



# GRAPHICAL ENHANCEMENTS

DireXions 2024

# LARGER PANELS AND MORE CONTROLS

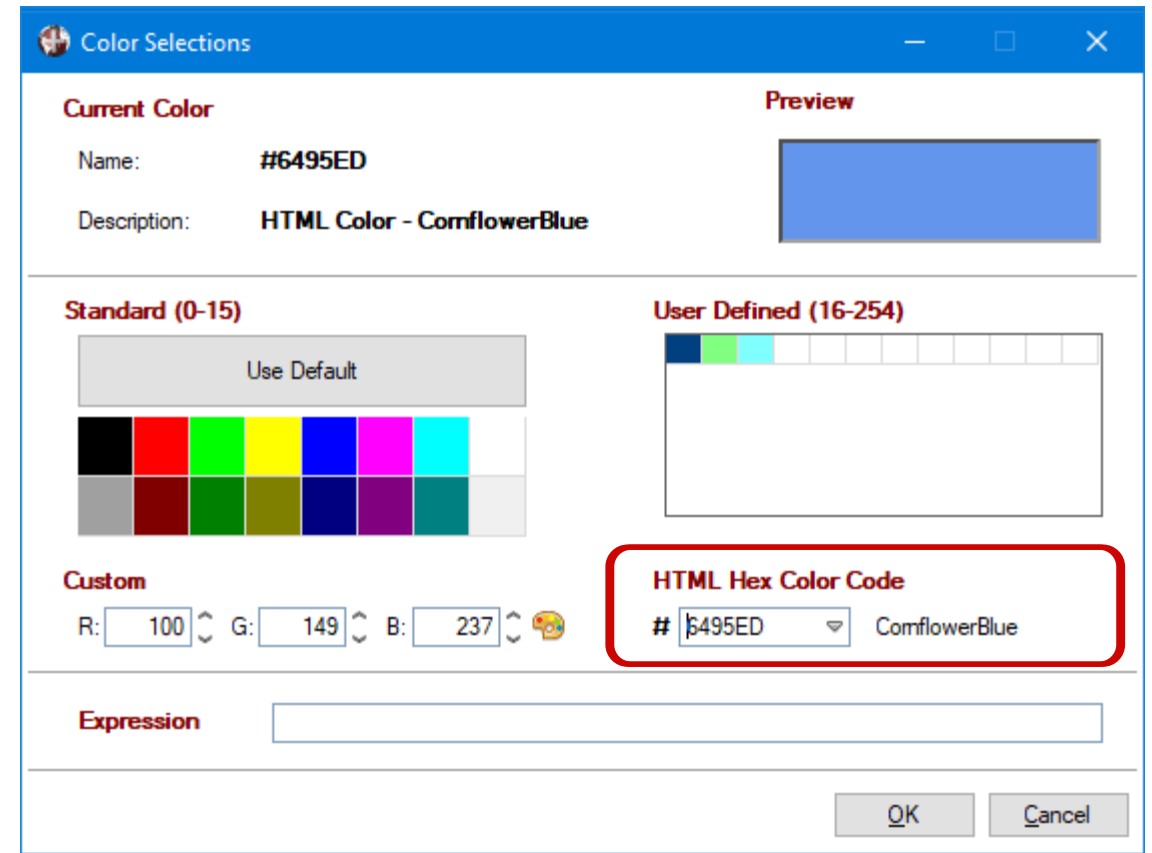
## Support for larger screens and more controls

- Dialogs now 620 columns by 255 rows
- Up to 999 controls on a panel
- Concurrent panels up to 199 controls

