



# MultiBase Cosmos

Notes to version 7.6.1

**BASE100**

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## Index

<b>1. IMPLEMENTATIONS .....</b>	<b>3</b>
1.1 RUNTIME.....	3
1.1.1 <i>Visual appearance</i> .....	3
1.1.2 <i>TreeWalk method</i> .....	5
1.2 VISUAL EDITOR .....	5
1.2.1 <i>Project editor</i> .....	5
1.2.2 <i>Source code editor</i> .....	5
<b>2. NEW METHODS.....</b>	<b>6</b>
2.1 MODULE CLASS.....	6
2.1.1 <i>LoadControlsScrollSkin</i> .....	6
2.2 SIMPLECONTROL CLASS .....	6
2.2.1 <i>SetControlScrollSkin</i> .....	6
2.2.2 <i>SetGridCurrentRowBackColor</i> .....	6
<b>3. ENVIRONMENT VARIABLES .....</b>	<b>7</b>
<b>4. CORRECTIONS .....</b>	<b>8</b>
4.1 RUNTIME.....	8
4.2 VISUAL EDITOR .....	8
4.3 CTSQL .....	8

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## 1. Implementations

### 1.1 Runtime

#### 1.1.1 Visual appearance

##### Skin

The BOX, DROP LIST, DROP EDIT and GRID controls will be able to display a custom skin on the vertical and horizontal scroll bars.

For this, it will be necessary to define a file with the images that will be used to change the appearance of the elements of the scroll bars.

The graphic elements that can be indicated in this file are:

- The fixed left and right horizontal scroll buttons in “normal”, “hot” and “active” status.
- The fixed up and down vertical scroll buttons in “normal”, “hot” and “active” status.
- The “thumb”, or movable horizontal scroll button, in “normal”, “hot” and “active” status.
- The “thumb”, or movable vertical scroll button, in “normal”, “hot” and “active” status.
- Background of the vertical and horizontal bars.
- Fixed box in the lower right corner between the scrollbars.

Definition of the variables corresponding to each element and state of the scroll bar:

Name	Description
HORIZONTAL_LEFT_ARROW_NORMAL	Image of horizontal scroll button to the left. Image size 17x17 pixels.
HORIZONTAL_RIGHT_ARROW_NORMAL	Image of horizontal scroll button to the right. Image size 17x17 pixels.
HORIZONTAL_THUMB_LEFT_NORMAL	Image of the left part of the horizontal thumb. Image size 9x17 pixels.
HORIZONTAL_THUMB_MIDDLE_NORMAL	Image of the central part of the horizontal thumb. Image size 1x17 pixels.
HORIZONTAL_THUMB_RIGHT_NORMAL	Image of the right part of the horizontal thumb. Image size 9x17 pixels.
HORIZONTAL_BACKGROUND_NORMAL	Background image of the horizontal scroll bar. Image size 1x17 pixels.
HORIZONTAL_LEFT_ARROW_HOT	Image of the horizontal scroll button to the left when the mouse pointer is over the button. Image size 17x17pixels.
HORIZONTAL_RIGHT_ARROW_HOT	Image of the horizontal scroll button to the right when the mouse pointer is over the button. Image size 17x17pixels.
HORIZONTAL_THUMB_LEFT_HOT	Image of the left part of the horizontal thumb when the mouse pointer is over the button. Image size 9x17 pixels.
HORIZONTAL_THUMB_MIDDLE_HOT	Image of the central part of the horizontal thumb when the mouse pointer is over the button. Image size 1x17 pixels.
HORIZONTAL_THUMB_RIGHT_HOT	Image of the right part of the horizontal thumb when the mouse pointer is over the button. Image size 9x17 pixels.
HORIZONTAL_LEFT_ARROW_ACTIVE	Image of the horizontal scroll button to the left when the mouse pointer is pressed on the button. Image size 17x17 pixels.
HORIZONTAL_RIGHT_ARROW_ACTIVE	Image of the horizontal scroll button to the right when the mouse pointer is pressed on the button. Image size 17x17 pixels.
HORIZONTAL_THUMB_LEFT_ACTIVE	Image of the left part of the horizontal thumb when the mouse pointer is pressed on the button. Image size 9x17 pixels.

Name	Description
HORIZONTAL_THUMB_MIDDLE_ACTIVE	Image of the central part of the horizontal thumb when the mouse pointer is pressed on the button. Image size 1x17 pixels.
HORIZONTAL_THUMB_RIGHT_ACTIVE	Image of the right part of the horizontal thumb when the mouse pointer is pressed on the button. Image size 9x17 pixels.
VERTICAL_UP_ARROW_NORMAL	Image of vertical scroll up button. Image size 17x17 pixels.
VERTICAL_DOWN_ARROW_NORMAL	Image of vertical scroll button down. Image size 17x17 pixels.
VERTICAL_THUMB_UP_NORMAL	Image of the upper part of the vertical thumb. Image size 17x9 pixels.
VERTICAL_THUMB_MIDDLE_NORMAL	Image of the central part of the vertical thumb. Image size 17x1 pixels.
VERTICAL_THUMB_DOWN_NORMAL	Image of the bottom of the vertical thumb. Image size 17x9 pixels.
VERTICAL_BACKGROUND_NORMAL	Background image of the vertical scroll bar. Image size 17x1 pixels.
VERTICAL_UP_ARROW_HOT	Image of the vertical scroll button up when the mouse pointer is over the button. Image size 17x17 pixels.
VERTICAL_DOWN_ARROW_HOT	Image of the vertical scroll button down when the mouse pointer is over the button. Image size 17x17 pixels.
VERTICAL_THUMB_UP_HOT	Image of the upper part of the vertical thumb when the mouse pointer is over the button. Image size 17x9 pixels.
VERTICAL_THUMB_MIDDLE_HOT	Image of the central part of the vertical thumb when the mouse pointer is over the button. Image size 17x1 pixels.
VERTICAL_THUMB_DOWN_HOT	Image of the bottom of the vertical thumb when the mouse pointer is over the button. Image size 17x9 pixels.
VERTICAL_UP_ARROW_ACTIVE	Image of the vertical scroll button up when the mouse pointer is pressed on the button. Image size 17x17 pixels.
VERTICAL_DOWN_ARROW_ACTIVE	Image of the vertical scroll button down when the mouse pointer is over the button. Image size 17x17 pixels.
VERTICAL_THUMB_UP_ACTIVE	Image of the upper part of the vertical thumb when the mouse pointer is pressed on the button. Image size 17x9 pixels.
VERTICAL_THUMB_MIDDLE_ACTIVE	Image of the central part of the vertical thumb when the mouse pointer is pressed on the button. Image size 17x1 pixels.
VERTICAL_THUMB_DOWN_ACTIVE	Image of the lower part of the vertical thumb when the mouse pointer is pressed on the button. Image size 17x9 pixels.
SCROLLBARS_SEPARATOR	Image in the lower right corner. Image size 17x17 pixels.

