

Displaying and Hiding Tool Features Inside Plug-in Areas

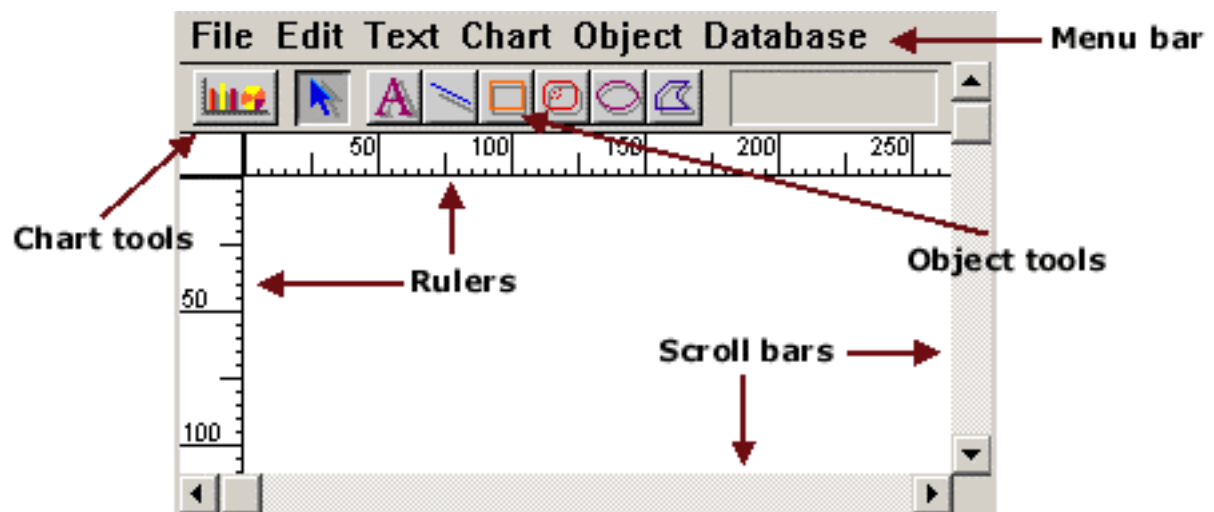
By Jamras Komoncharoensiri, Technical Support Engineer, 4D, Inc.
Technical Note 04-08

Introduction

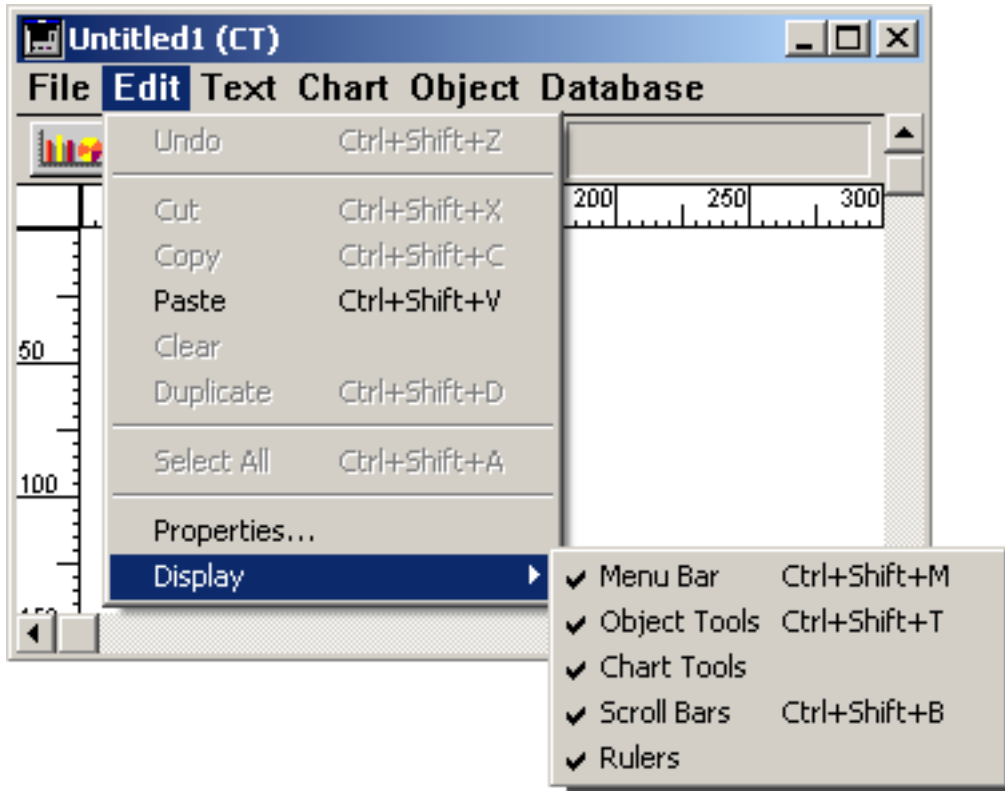
All 4D productivity plug-ins are equipped with interface elements such as a menu bar, toolbars and scrollbars. They are set to appear by default to provide the user quick access to the most often used features. These features can be displayed and hidden manually by the user or procedurally by executing a specific command of the plug-in. Depending on how the plug-in is used, the ability to procedurally control when each element is displayed might be necessary, especially if the plug-in area is being used in read-only mode. This technical note will demonstrate how to control the display options manually and procedurally for 4D Chart, 4D Draw, 4D Write and 4D View.