See 'NOMADS Panel Designer Enhancements'  
PDF for more details

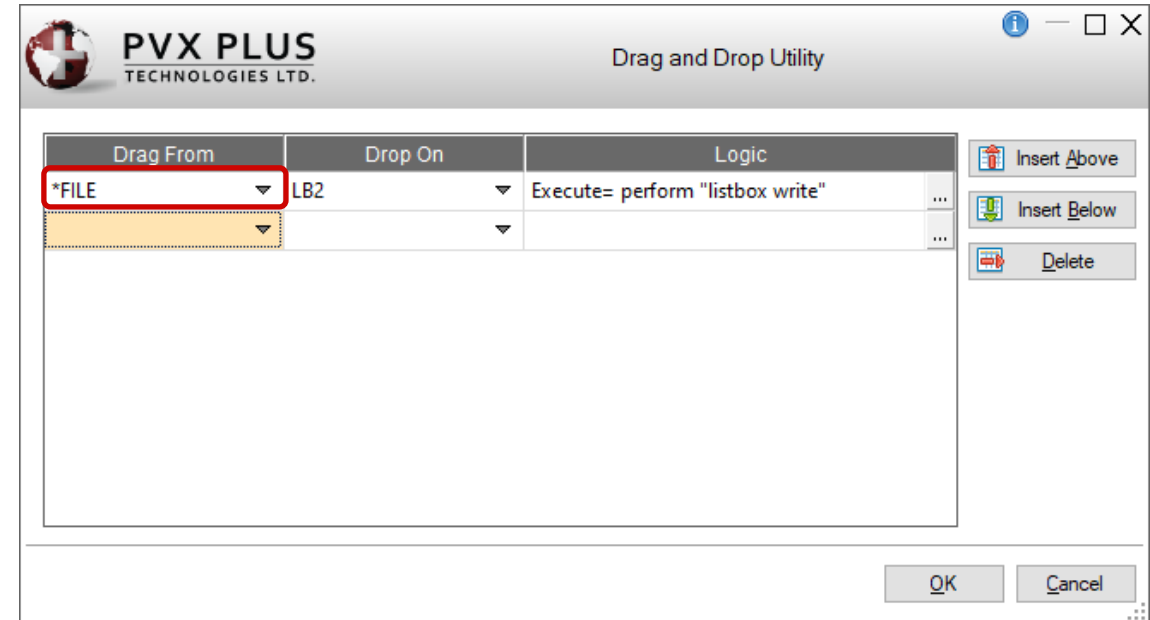
# HTML COLORS

- Ability to select [HTML Named Colors](#)
- 140 standard HTML colors
- To use HTML color name, prefix with # symbol i.e. #CornFlowerBlue
- New HTML Color drop box in Color Selections dialog in NOMADS panel designers
- Also available in iNomads



# DRAG AND DROP ENHANCEMENTS

- [Drag and Drop](#) between concurrent windows
- Use \*FILE to allow external applications, such as Windows Explorer, to drop file names onto a destination input control.



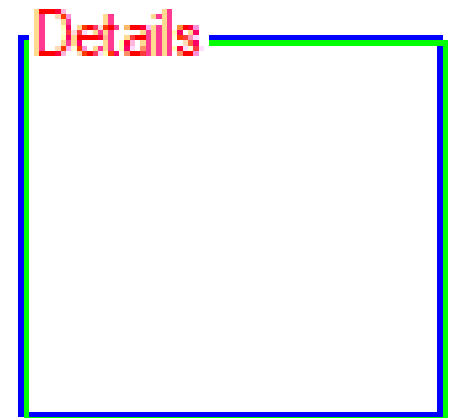
See 'NOMADS Panel Designer Enhancements'  
PDF for more details

# FRAME MNEMONIC

- New Options added to **FRAME** mnemonic
  - Text Color, Frame Highlight Color, Frame Shadow Color
- 'FRAME'(x,y,x,y,style[,title\$ [,textColor\$,frameHighlightColor\$,frameShadowColor\$]]])
  - **textColor\$** - Color of the header text. Optional. (Default: Black)
  - **frameHighlightColor\$** - Color of highlight line. Optional. (Default: Light Gray)
  - **frameShadowColor\$** - Color of shadow line. Optional. (Default: Dark Gray)

