set the current bookmark to the row
 End If
End Sub
Private Sub SSDBGrid2 DragDrop(Source As Control, X As Single, Y As Single)
 SSDBGrid2.AddItem ""
 For i = 0 To SSDBGrid1.Columns.Count - 1
    SSDBGrid2.Columns(i).Text =
SSDBGrid1.Columns(i).CellText(SSDBGrid1.Bookmark) 'Copy Grid1 contents to
Grid2 Next i
 SSDBGrid2.Update
 SSDBGrid2.MoveNext
 SSDBGrid1.Drag 2 ' Drag action stopped
End Sub
```

How can I format a cell within the DataGrid for a ZIP Code without using the NumberFormat property of the column object?

Reference: **DAT1173**

Use this two step procedure to perform the formatting:

1. Set the Column object's **FieldLen** property to 9 in the **InitColumnProps** event of the DataGrid:

```
Private Sub SSDBGrid1_InitColumnProps()
    SSDBGrid1.Columns(n).FieldLen = 9
End Sub
```

2. Parse the text of the column into ZIP code format.

How can I limit the number of characters typed in a cell in a DataGrid and accept only numeric values as a valid entry?

Reference: **DAT1179**

The following code allows only numeric keystrokes (or backspaces) and limits the length of the value entered to six digits:

Put the following code in the DataGrid's **KeyPress** event:

```
If SSDBGrid1.Col = 0 Then

If Len(SSDBGrid1.Columns(0).Text) > 5 And KeyAscii <> 8 Then
    KeyAscii = 0
    Beep
Else
    If (KeyAscii < 48 Or KeyAscii > 57) And KeyAscii <> 8 Then
        KeyAscii = 0
        Beep
    End If
End If
End If
```

How can I lock a cell in a bound DataGrid?

Reference: **DAT1138**

Use the **RowColChange** event, as outlined in the following procedure:

The following will lock the cell in row 5, column 1:

How can I loop through the SelBookmarks collection in the order they appear on the DataGrid, not in the order they were selected?

Reference: DAT1206

The following will step through the selected bookmarks in the order they appear:

```
Private Sub Command1 Click()
 Dim bm As Variant
 Dim j, i As Integer
 ' MoveFirst is necessary when using GetBookmark method;
 ' this method is specific to the DataGrid's current location
 SSDBGrid1.MoveFirst
 For i = 0 To SSDBGrid1.Rows - 1
    bm = SSDBGrid1.GetBookmark(i) ' Get the bookmark for each row
    For j = 0 To SSDBGrid1.SelBookmarks.Count - 1 'For each selected row
       If CStr(bm) = CStr(SSDBGrid1.SelBookmarks(j)) Then
          ' If DataGrid bookmark matches selbookmark
          Debug.Print SSDBGrid1.Columns(0).CellText(bm)
       End If
    Next j
 Next i
End Sub
```

How can I manually 'ListAutoPosition' through an AddItem combo list using all entered characters?

Reference: DAT1226

This routine will position the combo list based on the current value entered.

```
Private Sub SSDBcombol Change()
 Dim i%
 Dim bm As Variant
 If SSDBcombol.Text <> "" Then
    For i = 0 To SSDBcombol.Rows - 1
       SSDBcombol.MoveFirst
       bm = SSDBcombo1.GetBookmark(i)
       If UCase(SSDBcombo1.Text) =
UCase (Mid(SSDBcombo1.Columns(0).CellText(bm), 1,
Len(SSDBcombo1.Text))) Then
          SSDBcombo1.Bookmark = bm
          Exit For
       End If
    Next i
 End If
End Sub
```

How can I perform my own incremental search in an SSDBCombo?

Reference: **DAT1187**

Use the following procedure:

```
Private Sub SSDBCombo1_PositionList(ByVal Text As String)
Dim sctr As String
sctr = "name like'" & Text & "*" & "'"
Debug.Print sctr
Data1.Recordset.FindFirst sctr
SSDBCombo1.Bookmark = Data1.Recordset.Bookmark
End Sub
```

How can I place the Record number of the row in an Unbound Column of a bound SSDBGrid?

Reference: **DAT1200**

The following procedure adds an unbound row number column to a bound DataGrid:

Note This code will only work if the **RecordsetType** property of the Data Control is set to "1-Dynaset".

