

BBC Custom Control Library 9

BNCS Software

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Overview

Custom control library 9 provides new custom controls for use in ApplCore Panels (or applications written in other languages). It provides standard and 95-style buttons with small proportional font, a combo-bitmap/text button, a LED character display box for emulating control panel displays and a dual LED button. The Custom resource names are as follows:

- **BBC Prop Font Button** Standard BBC button but with user specified font and pitch
- **BBC Combo BMP Button** BBC Button with Bitmap and Associated Text
- **BBC LED Display** Recessed 'W95 style' display using LED Matrix Font*
- **BBC Dual LED Button** Press Switch with two LEDs in top
- **BBC Shallow Button** W95 Style BBC button with user specified font and pitch
- **BBC Font Display Button** Recessed/raised/neither display with user specified font & pitch
- **BBC Chunky Button** Standard button with chunky border and user specified font & pitch
- **BBC Repeat Button** Standard button with small font pitch and auto repeat facility

*NB Requires Windows TrueType font 'DotMatrix' (dotmatrix.ttf) available from ftp site to work correctly - Windows chooses another font if it can't find 'DotMatrix'

All these buttons respond to multi line text and colour codes as do other BBC Buttons.

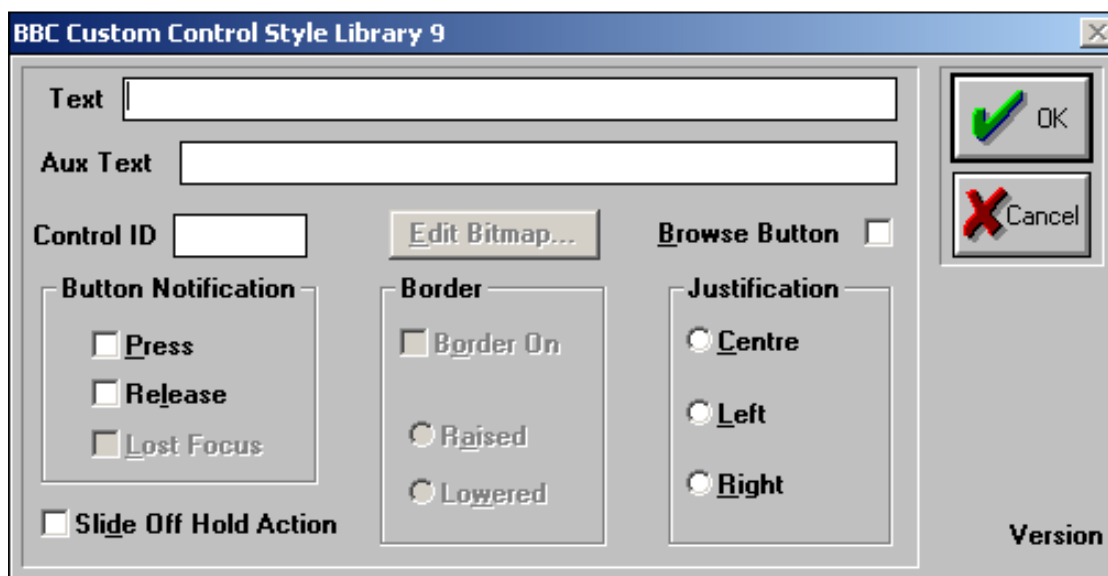
The controls are automatically available at runtime from Applcore panels, and to any 3rd party standalone application which LoadLibrary()'s this DLL or its parent "BBC_CC.DLL".

They have been tested with RW v4.50 but not Microsoft Dialog Editor /WW Resources etc. They have been specifically designed for use in Resource Workshop and are Borland CC compliant.



The Toolbar shows the eight new controls after the BBC original ones. Drag and drop them onto the dialog as usual. They are also available from the custom control selection tool [key symbol] in the usual way.