Assigning a skin to the scroll bar of controls can be done with the `SetControlScrollSkin` and `LoadControlsScrollSkin` methods, or using the `COSMOSCONTROLSCROLLSKIN` environment variable.

The `SetControlScrollSkin` method of the `SimpleControl` class will assign a skin to a specific control.

The `LoadControlsScrollSkin` method of the `Module` class will assign the same skin to all controls that support skin.

The `COSMOSCONTROLSCROLLSKIN` environment variable will assign the same skin to all the controls that support skin without having to execute the `LoadControlsScrollSkin` method, that is, the assignment is made from the application's configuration file.

### **CustomControls section**

The PANEL type control has been added to the configuration of the "CustomControls section" section. Supports BORDERS, CORNERRADIUS and BORDERSTYLE.

### **Grid control**

The SetGridCurrentRowBackColor method has been implemented. This method allows you to change the background color of the current row in a GRID control.

#### **1.1.2 TreeWalk method**

The size of the second parameter of this method has been increased, which is now 255 characters.

## **1.2 Visual Editor**

### **1.2.1 Project editor**

When you double-click on the text search window within the project, in addition to opening the module, you are positioned on the module within the project tree.

### **1.2.2 Source code editor**

Ability to choose the color of the line number in the code editor.

Possibility of saving the styles defined in the customization of the colors.

## 2. New methods

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### 2.1 Module class

#### 2.1.1 LoadControlsScrollSkin

This method assigns to all the BOX, GRID, DROP LIST or DROP EDIT type controls of the application a skin from a file indicated as a parameter and that contains the description of the graphic elements that are used to change the appearance of the scrollbar.

The call to this method must be made before the window containing the controls is displayed. In case the COSMOSCONTROLSCROLLSKIN environment variable has been defined and this method is used to change the skin, the call to this method can be made after the window is displayed.

Syntax:

```
LoadControlsScrollSkin(skinFile as Char)
```

Parameters:

skinFile	Skin definition file path.
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### 2.2 SimpleControl class

#### 2.2.1 SetControlScrollSkin

This method assigns to a BOX, GRID, DROP LIST and DROP EDIT control a skin from a file indicated as a parameter and that contains the description of the graphic elements that are used to change the appearance of the scroll bar.

Syntax:

```
SetControlScrollSkin(skinFile as Char)
```

Parameters:

skinFile	Skin definition file path.
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#### 2.2.2 SetGridCurrentRowBackColor

This method allows you to modify the background color of the current row of the Grid control

Syntax:

```
SetGridCurrentRowBackColor (backColor as Integer)
```

Parameters:

backColor	The background color of the row. The color must be indicated in RGB format.
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### 3. Environment variables

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#### **COSMOSCONTROLSCROLLSKIN**

This environment variable indicates to runtime the file that contains the description of the graphic elements that will be used to change the appearance of the scroll bar of all the BOX, GRID, DROP LIST and DROP EDIT controls of the application.

It must be defined in the Environment section of the project INI file or in COSMOS.INI. Its value is the path, absolute or relative to the project, of the skin definition file.

## 4. Corrections

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### 4.1 Runtime

- With the *CustomColors* and *CustomControls* sections active there were Radio Button controls where the labels were painted twice. The problem occurs when the LABELALIGNMENT attribute has been defined in *CustomControls* as center or right, and the control was disabled.  
Cosmos style 7. If a button was defined with the *no label* attribute and without *highlightborder*, the colors indicated in the Color\_Border and Color\_Back\_Button\_Disabled attributes of the *CustomColors* section were not respected.
- COSHTTDPDLL. If two consecutive calls were made to a function of this dll in the same Cosmos program, a memory error occurred. This only happens with the libraries of version 7.6 of Cosmos.
- UTF8ToAnsi method. UTF-8 to ANSI Windows-1252 conversion of UTF-8 character 0xe28099 (right single quote) failed.
- The AnsiToUTF8 method did not work correctly with some characters, for example with the 0x94 (double quotes).

### 4.2 Visual editor

- If the background color was changed in the code editor, maximizing the screen and causing a scrolling to the bottom with the cursor, a repaint error occurred (blank screens were seen). As you progressed, there came a time when the cursor was not visible, but the line counter showed that it was increasing. When the scroll button was released, the cursor was positioned on the line without problems.

### 4.3 CTSQL

- CTSQL did not return the correct values if the SQL optimized to access by index when a SUBSELECT statement was executed more than once within an SQL statement (SELECT, UPDATE) with condition by ranges (OR, IN).