```
(General) (declarations)
 Dim flag As Boolean
 Dim rs As Recordset
Private Sub Form Activate()
 flag = True
 Set rs = Data1.Recordset.Clone()
End Sub
Private Sub SSDBGrid1 InitColumnProps()
 SSDBGrid1.Columns.Add 0
End Sub
Private Sub SSDBGrid1 RowLoaded(ByVal Bookmark As Variant)
 If flag = True Then
    rs.Bookmark = Bookmark
    SSDBGrid1.Columns(0).Text = rs.AbsolutePosition
 End If
End Sub
```

How can I programmatically select a row?

Reference: **DAT1246**

Add it to the SelBookmarks collection.

To programmatically select a row you must add it to the SelBookmarks collection. This collection holds all the selected rows bookmarks in the order they were selected.

The following selects the current row:

SSDBGrid1.SelBookmarks.Add SSDBGrid1.Bookmark

How can I put default search strings and selection criteria in the Find dialog without having to construct my own Find dialog?

Reference: **DAT1222**

Use the SendKeys statement to add your own criteria to the dialog.

```
Private Sub SSDBData1_ShowFindDialog()

DoEvents ' Give time to show the dialog
SendKeys "*" ' Send a default string - an asterisk
SendKeys "%L" ' Choose L for Less than
SendKeys "%D" ' Choose D to search down

SendKeys "{TAB}" ' Tab to field list box
SendKeys "{PGUP}" ' Go to the top of the list
SendKeys "{down 3}" ' Arrow down to the default field

End Sub
```

How can I search for a string in a column of the SSDBGrid?

Reference: **DAT1161**

Use the following procedure to search for a string in a grid column:

Place a SSDBGrid on a form (it doesn't matter which data mode the grid is in.) Place a text box on a form. Place a command button on the form, put the following code in the **Click** event:

```
Private Sub Command1_Click()

' This code is designed to search for
' the contents of the text box in column 1 of the DataGrid.

Dim bm as Variant

For i = 0 To SSDBGrid1.Rows - 1
    SSDBGrid1.MoveFirst
    bm = SSDBGrid1.GetBookmark(i)
    If Text1.Text = SSDBGrid1.Columns(1).CellText(bm) Then
        SSDBGrid1.Bookmark = SSDBGrid1.GetBookmark(i)
        Exit For
    End If
Next i

End Sub
```

How can I select a consecutive number of cells and copy their contents to the clipboard?

Reference: **DAT1215**

Use the following procedure to copy grid cells to the clipboard.

```
(General) (declarations)
 Dim griddata As String
Private Sub Form Load()
 ' Create styleset with backcolor of red
 SSDBGrid1.StyleSets("color").BackColor = RGB(255, 55, 55)
End Sub
Private Sub SSDBGrid1 MouseDown (Button As Integer, Shift As Integer, X As
Single, Y As Single)
 Dim bm As Variant
 ' If right mouse click
 If Button = 2 Then
    ' Apply the styleset "color" to the cell
    SSDBGrid1.Columns(SSDBGrid1.ColContaining(X)).CellStyleSet ("color"),
SSDBGrid1.RowContaining(Y)
    ' Get the row's bookmark
    bm = SSDBGrid1.RowBookmark(SSDBGrid1.RowContaining(Y))
    ' Build string of cell's contents
    griddata = griddata +
SSDBGrid1.Columns(SSDBGrid1.ColContaining(X)).CellText(bm)
   ' Copy contents to ClipBoard
    Clipboard.SetText griddata
 Else
    ' If left mouse click clear griddata and Clipboard and clear stylesets
applied to DataGrid
    SSDBGrid1.Refresh
    griddata = ""
    Clipboard.SetText griddata
 End If
End Sub
```

How can I set focus to the next control in the tab order when I hit the tab key while the DataGrid has focus?

Reference: **DAT1177**

Use the following code to allow the user to tab to the next control from the last row of the grid:

```
Private Sub SSDBGrid1_KeyDown(KeyCode As Integer, Shift As Integer)

If KeyCode = 9 And SSDBGrid1.Row = SSDBGrid1.Rows Then
    ' The tab key has been pressed on the last row
    For i = 0 To Form1.Controls.Count
        ' Go through the controls and find the next enabled control in the tab order
        If Form1.Controls(i).TabIndex > SSDBGrid1.TabIndex And
Form1.Controls(i).Enabled = True Then
        Form1.Controls(i).SetFocus
        Exit For
        End If
    Next i
    End Sub
```

This code moves to the next control when user tabs off last row in a grid with **AllowAddNew** set to False. It also moves to next control when user tabs off the Add row in a grid with **AllowAddNew** set to True.

How can I sort the Columns in an AddItem DataGrid since there is no "Ordered" property?

Reference: DAT1224

' Populate the arrays Select Case L MultiSingle

The following procedure will sort the contents of an AddItem grid using a memory array as a temporary holding place for the data. It also makes use of an efficient bubble sort algorithm.

This example requires a DataGrid in AddItem DataMode. (This can also be applied to the DataDropdown and the DataCombo in the AddItem DataMode):

```
Private Sub Command1 Click()
 Call Order An Additem Control (SSDBGrid1, SSDBGrid1.Rows, SSDBGrid1.Cols,0)
 ' This function will sort an additem data grid
 ' It passes the following parameters:
 ' "In Control" = Name of the control being sorted
 ' "In Number Of Rows" = Number of rows in the additem grid
 ' "In Number OF Cols" = Number of columns in the additem grid. Leave 0 if
there is only one column
 ' "Sort Column" = Column to be sorted on
End Sub
Place this code in a Module:
Sub Order An Additem Control (In Control As Control, ByVal In Number Of Rows
As Integer, ByVal In Number Of Cols As Integer, ByVal Sort Column As
Variant)
 Dim L MultiSingle As Integer ' If False then we are using Single
Dimentional array, else Multi
 Dim i As Integer ' Temporary variable
Dim J As Integer ' Temporary variable
Dim k As Integer ' Temporary variable
 Dim 1 Array Holding Items() As String 'Temporary array that will contain
the info in the control
 Dim Temp Text As String
 Dim Temp\overline{2} As String
 ' Turn off Redraw
 In Control.Redraw = False
 Screen.MousePointer = 11
 ' Create the array
 If (Sort Column) < 0 Then Sort Column = 0
 If In Number Of Cols > 1 Then ' Create a 2 dimentional array
     ReDim l Array Holding Items (In Number Of Rows, In Number Of Cols)
     L MultiSingle = True
 Else
     ReDim l Array Holding Items (In Number Of Rows)
    L MultiSingle = False
 End If
```

```
Case True ' Multi
    For i = 0 To In Number Of Rows - 1
       For J = 0 To In Number_Of_Cols - 1
           In Control.Bookmark = In Control.AddItemBookmark(i) ' Set the
bookmark to a row
           ' Set the array to the contents of the row above
          1 Array Holding Items(i, J) = In Control.Columns(J).Text
       Next J
       DoEvents
    Next i
 Case False
    For i = 0 To In Number Of Rows - 1
       In Control.Bookmark = In Control.AddItemBookmark(i)' Sets the
bookmark to a row
        ' Sets the array to the contents of the row above
       1 Array Holding Items(i) = In Control.Columns(0).Text
       DoEvents
    Next i
 End Select
 ' Bubble sort the array
 For i = 0 To In Number Of Rows - 1
    For J = In Number Of Rows - 1 To i + 1 Step -1
    If L MultiSingle = False Then ' Single Array
        DoEvents
        If 1 Array Holding Items (J) < 1 Array Holding Items (J - 1) Then
          Temp2 = 1 Array Holding Items(J)
           1 \text{ Array Holding Items}(J) = 1 \text{ Array Holding Items}(J - 1)
           1 Array Holding Items(J - 1) = Temp2
       End If
    Else ' Multiple
       DoEvents
       If 1 Array Holding Items(J, Sort Column) < 1 Array Holding Items(J -
1, Sort Column) Then
           For k = 0 To In Number Of Cols - 1
              Temp2 = 1 Array Holding Items(J, k)
              l_Array_Holding_Items(J, k) = l_Array_Holding_Items(J - 1, k)
              l Array Holding_Items(J - 1, k) = Temp2
          Next k
       End If
    End If
    Next J
 Next i
 ' Repopulate the control with sorted items
 In Control.RemoveAll
 Select Case L MultiSingle
 Case True ' Multi
    For i = 0 To In Number Of Rows - 1
       Temp\_Text = \overline{"}"
       For J = 0 To In Number Of Cols - 1
          If J = 0 Then
```