## Example

```
print 'frame'(100,100,300,300,0,"Details","red","green","blue")
```



# THEMES AND VISUAL CLASSES

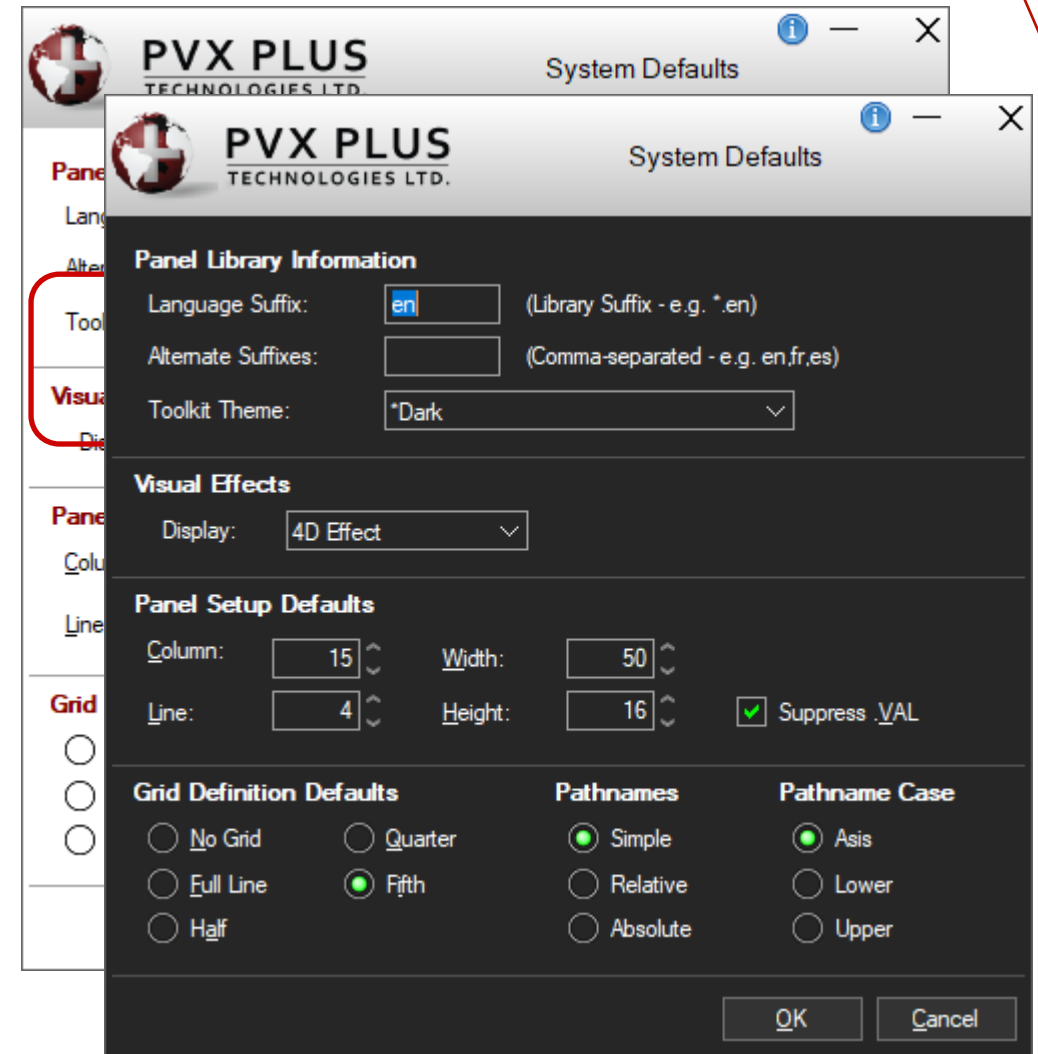
- Themes are now part of 2024 install – installation now comes with defined themes
- Improved overall usability and interaction with themes
- Created Dark and Light themes
  - Updated visual classes to support above themes
- Added new Themes and Visual Classes properties to existing controls
- Themes and Visual Classes properties now available for Shapes, Menu Bar and Popup Menu controls
- New Copy Theme
  - Utility used to copy a theme and associated visual classes

See 'Themes and Visual Classes Overview' PDF  
for more details

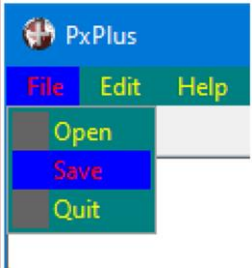
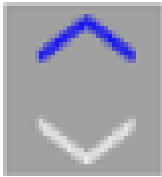
# TOOLKIT THEME

