
Visual DataFlex 16.1

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Visual DataFlex 2010 – It's all about Grids

- In 16.0, we introduced our new grids
- In 16.1, the grids have significantly matured
 - More than any other product in recent memory the grid changes made in 16.0 and 16.1 are the direct result of user feedback and collaboration

What are the advantages of the new grids

- Your users will love them
 - They look great – it's like adding a fresh coat of paint to your application
 - It gives users more control
 - Columns can be resized, moved and hidden
 - You can freeze a column to the left
 - Any column can be sorted
 - You have far more control over the grids appearance (colors, fonts, images, etc.)

What are the advantages of the new grids

- They are built on a better model
 - The new grids are implemented by using the Codejock COM ReportControl
 - They are modeled using a set of composite classes that represents
 - The grid
 - The columns
 - The data (i.e., the data-source)
 - You will find it much easier to work with these composite classes

What are the advantages of the new grids

- The Regular grids are so much better
 - The cCJGrid can be used for data display and for data entry
 - They support a powerful editing model
 - Much of the high level DataFlex data entry interface has been moved to this class
 - Standard DataFlex input and display masks are supported
 - They are fast and can easily handle a large amount of data
 - They have a powerful selection interface
 - single-select, multi-select interface and no-select
 - You will find that many of your more advanced grid needs can be handled by this class
 - The feedback we've received from our early adapters is that this is the class that makes the big difference!

What are the advantages of the new grids

- The old data aware grids were good, the new ones are better
 - It has all of great features of the old grids
 - Brought back by popular demand
 - It has a new interface that is much easier to use
 - Data can be dynamic or static
 - Dynamic data lets you work with very large data
 - Data is loaded and cached as needed
 - Static data lets you work with all of your data at one time
 - Static data is auto-loaded or loaded manually
 - Static data can sort by any column
 - Static data still has full DB capabilities (save, delete)

This is the new grid class hierarchy

cJComReportControl

--- cJGrid

----- cJGridPromptList

----- cDbCJGrid

----- cDbCJGridPromptList

cJComReportColumn

--- cJGridColumn

----- cDbCJGridColumn

cObject

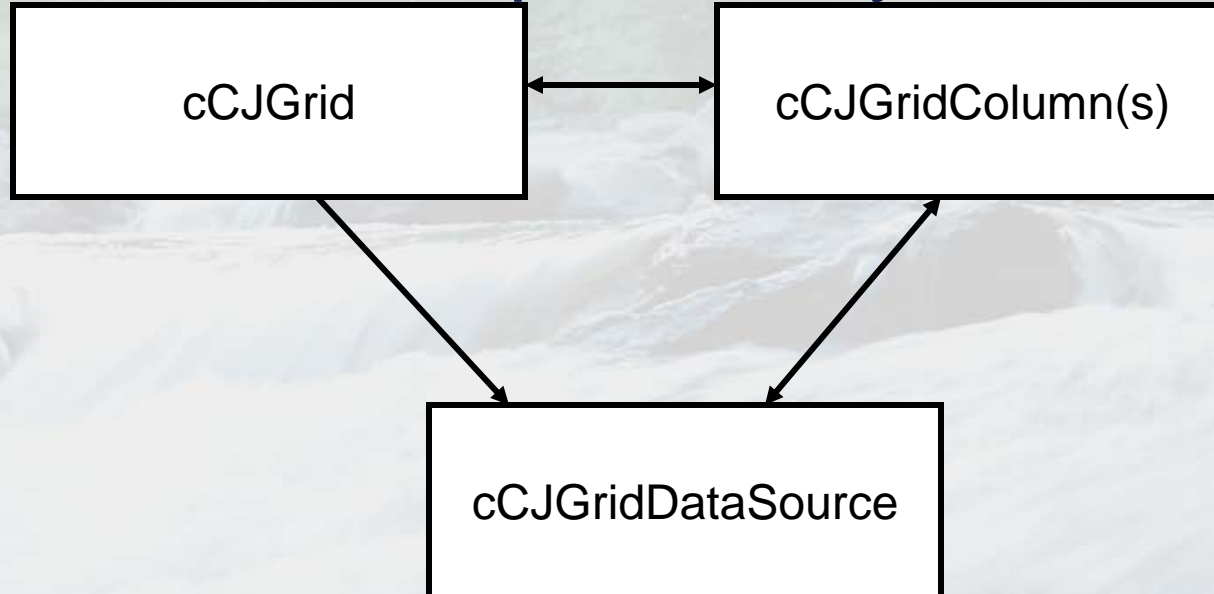
--- cJGridDataSource

----- cJGridCachedDataSource

----- cDbCJGridDataSource

This is how the grid classes interact

Grid Composite Object Structure



This is an example of a regular grid

```
Object oGrid is a cCJGrid
  Set Size to 230 408
  Set Location to 7 9
```

```
Object oName is a cCJGridColumn
  Set psCaption to "Name"
  Set piWidth to 95
End_Object
```