4D Chart

There are five tool features in 4D Chart: menu bar, chart tools, object tools, scroll bars and rulers.



The user can display or hide each of these features simply by using the Display submenu of the Edit menu. The items that are checked in the Display submenu are displayed in 4D Chart.



To accomplish the same task procedurally, you need to execute the command **CT SET DISPLAY**. This command sets whether the specified item is displayed or hidden in the 4D Chart window or area.

Display the features:

```
CT SET DISPLAY (Area;1;1) `Menu bar
CT SET DISPLAY (Area;2;1) `Chart tools
CT SET DISPLAY (Area;3;1) `Object tools
CT SET DISPLAY (Area;6;1) `Scroll bars (Both horizontal and vertical)
CT SET DISPLAY (Area;9;1) `Rulers (Both horizontal and vertical)
```

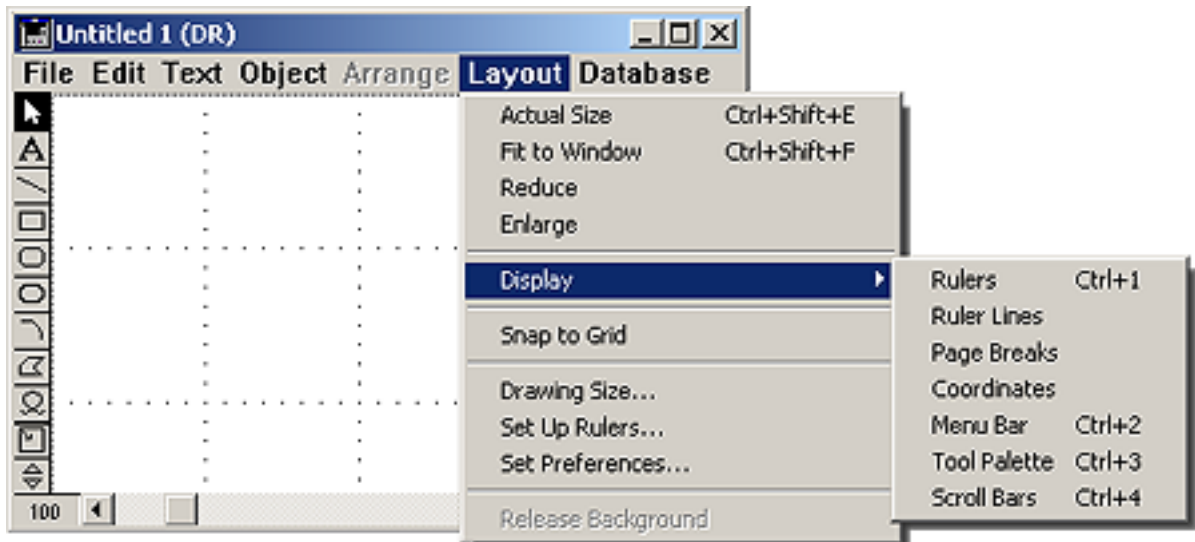
Hide the features:

```
CT SET DISPLAY (Area;1;0) `Menu bar
CT SET DISPLAY (Area;2;0) `Chart tools
CT SET DISPLAY (Area;3;0) `Object tools
CT SET DISPLAY (Area;6;0) `Scroll bars (Both horizontal and vertical)
CT SET DISPLAY (Area;9;0) `Rulers (Both horizontal and vertical)
```