- Introduced in PxPlus 2024
- Toolkit Theme can be set to Dark mode, Light mode, or Default (None)
- Selected theme will be applied to the entire PxPlus toolkit with some exceptions
- Toolkit Theme is selected using Systems Defaults
- Available on the IDE and NOMADS Session Manager

See 'Application Look and Feel' PDF for more details

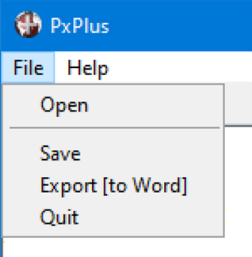


# DIRECTIVES - UPDATED

DIRECTIVE	Description
<a href="#">MENU BAR</a>	<p>New <a href="#">Parameters</a> added for specifying hover background color, hover text color, and menu text color. In addition, option to apply colors to <a href="#">Top Level Menu</a>.</p> <p>HFILL - Hover background color for mouse over menu items HTEXT - Hover text color for mouse over menu items TEXT - Text color for menu text</p> <pre>menu_bar 10,"!LEFT(RGB:100,100,100),FILL(DarkCyan), <b>HFILL(Blue),HTEXT(Red),TEXT(Yellow)</b> [&amp;File,&amp;Edit,&amp;Help],F:[&amp;Open,&amp;Save,&amp;Quit],E:[&amp;Add,&amp;Delete]</pre> <p>If the first character of the menu definition is an ! (exclamation point), or a first or second character of - (dash) is also specified, then the specified colors will also be applied to the top level menu.</p> 
<a href="#">BUTTON</a>	<p>New <a href="#">"I" Option</a> added for creating a spinner button</p> <pre>button spin_btn,@(2,14,4,2)="",opt="lf" spin_btn'backColor\$="dark gray" spin_btn'textColor\$="gray" spin_btn'hoverTextColor\$="blue"</pre>  <p>Prior to PxPlus 2024, spinner buttons on multi-lines used vertical scroll bars Under Windows 11, scroll bars only display when hovering over, thus making spinners on multi-lines basically invisible All multi-lines with spinners now use the new spinner in PxPlus 2024.</p>



# DIRECTIVES - UPDATED

DIRECTIVE	Description
<p>MENU_BAR Find</p>	<p>New Find format returns a string consisting of all the menu bar character codes, followed by a colon and their settings.</p> <pre>MENU_BAR 1 20,"[&amp;File],F:[&amp;Open,,&amp;Save,&amp;Quit=4]" MENU_BAR FIND X\$</pre> <p>Print X\$ F:E,H:E,FO:E,FS:E,FQ:E,HI:E,HP:E,HS:E,HL:E,HM:E,HU:E</p> 
<p>MENU_BAR Load</p>	<p>New Load format sets the enabled/disabled and optionally the On/Off status of menu bar entries based on their codes. "E" for <b>E</b>nabled or "D" for <b>D</b>isabled, and optionally "C" for <b>C</b>hecked (On).</p> <pre>MENU_BAR LOAD "M:D,B:E,BP:EC"</pre>
<p><a href="#">MENU_BAR</a> <a href="#">POPOP_MENU</a></p>	<p>Added support for Inclusion of Special Characters to define the menu.</p> <pre>MENU_BAR 1 20,"\[&amp;File],F:[&amp;Open,,&amp;Save,&amp;Export \[to Word\],&amp;Quit=4]" POPOP_MENU @(col,row),"\[&amp;File],F:[&amp;Open=1,,&amp;Save,&amp;Export \[to Word\]=2,&amp;Quit=4]",X</pre> <p>Above Menu_Bar example adds an entry in the menu bar to read "Export [to Word]"</p>



# 'OPTION' MNEMONICS

# 'OPTION' MNEMONICS

- Used for setting specific environment properties at run time within a session

- **Example**

```
Print 'OPTION'("DrpBtnTickClr","Red")
```

```
SETDEV (0) SET "DrpBtnTickClr" TO "Red"
```