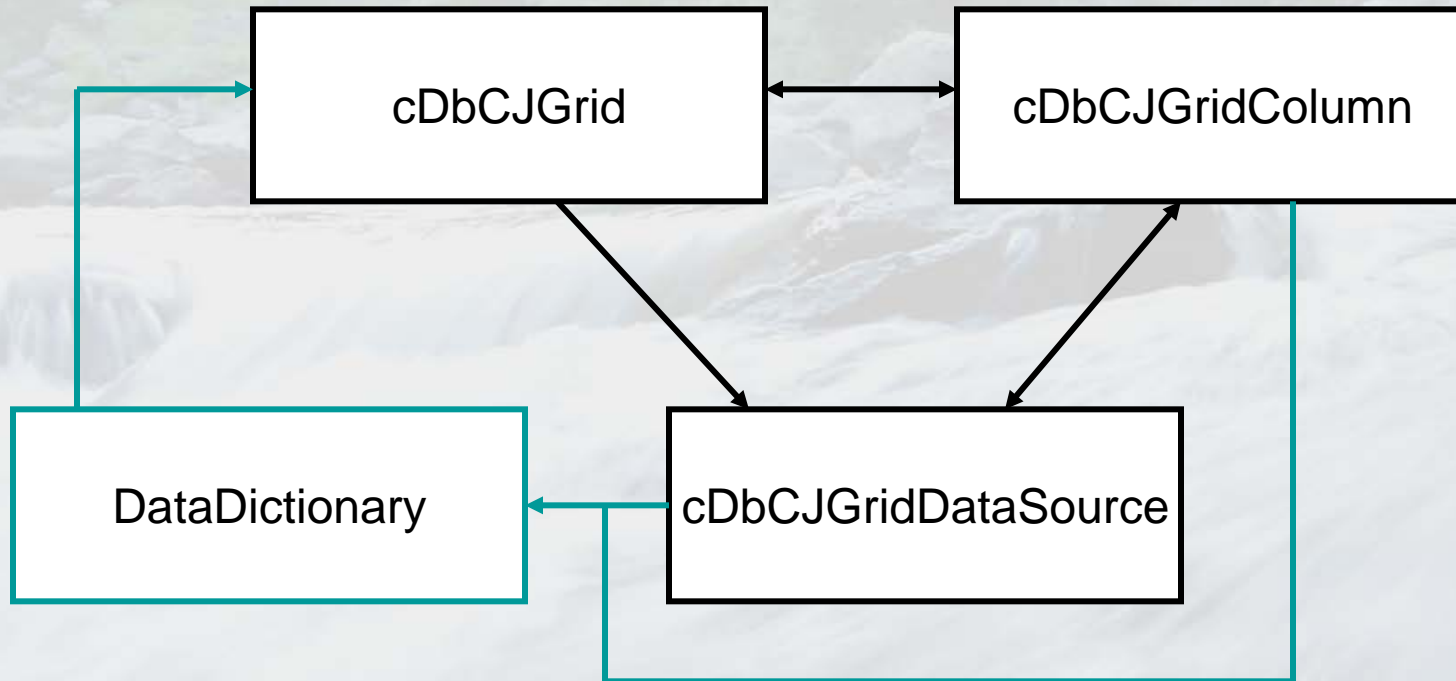
```
Object oType is a cCJGridColumn
  Set psCaption to "Type"
  Set piWidth to 55
End_Object
```

```
Object oSize is a cCJGridColumn
  Set psCaption to "Size"
  Set piWidth to 50
End_Object
```

```
End_Object
```

This is how the data aware grid classes interact

Data Aware Grid Object Structure



This is an example of a data aware grid

```
Object oCustGrid is a cDbCJGrid
  Set Size to 180 281
  Set Location to 6 6
  Set Ordering to 1
  Set Server to Customer_DD

Object oNumCol is a cDbCJGridColumn
  Entry_Item Customer.Customer_Number
  Set piWidth to 38
  Set psCaption to "Number"
End_Object

Object oNameCol is a cDbCJGridColumn
  Entry_Item Customer.Name
  Set piWidth to 183
  Set psCaption to "Customer Name"
End_Object

Object oEmail is a cDbCJGridColumn
  Entry_Item Customer.EMail_Address
  Set piWidth to 50
  Set psCaption to "email"
End_Object

End_Object
```

Let's look at some examples

- Most of the examples we will look at are found in the *Specialized Components* sample workspace

C:\Visual DataFlex 16.1 Examples\Specialized Components

What's new in 16.1?

- Bugs fixed, suggestions implemented
 - Check the “What’s New” section of the on-line help
- We’ve done a lot of grid related fine tuning and bug fixing
 - There are many, many changes made in 16.1
 - This is the revision you want to use for grids.
- We paid special attention to the legacy edit mode behaviors
 - A lot of developers prefer this type of editing
 - We’ve made the process of entering and leaving edit mode much smoother

What's new in 16.1?

- We've improved the prompt lists
 - We added a non-data aware prompt list (cCJGridPromptList)
 - Table/DD based prompts lists use the data-aware cDbCJGridPromptList
 - Non table prompt lists can use the cCJGridPromptList
 - The popup search interface was moved down to the cCJGrid class so that developers can use this with their custom non-prompt grid classes
 - Request_Search and RequestColumnSearch

What's new in 16.1?