Button Styles



A new approach to Button Content has been adopted. Each button can have a normal text field (as displayed in the button top), an auxiliary text field (used for various purposes), and flags to indicate when the button should signal to the panel application that the user has pressed or released it. Total button text length is limited to 60 characters.

The default settings are that the normal "Text" field contains 'Label', the "Aux Text" field contains 'AuxLabel' and the button notification flags are set so the button activates on release only.

Wherever the Aux Text field is used for special purposes, the label will change to indicate the purpose for a particular style. The 'Edit Bitmap' button is only available when editing BBC Combo BMP buttons.

If either flag is set (but not both) the panel application is provided with the control ID number. However, if both flags are set, then the PRESS indicates the control ID, and the RELEASE indicates (ID+1000) to the panel.

As of version 1.23.04 all button styles except 'BBC Repeat Button' can be "Browse" style similar to the browse button in the first custom control library. If the browse flag is set, the button notification is forced to 'press' only, preserving the correct functionality of browse buttons.

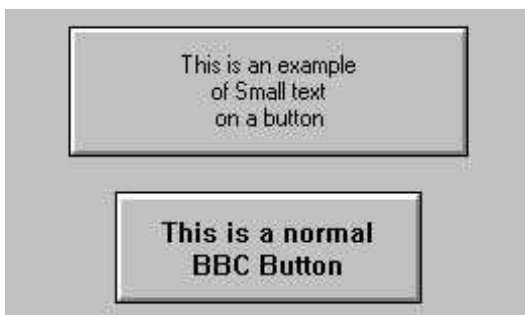
As of version 1.24.03 all button styles can have extra button notification based upon the control losing focus/mouse capture. This occurs when the mouse is moved off the button without releasing the mouse button. Normally no signal is sent to ApplCore, but if this flag is checked, a 'button up/release' signal is sent. The command executed depends on whether both the press and release flags are set, or just the release flag. See above for details.

NB 'Lost Focus' notification is only available with the Release Button notification. It is disabled until 'Release' is checked.

The Aux text field can be accessed for writing via the text block switch in the usual way. It is block 1, whereas the normal text field is block 0.

Style Descriptions

BBC Prop Font Button



The Normal text field contains the displayed text The Aux text field contains the required font and pitch The Flags work as described above

BBC Combo BMP Button



The Normal text field contains the displayed text. If this is left blank, the button size can be adjusted to exactly fit the bitmap, and it will behave like the normal BBC Bitmap Button.

The Aux text field contains the Bitmap resource name. which should be in the resource file or can be a .BMP in the local directory. If it is not found, a box with the resource name is displayed instead of the bitmap.

At design time the edit dialog allows selection of the bitmap position. It can be one of: TOP (shown above), LEFT, RIGHT, BOTTOM. In each case the associated text is drawn in a rectangular area which does not overlap the area used by the bitmap. Bitmaps are displayed centrally w.r.t. their position parameter.

The Flags work as described above

BBC LED Display



The Normal text field contains the displayed text

The Aux text field contains the required point size. If this is not a valid number, a default point size is chosen. The font size is chosen at design time to match the anticipated text contents with the display size.

The Flags work as described above. If no button action is required, the flags can be unchecked.

BBC Dual LED Button



The Normal text field contains the button label

The Aux text field is used to determine the font size. If it contains exactly 'L' or 'I' then the font is the Normal BBC button font, else it is the new proportional small font.

The flags work as described above

The colour attributes are slightly non-standard, ie the left hand LED colour attribute is the normal LED colour control, but the right hand one is controlled by the LABELTEXTCOLOUR parameter. Further, the background colour of the top part of the button which surrounds the LEDs is controlled by the LABELCOLOUR parameter.

BBC Shallow Button



This control is similar to Windows 95 buttons. The Normal text field contains the displayed text The Aux text field contains the required font and pitch The Flags work as described above

BBC Font Display



The Normal text field contains the displayed text

The Aux text field contains the required font and pitch. The example is the Liquid Crystal Display font. Any font and pitch can be chosen using the text "FontName[,Pitch]" If pitch isn't specified, 14 point is used.