# 'OPTION' MNEMONICS - GRAPHICAL

OPTION	Description
<a href="#">StdLvueLineClr</a>	Defines the text color when the mouse is over a row in a List View. (Report View Only)
<a href="#">StdGridLineClr</a>	Sets the standard/default line color for all subsequent grids. (Default is RGB: 220,220,220)
<a href="#">StdGridHideButtons</a>	Sets the default <a href="#">HideButtons</a> property for all subsequent grids.
<a href="#">StdGridQueryImg</a>	<p>This option defines the image to use in the query/lookup buttons of a grid.</p> <p>The value of the setting is an image pathname or internal image (!xxxxxx). An invalid value will result in the original ellipsis (...) being used.</p>
<a href="#">TipColor</a>	<p>Defines the color for non-HTML tips.</p> <p>Valid formats for defining a color include predefined system color names (e.g. LightRed), RGB values, HSL values, Hex color codes, color blending, and dynamic color lightening.</p>

# 'OPTION' MNEMONICS - GRAPHICAL

OPTION	Description
<a href="#">ClrPlusZ SB Back</a>	Sets background for any 'SB' data. (Default: Light Gray button face color)
<a href="#">ClrPlusZ SF Back</a>	Sets background for any 'SF' data. (Default: White)
<a href="#">ClrPlusZ Text</a>	Sets text. (Default: Black)
<a href="#">LockOverDisable</a>	When set ("1" or "Y"), Multi_Line input fields that are <b>both</b> locked <b>and</b> disabled will display as locked (as opposed to disabled).

# 'OPTION' MNEMONICS - GRAPHICAL

- These options control the color of the drop box button and tick color



OPTION	Description
<a href="#">DrpBtnBackClr</a>	Background color of the Drop Box button.
<a href="#">DrpBtnDisableBackClr</a>	Background color of the Drop Box button when the Drop Box is disabled.
<a href="#">DrpBtnHoverBackClr</a>	Hover background color of the Drop Box button. Defaults to the Windows hover color if no drop button colors are set; otherwise, defaults to the drop button background color but is 25% lighter.
<a href="#">DrpBtnHoverTickClr</a>	Hover color of the down arrow/tick on the Drop Box button. Defaults to the Windows tick color if no drop button colors are set; otherwise, defaults to the drop button tick color but is 25% lighter.
<a href="#">DrpBtnTickClr</a>	Color of the down arrow/tick on the Drop Box button.



# PROPERTIES

# PROPERTIES

- Properties for control objects can be changed dynamically using a control's assigned CTL value (Check Boxes, Grids, etc.)

- **Example**

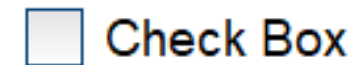
InvoiceGridctl'LockBackColor\$="Gray"




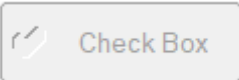
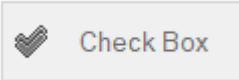
PaymentDBctl'FrameColor\$="#DC143C"



# CHECK BOX IMPROVEMENTS




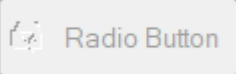
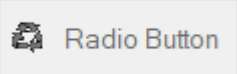
## New Check Box Properties




Property	Description	Example
<a href="#">'CbFrameColor\$</a>	Color of the Check Box frame for standard Check Box	 Check Box
<a href="#">'CbHoverColor\$</a>	Color of the hover rectangle for standard Check Box	 Check Box
<a href="#">'CbMarkColor\$</a>	Color of the check mark for standard Check Box	 Check Box
<a href="#">'GrayDisabledBmp</a>	Disabled color when a bitmap exists - shadow, gray scale	 Check Box  Check Box

# RADIO BUTTON IMPROVEMENTS







Radio Button

Property	Description	Example
<a href="#">'RbFrameColor\$</a>	Color of the standard Radio Button frame	 Radio Button
<a href="#">'RbHoverColor\$</a>	Color of the hover circle for standard Radio Button	 Radio Button
<a href="#">'RbMarkColor\$</a>	Color of the circle for standard Radio Button	 Radio Button
<a href="#">'GrayDisabledBmp</a>	Disabled color when a bitmap exists - shadow, gray scale	 Radio Button  Radio Button