- We've made it easier to make batch changes to data in a static grid
 - ReInitializeList works like InitializeList except it lets you retain your existing row/column positions and selections
- We've improved the interface for programmatically selecting and deselecting rows
 - Added SetSelectedRow, SetSelectedRowsAll and SetIndexesForSelectedRows
- We've improved the edit change event interface
 - The events OnEditChanging, OnSelectedRowDataChanged and OnEndEdit provides the needed hooks to control the entire edit changing process

What's new in 16.1?

■ Studio Changes

- You can choose to always open files in edit mode
 - You can optionally set the Studio to open files in design mode or edit mode
- Read-only file status bar toggle
 - A read only file can be made read/write within the Studio
- Improved debugger breakpoint panel
 - Interface has been reorganized to make it easier to use
- Quick open has a hot key
 - Ctrl+shift+O
- Various table names are no longer automatically uppercased
- Improved support for client web services
 - QNAME, <choice>, SSL, user prefixes, one way web services

What's new in 16.1?

- Visual DataFlex 16.1 includes AJAX 2.3
 - The AJAX WebApp Library has matured with each release
 - It's quite good
 - If you are writing WebApps, it is the recommended that you use the AJAX library
 - As of 17.0, AJAX will be fully integrated into WebApp

WebApp = AJAX

What's new in 16.1?

- We've made changes to better handle COM focus changes
- We've implemented changes to handle IE9 and Codejock compatibility issues

16.1 COM Changes

- We updated the Codejock components from 13.4.0 to 13.4.2
- It didn't work!
 - Codejock changed the interface to the ReportControl
 - They removed a notification message that we were counting on to give the control the keyboard focus and to keep the DataFlex and COM focus synchronized.
- Rather than implement a local change to the class, we improved the way all COM handles mouse and keyboard focus changes.
- This has the potential to *positively* impact all COM
 - It fixes long term focus issues with certain COM controls
 - Many COM controls will now just work better.

If you use Codejock COM products

- The Codejock 13.4.2 ReportControl (and higher) will not work properly with Visual DataFlex revisions before 16.1
- If you were using any Codejock controls on older Visual DataFlex revisions we would advise that you stay with Codejock 13.4.0 until you can update to 16.1
- Note that this only applies to COM controls you might have purchased directly from Codejock. If you are using the Codejock controls provided without standard installs, everything is matched and it works.

Visual DataFlex, Codejock and IE9

- The Problem
 - Some Codejock controls such as the docking panes use a painting optimization that does not work if the application is using IE9 as an embedded browser
- The problem appears when you try to resize a docking pane in a view that uses the IE9 COM control
 - The application will either freeze or crash
 - This is a general problem with the Codejock control
- The Solution
 - Codejock modified their code in 13.4.2 to address this
 - VDF 16.1 uses 13.4.2 so there is no problem

Visual DataFlex, Codejock and IE9

- How this impacts your pre-16.1 deployed applications
 - You may have a problem if:
 - An application panel uses the Codejock docking controls based on a revision of 13.4.1 or lower
 - *And*, that application uses a IE COM web browser in a view
 - *And*, the computer running that application has IE9 installed
- The solution is to update to 16.1.
- The workaround is to uninstall IE9 from that computer

Visual DataFlex, CodeJock and IE9

- How this impacts the pre 16.1 Visual DataFlex Studio
 - The Studio uses docking panes and a browser in the Start Center, so you can see the problem. Here are your options:
 - Use VDF16.1 - we've upgraded our internal use to 13.4.2. It works.
 - Or, don't install IE9 on your development machine. As a developer you have a bit more control over your own computer.
 - Or, disable the Studio's Start Center. If the IE9 control is not activated, there are no problems.

For more information about Visual DataFlex 16.1

■ Grids

- Here is a two part webinar about the grids that was made just prior to the release of 16.0. It provides a good introduction to using grids.

- http://media.dataaccess.com/webinars/2010-05-12_JT_VDF2010_16_0_gridOrientation.wmv

- http://media.dataaccess.com/webinars/2010-05-25_JT_VDF2010_16_0_gridOrientationPart2.wmv

For more information about Visual DataFlex 16.1

- The Visual DataFlex Studio – the Big Picture
 - This webinar uses VDF 14.1, but it shows how the Studio is used to build an application (tables, DDs, views, etc.)
 - http://media.dataaccess.com/webinars/2009-04-14_JJT_VDF2008_BigPic.wmv
- AJAX
 - Here is a webinar presented in 2009 about the basics of AJAX
 - http://media.dataaccess.com/webinars/2009-04-15_EK_Transitioning_Apps_w_VDF_AJAX_Library.wmv

For more information about Visual DataFlex 16.1

- Synergy 2011
 - All of the Power point presentations for Synergy 2011 will be made available shortly. Keep an eye on our web-site or e-news for more information.

- Other Webinars
 - A link to all of our webinars can be found here
 - <http://www.dataaccess.com/support.asp?pageid=1664>

Thank you

Enjoy Visual DataFlex 16.1!