Overview

In addition to the powerful new controls supported by ViewIt FCMD-based control drivers, ViewIt also supports the addition of older CDEF-based controls to ViewIt windows.   CDEF-based controls are indicated by BaseID = CDEF ID and VersID = 0.

Standard CDEF 0

Apple provides 2 standard CDEFs with IDs 0 and 1.   The first of these supports the standard button, check box, and radio button controls, where the VarCode is used to define the control type: 0 = button, 1 = check box, and 2 = radio button.   If 8 is added to VarCode, then the control is drawn using the window's current font settings.   ViewIt uses this feature to draw these standard controls in the proper font, size, and style, so it is important to use VarCode values of 8, 9, and 10 with controls based on CDEF 0.

Some features supported by FCMD-based controls are not supported by CDEF-based controls since the CDEF is unaware of our expanded control record and messages.   Such features include resource linking, frame and body drawing, indentation of content area, hand scrolling, and support for editable controls.

Nearly all other features, however, are supported.   These include font, size, style, and color selection, addition of a ring or shadow, command key, default button, check box, and radio button behavior, data linking, and use with ViewIt commands.

COLOR NOTE: The   CDEF 0-based controls have the "feature" of reusing the last defined part color for all other parts that are not assigned colors.   Thus setting just the "Frame" in ViewIt's Style menu to red will cause the entire control to be drawn in red unless you take the trouble to also define other part colors.   This feature does not occur if using BaseCt-based controls that mimic the CDEF 0 controls.

Standard CDEF 1

The second standard CDEF (ID = 1) supports scroll bars (= dials).   The features supported by ViewIt are similar to those listed above for CDEF 0 controls.   In addition, if the dial is set to type "Dial Control" in the Control dialog, then ViewIt provides default scroll bar behavior when the bar is clicked:
 - The thumb can be dragged to reset the bar value.
 - The arrows can be clicked to reset the bar value.
 - The "page up" and "page down" regions of the bar can be clicked to move 10% of the bar value range.
 - After resetting the bar value, ViewIt calls GetVal to update any data variable linked to the control, and SetVal for all controls in the same view linked to the same variable (i.e., changing the bar value causes other controls linked to the same data to be updated).

If the dial is not type "Dial Control", then it should be set to type "Static" and the "Returns On Hit" option set so that your program can respond to clicks in it.

Other CDEFs

CDEFs that support button-, check box-, or radio button-type controls can be used in ViewIt windows in the same way that the standard CDEF 0 controls are used.   CDEFs that support dial-type controls can be used in the same way as standard CDEF 1 scroll bars are used. Simply set the BaseID to the custom CDEF ID, VersID to 0, & the VarCode to values supported by the CDEF.

Data Linking

All CDEF-based controls base data linking on the control's standard Value: 0 = unchecked and 1 = checked for check boxes and radio buttons, and 32767 = max value and -32767 = min value for dials.