# BUTTON IMPROVEMENTS

Property	Description	Example
<a href="#">'GrayDisabledBmp</a>	Disabled color when a bitmap exists - shadow, gray scale	

# DROP BOX IMPROVEMENTS

Property	Description	Example
<a href="#">'ButtonBackColor\$</a>	Background color of the Drop Box button	
<a href="#">'ButtonTickColor\$</a>	Color of the down arrow/tick	
<a href="#">'FrameColor\$</a>	Color of the frame/border	
<a href="#">'ButtonHoverBackColor\$</a>	Background hover color of a Drop Box button	
<a href="#">'ButtonHoverTickColor\$</a>	Hover color of the down arrow/tick	
<a href="#">'ButtonDisableBackColor\$</a>	Background disabled color of a Drop Box	

# GRID IMPROVEMENTS

## New Grid Properties

	ID	Name	City	Sales
1	435	John Doe	Toronto	791.22
2	196	Nancy Jones	New York	869.23
3	688	Steve Smith	Paris	47.90
4				

Property	Description	Example																									
<a href="#">'HdrHeight</a>	Header Height in pixels 0 - No header -1 - Restores to default	<table border="1"> <thead> <tr> <th></th> <th>ID</th> <th>Name</th> <th>City</th> <th>Sales</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>435</td> <td>John Doe</td> <td>Toronto</td> <td>791.22</td> </tr> <tr> <td>2</td> <td>196</td> <td>Nancy Jones</td> <td>New York</td> <td>869.23</td> </tr> <tr> <td>3</td> <td>688</td> <td>Steve Smith</td> <td>Paris</td> <td>47.90</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		ID	Name	City	Sales	1	435	John Doe	Toronto	791.22	2	196	Nancy Jones	New York	869.23	3	688	Steve Smith	Paris	47.90	4				
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<a href="#">'LineColor\$</a>	Grid Line colors	<table border="1"> <thead> <tr> <th></th> <th>ID</th> <th>Name</th> <th>City</th> <th>Sales</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>435</td> <td>John Doe</td> <td>Toronto</td> <td>791.22</td> </tr> <tr> <td>2</td> <td>196</td> <td>Nancy Jones</td> <td>New York</td> <td>869.23</td> </tr> <tr> <td>3</td> <td>688</td> <td>Steve Smith</td> <td>Paris</td> <td>47.90</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		ID	Name	City	Sales	1	435	John Doe	Toronto	791.22	2	196	Nancy Jones	New York	869.23	3	688	Steve Smith	Paris	47.90	4				
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<a href="#">'SuppressHdr</a>	Suppression of headers 0 - Headers not suppressed 1 - Row Header suppressed (left side) 2 - Column Header suppressed (top) 3 - Both Headers suppressed	<table border="1"> <thead> <tr> <th>ID</th> <th>Name</th> <th>City</th> <th>Sales</th> </tr> </thead> <tbody> <tr> <td>435</td> <td>John Doe</td> <td>Toronto</td> <td>791.22</td> </tr> <tr> <td>196</td> <td>Nancy Jones</td> <td>New York</td> <td>869.23</td> </tr> <tr> <td>688</td> <td>Steve Smith</td> <td>Paris</td> <td>47.90</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	ID	Name	City	Sales	435	John Doe	Toronto	791.22	196	Nancy Jones	New York	869.23	688	Steve Smith	Paris	47.90									
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<a href="#">'CurrentCellColor\$</a>	Text color of current cell	<table border="1"><thead><tr><th></th><th>ID</th><th>Name</th><th>City</th><th>Sales</th></tr></thead><tbody><tr><td>1</td><td>435</td><td>John Doe</td><td>Toronto</td><td>791.22</td></tr><tr><td>2</td><td>196</td><td>Nancy Jones</td><td>New York</td><td>869.23</td></tr><tr><td>3</td><td>688</td><td>Steve Smith</td><td>Paris</td><td>47.90</td></tr><tr><td>4</td><td></td><td></td><td></td><td></td></tr></tbody></table>		ID	Name	City	Sales	1	435	John Doe	Toronto	791.22	2	196	Nancy Jones	New York	869.23	3	688	Steve Smith	Paris	47.90	4				
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<a href="#">'LockBackColor\$</a>	Background color when the Grid cell is locked	<table border="1"><thead><tr><th></th><th>ID</th><th>Name</th><th>City</th><th>Sales</th></tr></thead><tbody><tr><td>1</td><td>435</td><td>John Doe</td><td>Toronto</td><td>791.22</td></tr><tr><td>2</td><td>196</td><td>Nancy Jones</td><td>New York</td><td>869.23</td></tr><tr><td>3</td><td>688</td><td>Steve Smith</td><td>Paris</td><td>47.90</td></tr><tr><td>4</td><td></td><td></td><td></td><td></td></tr></tbody></table>		ID	Name	City	Sales	1	435	John Doe	Toronto	791.22	2	196	Nancy Jones	New York	869.23	3	688	Steve Smith	Paris	47.90	4				
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<a href="#">'RowHeaderBackColor\$</a>	Background color for row column (left)	<table border="1"><thead><tr><th></th><th>ID</th><th>Name</th><th>City</th><th>Sales</th></tr></thead><tbody><tr><td>1</td><td>435</td><td>John Doe</td><td>Toronto</td><td>791.22</td></tr><tr><td>2</td><td>196</td><td>Nancy Jones</td><td>New York</td><td>869.23</td></tr><tr><td>3</td><td>688</td><td>Steve Smith</td><td>Paris</td><td>47.90</td></tr><tr><td>4</td><td></td><td></td><td></td><td></td></tr></tbody></table>		ID	Name	City	Sales	1	435	John Doe	Toronto	791.22	2	196	Nancy Jones	New York	869.23	3	688	Steve Smith	Paris	47.90	4				
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<a href="#">'ForegroundButtonColor\$</a>	Foreground text color for system-generated buttons																										

