Exercise 6 – Color Rules and Visibility

Execute edm, this time as shown below:

edm -m "db=student#"

• Open /home/student#/examples/exercize6.edl

This file contains several rectangles for which color and visibility rules will be demonstrated.

Color Rules

• Locate the top-most rectangle under the *Color Rules* heading.
  • Note the five message buttons above the rectangle. These change the value of the pv student#:a1 to one of the following: 0, 1, 2, 3, 99.
  • Select and then click on the rectangle to call up the property dialog box
  • Using the color name menu, set *Line Color* and *Fill Color* to the color name *Rule1*
  • Set *Color PV* to $(db):a1 (use PV List dialog, *File*=pv.list, *Prefix*=$(db):)
  • Click OK to save your modifications and close the dialog box
  • Deselect the rectangle
  • Execute the display by middle-clicking on the display background an selecting *Execute* from the menu
  • Using an editor of your choice, open the file colors.list in /home/edmClass
    • Find the rule named *Rule1*
    • Examine the conditions and color mappings
    • Notice that the default condition maps to the *invisible* color
  • Now return your attention to the edm display
    • Change the value of student#:a1 using the message buttons and examine how the rectangle colors change.
    • Change the value of student#:a1 to 99 - the rectangle becomes invisible

If you like, change the condition/color mapping of the rule named *Rule1* and experiment with the edm display.

Return to edit mode by middle-clicking on the display background and selecting *Edit* from the menu

Widget Visibility

• Locate the rectangle under the *Widget Visibility* heading.
  • Note the two message buttons above the rectangle. These change the value of the pv student#:a2 to 0 or 1.
  • Select and then click on the rectangle to call up the property dialog box
  • Using the color name menu, set *Line Color* and *Fill Color* to colors of your chocie, however, do not use color rules
  • Set *Visibility PV* to $(db):a2 (use PV List dialog, *File*=pv.list, *Prefix*=$(db):)
  • Configure visibility rule such that the widget is visible if PV value is >= 1 and <

100
- Click OK to save your modifications and close the dialog box
- Deselect the rectangle
- Execute the display by middle-clicking on the display background and selecting *Execute* from the menu
- Change the value of student#:a2 using the message buttons and examine the effect on the visibility of the rectangle

If you like, change the visibility conditions and experiment with the edm display.

Return to edit mode by middle-clicking on the display background and selecting *Edit* from the menu

Group Visibility

Complete this portion of the exercise only if edm version 1-10-0 or above is available.

- Locate the three rectangles under the *Group Visibility* heading.
  - Note the two message buttons above the rectangle. These change the value of the pv student#:a3 to 0 or 1.
  - Select all rectangles, middle-click on the display background and select Group from the menu; the group is now selected
  - Click on the group to call up the group property dialog box
  - Set *Visibility PV* to $(db):a3 (use PV List dialog, *File*=pv.list, *Prefix*=$(db):)
  - Configure visibility rule such that the group is visible if PV value is >= 1 and < 100
  - Click OK to save your modifications; another dialog box corresponding to one the grouped objects opens – click *Cancel* to dispose
  - Deselect the rectangle
  - Execute the display by middle-clicking on the display background and selecting *Execute* from the menu
  - Change the value of student#:a3 using the message buttons and examine the effect on the visibility of the group
  - Note that if you ungroup the objects, the group visibility information is lost

If you like, change the visibility conditions and experiment with the edm display.

Close Display File

- Close the display file and save changes to complete this exercise.