4D Draw

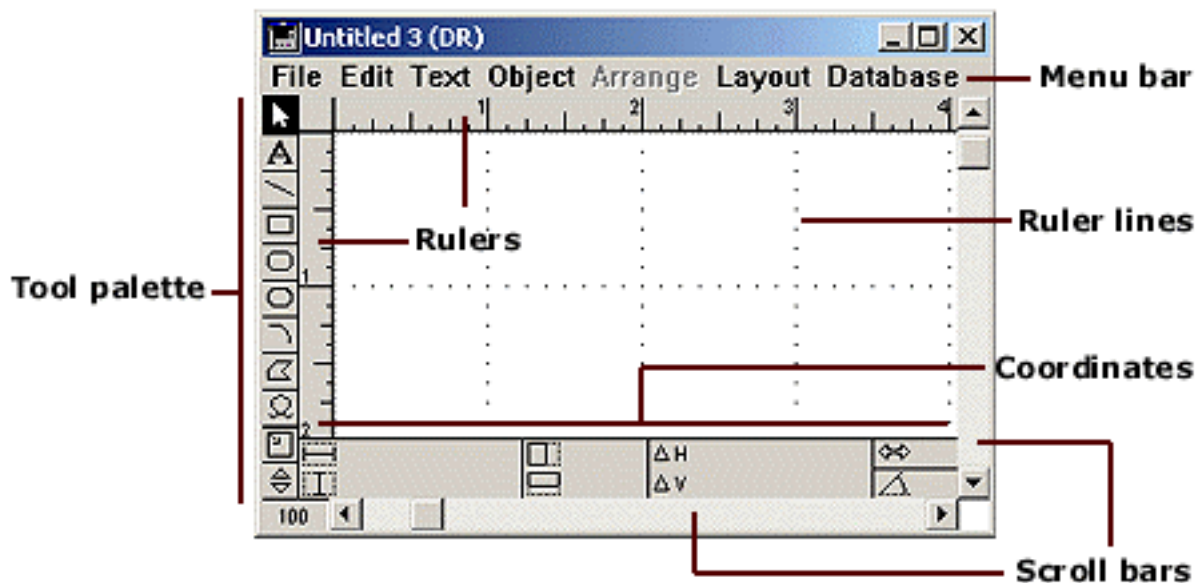
There are 3 aids and 4 layout features in 4D Draw that can be displayed or hidden at any time. The 4D Draw aid features include: menu bar, tool palette and scroll bars. The layout features include: rulers, ruler lines, page breaks, and coordinates panel. The menu bar, tool palette, scroll bars, and ruler lines are set to appear by default.

The user can manually control the display option for each of these elements by using the Display submenu of the Layout menu.



Unlike the 4D Chart menu item, 4D Draw doesn't use a checkmark in the Display submenu to indicate whether the feature is displayed or hidden. It assumes that the user has a visual view of the area to determine whether the element is displayed or hidden.

Here is what 4D Draw looks like when all elements are displayed.



To procedurally control the display option for the features, you need to execute the command **DR DISPLAY OPTIONS**.

Display the features:

```

DR DISPLAY OPTIONS (Area;1;1) `Rulers
DR DISPLAY OPTIONS (Area;2;1) `Ruler lines
DR DISPLAY OPTIONS (Area;4;1) `Page breaks
DR DISPLAY OPTIONS (Area;8;1) `Coordinates
DR DISPLAY OPTIONS (Area;16;1) `Menu bar
DR DISPLAY OPTIONS (Area;32;1) `Tool palette
DR DISPLAY OPTIONS (Area;64;1) `Scroll bar

```

Hide the features:

```

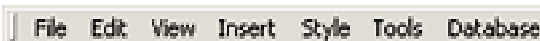
DR DISPLAY OPTIONS (Area;1;0) `Rulers
DR DISPLAY OPTIONS (Area;2;0) `Ruler lines
DR DISPLAY OPTIONS (Area;4;0) `Page breaks
DR DISPLAY OPTIONS (Area;8;0) `Coordinates
DR DISPLAY OPTIONS (Area;16;0) `Menu bar
DR DISPLAY OPTIONS (Area;32;0) `Tool palette
DR DISPLAY OPTIONS (Area;64;0) `Scroll bar