```
Temp Text = In Control.FieldDelimiter &
1_Array_Holding_Items(i, J) & In_Control.FieldDelimiter
             Temp_Text = Temp_Text & In_Control.FieldSeparator &
In_Control.FieldDelimiter & l_Array_Holding_Items(i, J) &
In Control.FieldDelimiter
          End If
       Next J
       In Control.AddItem Temp_Text
       DoEvents
    Next i
 Case False
    For i = 0 To In Number Of Rows - 1
       In Control.AddItem l Array Holding Items(i)
       DoEvents
    Next i
 End Select
 ' Turn Redraw back on
 In Control.Redraw = True
 Screen.MousePointer = 0
End Sub
```

How can I synchronize the horizonal scrolling of two DataGrids?

Reference: **DAT1168**

Use the following code in the **ScrollAfter** event of each DataGrid.

```
Private Sub SSDBGrid1_ScrollAfter()
    SSDBGrid2.LeftCol = SSDBGrid1.LeftCol
End Sub
Private Sub SSDBGrid2_ScrollAfter()
    SSDBGrid1.LeftCol = SSDBGrid2.LeftCol
End Sub
```

If you are using the SplitterBar then the above code will not work because SSDBGrid1.LeftCol will remain at "0". Please refer to the following sample when using the SplitterBar:

How can I total a column in a bound DataGrid?

Reference: **DAT1141**

Use this procedure to place the total of a grid column in a text box.

Place a bound DataGrid, command button and text box on a form. Use the following code:

```
Dim temp as Global Integer

Private Sub Command1_Click()

SSDBGrid1.MoveFirst
For i = 0 To SSDBGrid1.Rows - 1
    bm = SSDBGrid1.GetBookmark(i)
    temp = temp + SSDBGrid1.Columns(0).CellValue(bm)
Next
Text1.Text = temp

End Sub
```

How can I trap for messages through the DBEngine directly and display the Error Number and Error Description from DAO?

Reference: **DAT1166**

End Sub

This code will give you an idea of how to handle errors from DBEngine.

How can I update a DataGrid without moving off the row or if the Grid loses focus?

Reference: **DAT1147**

Use the following procedure to update the recordset without changing the current row. In the SSDBGrid's **LostFocus** event put the following:

How can I write all of the data that resides in an Additem DataGrid into a database?

Reference: **DAT1151**

The following procedure will store the entire contents of the AddItem grid in a database. This code assumes that you have a Data Control on the Form that is attached to a table that contains the same number of fields as columns in the DataGrid.

```
Private Sub Command1_Click()

For i = 0 To SSDBGrid1.Rows - 1
    Data1.Recordset.AddNew
   For x = 0 To SSDBGrid1.Columns.Count - 1
        Data1.Recordset(x) =

SSDBGrid1.Columns(x).CellText(SSDBGrid1.AddItemBookmark(i))
   Next x
   Data1.Recordset.Update
Next i
End Sub
```

How do I copy the SSDBGrid contents to the clipboard?

Reference: **DAT1196**

The following code copies the contents of the grid to the clipboard:

```
Dim GridData as string
Dim bm as variant

GridData = ""
SSDBGrid1.movefirst
For i = 0 to SSDBGrid1.Rows - 1
   bm = SSDBGrid1.GetBookmark(i)
   For a = 0 to SSDBGrid1.cols - 1
        griddata = griddata + SSDBGrid1.Columns(a).CellText(i) + ""
   Next
Next
Clipboard.SetText GridData
```

How do I know what row I am on in a DataGrid?

Reference: **DAT1243**

Use bookmarks to determine the row number within a recordset, or the **Row** property to determine which of the visible rows you are on.

Data Widgets 2.0 refers to Bookmarks only, not row numbers. This change was made due to the VB4 environment itself. VB4 uses a Bookmark when referencing a record, not a row number. The **Row** property in Data Widgets 2.0 pertains to the visible row number only. Every top row in the DataGrid will return row 0.

If you feel you do need to refer to a row number you can do the following:

If DataMode is Bound - the AbsolutePosition of the DataControl (RecordSetType of Dynaset only) will return the Row number:

```
lAbsoluteRow = Data1.RecordSet.AbsolutePosition
```

If DataMode is Unbound - if you were using a RecordSet, the same properties would apply as if it were bound. You can use the same as above.

```
lAbsoluteRow = RecordSet.AbsolutePosition
```

If DataMode is AddItem - the **Bookmark** property in this DataMode returns an absolute row number.

```
1AddItemRow = SSDBGrid1.AddItemRowIndex(SSDBGrid1.Bookmark)
```

To get the number of the visible row, use the **Row** property:

```
iVisibleRow = SSDBGrid1.Row
```

To get the Column number the same would apply in all DataModes.

```
iColumn = SSDBGrid1.Col
```

How would I color a row based upon what has been entered into a cell?

Reference: DAT1144

To get this effect you must have a column somewhere in the DataGrid that holds a value that determines the color that row should be.

For example, this sample checks the value that is in column 0 and decides which color to apply to the row.

```
Private Sub Form Load()
 ' Define the stylesets here.
 SSDBGrid1.StyleSets("yesStyle").BackColor = RGB(255, 0, 0)
 SSDBGrid1.StyleSets("noStyle").BackColor = RGB(0, 255, 0)
End Sub
Private Sub SSDBGrid1 RowLoaded(ByVal Bookmark As Variant)
 Dim i As Integer
 If SSDBGrid1.Columns(0).Text = "no" Then
    For i = 0 To SSDBGrid1.Cols - 1
       SSDBGrid1.Columns(i).CellStyleSet "noStyle"
    Next i
 ElseIf SSDBGrid1.Columns(0).Text = "yes" Then
    For i = 0 To SSDBGrid1.Cols - 1
       SSDBGrid1.Columns(i).CellStyleSet "yesStyle"
    Next i
 Else
    ' Do not apply any styleset.
    For i = 0 To SSDBGrid1.Cols - 1
       SSDBGrid1.Columns(i).CellStyleSet "
    Next i
 End If
End Sub
```

The reason the stylesets are applied in the **RowLoaded** event is that the DataGrid is a virtual control. As rows are scrolled off the screen, the styleset applied to that row no longer exists. As rows come into view, the **RowLoaded** event is fired. By checking the value of Column 0 in the **RowLoaded** event, you can apply the styleset to that row as it comes into view.

How would I limit the number of characters in the text portion of the DataCombo?

Reference: **DAT1130**

Use the **KeyPress** event or the Windows API.

This code limits the edit portion of the DataCombo to five characters.

```
Private Sub SSDBCombol_KeyPress(KeyAscii As Integer)

If Len(Trim(SSDBCombol.Text)) >= 5 Then
   KeyAscii = 0
   Beep
End If

End Sub
```

Or you can get the same effect using the Windwos API (this sample is for 32 Bit).

```
' Place these lines in a module
Public Const EM_LIMITTEXT = &HC5
Declare Function SendMessage Lib "user32" Alias "SendMessageA" (ByVal hwnd As Long, ByVal wMsg As Long, ByVal wParam As Long, lParam As Long) As Long
' Then place this code in the GotFocus event of the combo
' the third arguement is the maximum permitted length of the string
Dim x As Long
x = SendMessage(SSDBCombol.HwndEdit, EM_LIMITTEXT, 5, 0)
```

How would I use one drop down to update several columns on a grid?

Reference: **DAT1133**

Use the **RowColChange** event, as outlined in the following procedure.

In this sample both columns 3 and 5 in the DataGrid are attached to the same DropDown control. In the **RowColChange** event, the RecordSource of the data control bound to the DropDown is changed based on the Column in the DataGrid.