# GRID IMPROVEMENTS

Property	Description
<a href="#">'CellsNumeric</a>	Forces cell to only accept numeric data
<a href="#">'CellBlankWhenZero</a>	Display null when value is zero
<a href="#">'MaxListItems</a>	Number of lines in a drop list in Grid controls
<a href="#">'ButtonColor\$</a>	Background color for system-generated buttons, Drop Box and Query buttons
<a href="#">'SkipLockedCells</a>	Skip over locked cells horizontally or vertically using arrow buttons 0 - Do not skip over locked cells 1 - Skip over locked cells when advancing <i>horizontally</i> (Left/Right arrow) <b>(Default)</b> 2 - Skip over locked cells when advancing <i>vertically</i> (Up/Down arrow) 3 - Skip over locked cells <b>both</b> <i>vertically</i> and <i>horizontally</i>
<a href="#">'HideButtons</a>	Hide query buttons or drop box icons if there is a bitmap
<a href="#">'PasteFilter</a>	Strip leading/trailing non-printing characters from data copied/pasted; i.e. line feeds, tabs



# MULTI-LINE IMPROVEMENTS

Property	Description	Example
<a href="#">'OnDoubleClick</a>	Generates CTL event when double clicked	
<a href="#">'PasteFilter</a>	Strip leading/trailing non-printing characters from data copied/pasted. i.e. line feeds, tabs	
<a href="#">'Password</a>	Password masked data	
<a href="#">'LockBackColor\$</a>	Background color when locked	Multi line
<a href="#">'LockTextColor\$</a>	Foreground text color when locked	Multi line
<a href="#">'FrameColor\$</a>	Color of the frame/border	Multi line
Support for <a href="#">'DisableBackColor\$</a> , <a href="#">'DisableTextColor\$</a> and <a href="#">'TextColor\$</a> properties added to Rich Text controls		

# LIST BOX IMPROVEMENTS

Property	Description
<a href="#">'HdrHeight</a>	Header Height in pixels 0 - No header -1 - Restores the height to its default size
<a href="#">'LineColor\$</a>	Grid line colors
<a href="#">'FrameColor\$</a>	Color of the frame/border
Added "I" option to the <a href="#">'FindOptions\$</a> property to include a bitmap name when searching in a Report View List Box	