```

4D View

The following are the interface elements that are provided by 4D View:

Menu bar



Standard Toolbar



Numbers Toolbar



Style Toolbar



Borders Toolbar



Formula Toolbar



Grid



Horizontal Scroll bar



Vertical Scroll bar



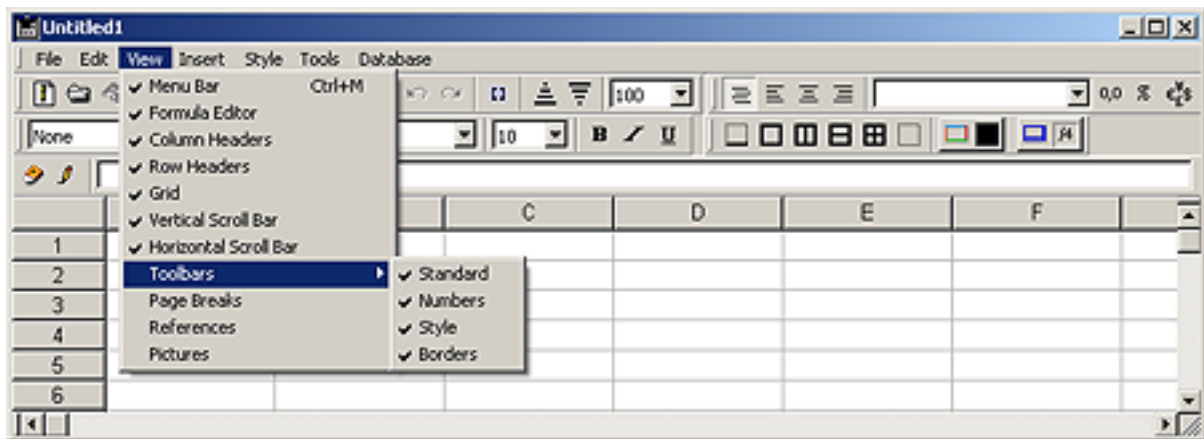
Column Headers



Raw Headers

1
2
3
4

These features are displayed by default. The user can manually set the display options for each from the View menu.



However, the display options for these features can also be set or modified procedurally by executing the command **PV SET AREA PROPERTY** for each feature.

Display the features:

```
PV SET AREA PROPERTY (Area;pv show menu bar;1) `Menu bar
PV SET AREA PROPERTY (Area;pv show standard toolbar;1) `Standard toolbar
PV SET AREA PROPERTY (Area;pv show numbers toolbar;1) `Numbers toolbar
PV SET AREA PROPERTY (Area;pv show style toolbar;1) `Style toolbar
PV SET AREA PROPERTY (Area;pv show borders toolbar;1) `Borders toolbar
PV SET AREA PROPERTY (Area;pv show formula toolbar;1) `Formula toolbar
PV SET AREA PROPERTY (Area;pv show hor grid;1) `Horizontal grid
PV SET AREA PROPERTY (Area;pv show vert grid;1) `Vertical grid
PV SET AREA PROPERTY (Area;pv show hor scrollbar;1) `Horizontal scrollbar
PV SET AREA PROPERTY (Area;pv show vert scrollbar;1) `Vertical scrollbar
PV SET AREA PROPERTY (Area;pv show column headers;1) `Column headers
PV SET AREA PROPERTY (Area;pv show row headers;1) `Row headers
```

Hide the features:

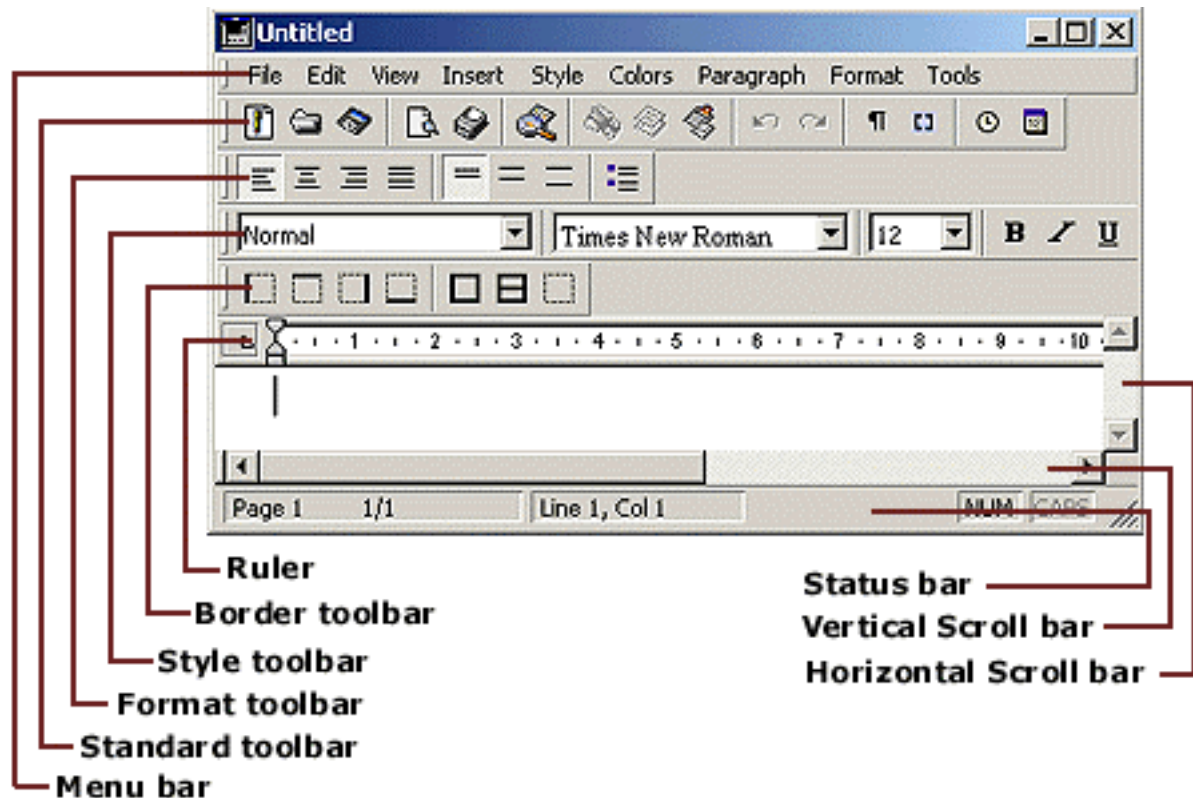
```
PV SET AREA PROPERTY (Area;pv show menu bar;0) `Menu bar
PV SET AREA PROPERTY (Area;pv show standard toolbar;0) `Standard toolbar
PV SET AREA PROPERTY (Area;pv show numbers toolbar;0) `Numbers toolbar
PV SET AREA PROPERTY (Area;pv show style toolbar;0) `Style toolbar
PV SET AREA PROPERTY (Area;pv show borders toolbar;0) `Borders toolbar
PV SET AREA PROPERTY (Area;pv show formula toolbar;0) `Formula toolbar
PV SET AREA PROPERTY (Area;pv show hor grid;0) `Horizontal grid
PV SET AREA PROPERTY (Area;pv show vert grid;0) `Vertical grid
PV SET AREA PROPERTY (Area;pv show hor scrollbar;0) `Horizontal scrollbar
```

```
PV SET AREA PROPERTY (Area;pv show vert scrollbar;0) `Vertical scrollbar  
PV SET AREA PROPERTY (Area;pv show column headers;0) `Column headers  
PV SET AREA PROPERTY (Area;pv show row headers;0) `Row headers
```