```
Private Sub SSDBGrid1 InitColumnProps()
 SSDBGrid1.Columns(3).DropDownHwnd = SSDBDropDown1.hWnd
 SSDBGrid1.Columns(5).DropDownHwnd = SSDBDropDown1.hWnd
End Sub
Private Sub SSDBGrid1 RowColChange(ByVal LastRow As Variant, ByVal LastCol
As Integer)
 If SSDBGrid1.Col = 3 And Data2.RecordSource <> "Publishers" Then
    Data2.RecordSource = "Publishers"
    Data2.Refresh
    SSDBDropDown1.DataFieldList = "PubId"
 ElseIf SSDBGrid1.Col = 5 And Data2.RecordSource <> "Authors" Then
    Data2.RecordSource = "Authors"
    Data2.Refresh
    SSDBDropDown1.DataFieldList = "Au ID"
 End If
End Sub
```

If I am loading an Additem DataGrid with a dynaset, how can I synchronize the dynaset with the DataGrid?.

Reference: **DAT1146**

The procedure below illustrates how to synchronize the movement of the DataGrid with the record pointer.

```
Dim db as Database
Dim rs as Recordset
Private Sub Form Load()
 Dim i As Integer
 Dim ct As Integer
    Set db = OpenDatabase(App.Path & "\unbound.mdb")
    Set rs = db.OpenRecordset("titles")
    ct = rs.Fields.Count
    SSDBGrid1.Columns.RemoveAll
    For i = 0 To (ct - 1)
       SSDBGrid1.Columns.Add i
       SSDBGrid1.Columns(i).Visible = True
       SSDBGrid1.Columns(i).Caption = rs.Fields(i).Name
    Next i
End Sub
Private Sub Form Activate()
 Dim strData As String
    rs.MoveFirst
    Do While Not rs.EOF
    For i = 0 To SSDBGrid1.Cols - 1
       strData = strData & rs(i) & vbTab
    SSDBGrid1.AddItem strData
    strData = "
    rs.MoveNext
    Loop
End Sub
Private Sub SSDBGrid1 RowColChange (ByVal LastRow As Variant, ByVal LastCol
As Integer)
 rs.AbsolutePosition = SSDBGrid1.AddItemRowIndex(SSDBGrid1.Bookmark)
End Sub
```

Is there an automatic conversion utility available when converting from Data Widgets 1.0 to Data Widgets 2.0?

Reference: **DAT1245**

No.

There are significant differences between the Data Widgets 1.0 components and the Data Widgets 2.0 components. Besides making full use of the latest OLE technology, we included many new features and enhancements that were requested by our customers. An automatic conversion would not make use of the new properties and the object and collection architecture now supported in OLE technology.

For example, in Data Widgets version 1.0 you obtained a cell's value by using an element of an indexed property array - the **ColText** property of the DataGrid:

```
sColumnText = SSDataGrid1.ColText(n)
```

In Data Widgets version 2.0 the columns are now a part of a collection of Column objects. Array properties and subscripts are no longer used. To obtain the same information, you would use the **Text** property of the Column object:

```
sColumnText = SSDBGrid1.Columns(n).Text
```

This is just a small sample of how the differences apply. While we do realize the manual conversion can be a time consuming process, we have included a help file, DATW1TO2.HLP, that will help with the process. This file lists all the Data Widgets 1.0 Properties, Events & Methods that were supported and explains how you can achieve the same functionality in Data Widgets version 2.0.

The Enhanced Data Control displays a message box when the Find function does not find anything. How can I post my own message instead of the default message?

Reference: **DAT1119**

You must set the RtnDispErrMsg parameter of the **FindResult** event to False, then display your own message through code.

In the **FindResult** event place this code:

```
If CStr(vBookmark) = "" Then
   MsgBox "MyMessage"
   RtnDispErrMsg = False
End If
```

What is different in version 2.0?

Reference: **DAT1047**

These are the main differences between version 1.X and 2.X of the DataWidgets controls:

- 1. They are no longer in the VBX format, they are now 16-bit and 32-bit ActiveX controls.
- 2. The ActiveX format utilizes Microsoft's OLE automation specifications.
- 3. OurActiveX controls can now be used on a range of development environments, whereas in the past, the product was limited to environments that supported the VBX format.
- 4. Version 2.0 of Data Widgets introduces the use of objects and collections. Objects allow you to more easily manipulate the custom controls. For example, you can now directly set a property specific to an object (such as an individual column).

What is the best method of learning Data Widgets 2.0?

Reference: DAT1242

Part of the difficulty with learning Data Widgets 2.0 is due to the OLE features of Objects and Collections. Once you understand this new technology, you will have no problem familiarizing yourself with Data Widgets 2.0.

The manual provides a <u>Guided Tour</u> section which is a basic, but thorough approach to familiarizing yourself with each component and their most common uses. Once you understand the basics of how to use each control, you will better understand the properties and methods that are applicable to that component.

You may want to review each of the collections used in Data Widgets 2.0 to gain an understanding of the objects the collection comprises. You can then review the properties of each object.

For example, there is a Columns collection that is composed of Column objects. This collection (like any collection) enables you to add objects to it, remove objects from it, or count how many objects it currently holds. If you wish to refer to an individual Column object, you refer to it by its place in the collection. Thus, the first Column object added to the collection would be referred to as Columns(0).

If you wish to set certain attributes of Columns(0) you would then refer to the Column object and its properties. You can set the Text, Caption, Style, BackColor, etc. properties of this Column. Each would be referred by using the Column object and its place in the Columns collection:

```
SSDBGrid1.Columns(0).Text = "Hello World"
SSDBGrid1.Columns(0).Caption = "Name"
```

This does not mean that you will learn every property, method or event, but once you have a better understanding of how objects and collections work you will have an easier time looking for help on a specific property or method you would like to use.

When I bind the SSDBCombo's DataSourceList to a DataControl and choose an item from the list, my other bound controls do not reflect the same record.

Reference: DAT1249

You must manually reposition the Data control to achieve this effect.

When choosing an item from the list, you are moving the position of the SSDBCombo, but it is not repositioning the bound DataControl. This is done to increase the speed of positioning of the SSDBCombo.

You can set the Data control's bookmark equal to the SSDBCombo's bookmark and it will keep the other bound controls in sync with the SSDBCombo.

In the **CloseUp** event of the SSDBCombo put the following code:

Data1.RecordSet.Bookmark = SSDBCombo1.Bookmark

When I set the CellStyleSet to a particular cell then scroll the cell out of view, the CellStyleSet is no longer applied when the cell scrolls back into view - how can I fix this?

Reference: **DAT1121**

Use the following procedure:

In order to get this effect, you need to a field in the Database associated with the Styleset. Whenever this field contains a certain value, you should apply this styleset to the DataGrid in the **RowLoaded** event.

Place a DBGrid and Command Button on the form and add the following code:

```
(General) (declarations)
 Dim temp as String
Private Sub Form Load()
 temp = ""
 SSDBGrid1.StyleSets("color").BackColor = RGB(255, 55, 55)
End Sub
Private Sub Command1 Click()
 SSDBGrid1.Columns(1).CellStyleSet ("color"), SSDBGrid1.Row
 temp = SSDBGrid1.Columns(1).CellValue(SSDBGrid1.Bookmark)
End Sub
Private Sub SSDBGrid1 RowLoaded(ByVal Bookmark As Variant)
 If SSDBGrid1.Columns(1).Text = temp Then
    SSDBGrid1.Columns(1).CellStyleSet ("color")
 Else
    SSDBGrid1.Columns(1).CellStyleSet ""
 End If
End Sub
```

When distributing my application that has a Data Widgets 2.0 control included, the Form will open, but will return an error "Can't Load Custom Control DLL".

Reference: **DAT1244**

You must correctly distribute and register all the DLLs needed by Data Widgets 2.0.

There are specific DLLs needed by Data Widgets in order to register the control and make use of the OLE technology. These DLLs are not included when running the Setup Wizard in Visual Basic 4.

The DLLs required can be found on the Data Widgets 2.0 on-line help in the Technical Specifications section "<u>Distributing Your Application</u>". The DLLs you need do vary depending on which environment you are supporting (16-bit and/or 32-bit applications) and are listed accordingly in this section.

When starting the Custom DataGrid editor, why do I get an error 31037 "Error loading from file"?

Reference: **DAT1194**

This error occurs when the shared system files TABCTL16.OCX and/or TABCLT32.OCX are not registered on your system. This occurs occasionally when an application's uninstall program mishandles the un-registration and removal of its support files.

When the Data Widgets install program installs a shared system file, it first checks to make sure that the version it is about to install is newer than that which already exists on your system. If it is newer, the install program proceeds to copy the file and then registers it. If a newer version of the file already exists on your system, the file is not copied and is not registered (It is not registered because existing system file are assumed to be registered and used by other applications).

When TABCTL16.OCX or TABCLT32.OCX is no longer registered, but can still be found on your system - you will receive the error "31037 - Error Loading From File" when executing the Custom Property Pages.

As a measure to correct this problem, you can manually register the file(s) using REGSVR.EXE (for TABCTL16.OCX) and/or REGSVR32.EXE (for TABCTL32.OCX).

When using SQLPassThrough, the DataCombo's ListAutoPosition and ListAutoValidate no longer work. Why?

Reference: **DAT1176**

Working with SQLPassThrough disables all search mechanisms. This is a limitation inherent to Visual Basic 4. Therefore, the DataCombo will no longer be able to perform the **ListAutoPosition** or the **ListAutoValidate** methods.

When using an unbound DataGrid, how can I display a value from my dynaset in a text box as I change rows?

Reference: **DAT1135**

Use the **RowColChange** event, as outlined in the following procedure.

In the **RowColChange** event you could do one of the following:

Private Sub SSDBGrid1_RowColChange(ByVal LastRow As Variant, ByVal LastCol As Integer)

```
' rs = Recordset
rs.Bookmark = SSDBGrid1.Bookmark
Text1.Text = rs("au_id")
End Sub
```

OR

```
Text1.Text = SSDBGrid1.Columns(2).Text
```

When using the SSDBCombo in Visual C++ 4.X, why will a charcter typed in the edit portion appear for a second then disappear?

Reference: **DAT1276**

This is caused by a bug in MFC.

There is a bug in MFC that causes problems if the **ListAutoValidate** property is set to True (the default value). This is caused by MFC requiring each keystrok to be validated against the list. If the keystroke is not found, the string in the SSDBCombo is reset to it's previous value.

The workaround for this is to set the **ListAutoPosition** property to False, and if you are using a Remote Data Control, use the Validate event on the MSRDC to handle the validation of the data yourself.

Why can't Data Widgets controls be bound in Visual C++ 4.0?

Reference: **DAT956**

DataWidgets 2.0 requires Advanced Data Binding.

Visual C++ version 4.0 does not support Advanced Data Binding, therefore, you can not bind Data Widgets 2.0. Visual C++ version 4.0 does support Simple Data Binding, which is sufficient for Calendar Widgets. However, Visual C++ 4.2 **does** support the Remote Data Control which allows the Data Widgets components to work in the Bound DataMode.

Why do I get an error when I bind the DataCombo's DataSource to a MSRDC control and perform a MSRDC1. ResultSet. Update?

Reference: **DAT1205**

This is a problem with the Microsoft Remote Data Control. The problem can be reproduced with the Microsoft Masked Edit Control.

Why isn't the SSDBCombo or SSDBDropdown dropping down?

Reference: **DAT1248**

The **DataFieldList** property is not set correctly.

Whether you are using the SSDBCombo or SSDBDropdown in Bound; Unbound; or AddItem DataMode you need to set the **DataFieldList** property. This property tells the control which Column from the list you would like to appear in the Edit Portion when selected. Without setting this property the control will not drop down.