The Flags work as described above. If no button action is required (display only), both flags can be unchecked. The border can be turned off to provide freeform text in any position on a dialog.

BBC Chunky Button



The Normal text field contains the displayed text. The Aux text field contains the required font and pitch The flags work as described above. This control is particularly suitable for TAKE buttons. The BUTTONCOLOUR parameter controls the button surface colour and LEDCOLOUR parameter controls the border colour.

BBC Repeat Button

The Normal text field contains the displayed text.

The Aux text field contains the button repeat rate in milliseconds. If it is not a valid number, a default rate is chosen. The repeat function has an initial delay, followed by auto repeat at the specified rate. It only works properly if the 'notification on button PRESS' is checked. An auto repeat button which works only when released makes no sense!

The flags work as described above.

The repeat rate can be changed by writing to the aux text field.

Note: On button press the Text is drawn shifted two units in position (to the right and down). When repeat action begins the text is redrawn at normal 0,0 position, i.e. animated.

Slide Off Hold Action function and Left Mouse Button Operational Characteristics

If “Slide Off Hold Action” is NOT checked (default) -- then sliding off will cause the button to release rather than maintain the pressed state (shows release and executes RELEASE).

If “Slide Off Hold Action” is checked:

The “Slide Off Hold Action” check box in the button design dialog controls the action of the button when the mouse/cursor is moved off (slid off) of the button face while the left mouse button is pressed.

Moving the cursor off of a button while left mouse button is selected will cause the button to remain in the PRESSED state.

Moving the cursor once again onto the PRESSED state button followed by a left button press will NOT generate a PRESSED notification. Releasing the left mouse button will generate notification (if “Release” is enabled).

Moving the cursor once again onto the PRESSED state button while the left button is press will NOT generate a PRESSED notification. Releasing the left mouse button will generate notification (if “Release” is enabled).

As of versions BBC_CC05 v1.25.01 / BNCS_CC09 v3.26.02 all button styles have support for “Slide Off Hold Action” action – that is by default cc09 releases the button pressed state when the mouse/cursor is moved off is slid off of the button face.

Auto Repeat is suspended when the cursor is moved off of a pressed button.

Installation

This DLL should be installed in Resource Workshop using the File...Install Control Library... menu item.

Thereafter the resource names mentioned above will be available as custom controls from the toolbar in the Dialog editor.

Revision History

- Document version: 1.0, Dated: 24-February-1999 – TA – BBC Resources, 1999
- Document version: 1.1, Dated: 09-March-2010 – CVS – Checked into CVS.
- Document version: 1.21, Dated: 26-May-2011 – SPJ
- CC09 library version 1.25.00 of bbc_cc09, dated: 31-May-2011 & bncs_cc09, 3.26.00, dated: 31-May-2011. Added slide off control to Button Style control to each button style.
- CC09 version: 3.26.1, dated: 26-June-2011 Correction of certain operational characteristics & bugs.
- CC09 version: 3.26.2, dated: 30-June-2011 Changes default sense of the slide off control. Renamed to “Slide Off Hold Action”.
- CC09 version: 3.26.5, dated: 20-July-2011 “Repeat Button” (Style 8) rendering issue.
- CC09 version: 3.26.6,7, test releases, corrections in press behaviour.
- CC09 version: 3.26.8, dated: 04-August-2011 release. Graphics corrections.
- Added note: total button text limit is 60 & copyright update. 06-Dec-2012
- CC09 version: 3.27.0, dated: 16-July-2013. Graphics corrections for Windows 7.
- BBC_CC09 version: 1.27.00, dated: 30-Sept-2013 bitmaps not seen in Workshop.
- BNCS_CC09 version: 3.27.02, dated: 25-Feb-2015 Added 4.5 env. Support. Bug 2637
- BNCS_CC09 version: 3.27.03, dated: 13-Aug-2015 4.5 environment full Win32 path length. Bugs 2637