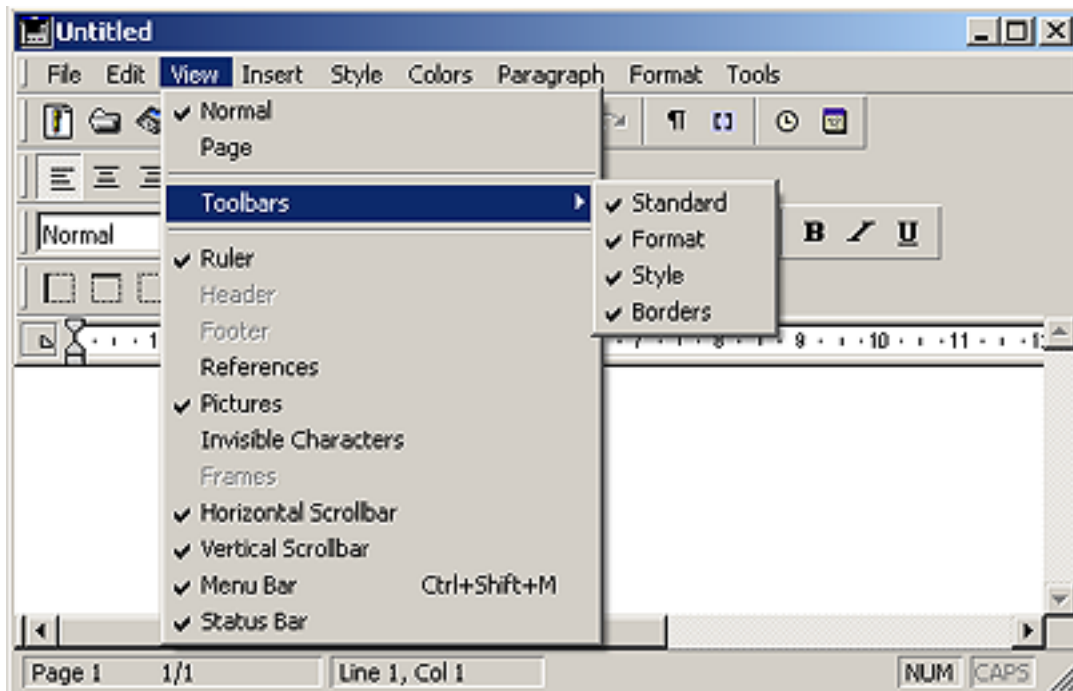
Note: The current versions of 4D View (6.8.x and 2003.x) may have some redraw issues when the display options are modified procedurally. Therefore, it is recommended that the command REDRAW WINDOW be executed after the display option is modified with the command **PV SET AREA PROPERTY**.

4D Write

There are nine tool features in a 4D Write area. These features are set to appear by default. The features include: menu bar, standard toolbar, format tool bar, style toolbar, border toolbar, ruler, status bar, vertical scroll bar and horizontal scroll bar.



The user can manually set the display option for each feature from the View menu.



The checkmark in the View menu and Toolbars submenu indicates that the element is currently displayed in the 4D Write area.

To procedurally control the display option for these elements, you need to execute the command ***WR SET DOC PROPERTY***.

Display the features:

```
WR SET DOC PROPERTY (Area;wr view menubar;1) `Menu bar
WR SET DOC PROPERTY (Area;wr view standard palette;1) `Standard toolbar
WR SET DOC PROPERTY (Area;wr view format palette;1) `Format toolbar
WR SET DOC PROPERTY (Area;wr view style palette;1) `Style toolbar
WR SET DOC PROPERTY (Area;wr view borders palette;1) `Borders toolbar
WR SET DOC PROPERTY (Area;wr view Hscrollbar;1) `Horizontal scroll bar
WR SET DOC PROPERTY (Area;wr view Vscrollbar;1) `Vertical scroll bar
WR SET DOC PROPERTY (Area;wr view statusbar;1) `Status bar
WR SET DOC PROPERTY (Area;wr view rulers;1) `Rulers
```

Hide the features:

```
WR SET DOC PROPERTY (Area;wr view menubar;0) `Menu bar
WR SET DOC PROPERTY (Area;wr view standard palette;0) `Standard toolbar
WR SET DOC PROPERTY (Area;wr view format palette;0) `Format toolbar
WR SET DOC PROPERTY (Area;wr view style palette;0) `Style toolbar
WR SET DOC PROPERTY (Area;wr view borders palette;0) `Borders toolbar
WR SET DOC PROPERTY (Area;wr view Hscrollbar;0) `Horizontal scroll bar
WR SET DOC PROPERTY (Area;wr view Vscrollbar;0) `Vertical scroll bar
WR SET DOC PROPERTY (Area;wr view statusbar;0) `Status bar
WR SET DOC PROPERTY (Area;wr view rulers;0) `Rulers
```

Conclusion

Now that you know how the interface elements can be manually and procedurally modified, it is up to you to decide which display option of the plug-in would work best in your solution.