

Exercise 5 - Alignment Techniques

Execute edm

- Create a new window

Grid/Snap to Grid

- Middle-button-click on the new window background and select display properties to bring up the window property box.
 - Set *Show Grid* to Yes
 - Set *Snap to Grid* to Yes
 - Set *Grid Spacing* to 15

Notice that the keyboard shortcut keys, (*G/g*), next to the label *Show Grid*. These keys may be pressed to control the grid display without calling up the window properties. Pressing *G* turns on the grid; pressing *g* turns it off.

Likewise, the keys (*S/s*) turn on/off the *Snap to Grid* option.

- Select *OK* to apply changes and exit the dialog box

With *Snap to Grid* on, object location and size is constrained by the grid for mouse operations.

- Create several rectangles. Move and resize them to observe the effect of *Snap to Grid* being turned on.
- Turn off *Snap to Grid* by pressing *s*
- Turn off the *Grid* display by pressing *g*

Orthogonal move

- Middle-button-click on the new window background and select *Display Properties* to bring up the window property box.
 - Set *Orthogonal Move* to Yes

Orthogonal Move constrains mouse move operations horizontally or vertically with respect to an objects initial location.

Notice that the keyboard shortcut keys, (*M/m*), next to the label *Orthogonal Move*. These keys may be pressed to control this attribute without calling up the window properties. Pressing *M* turns on *Orthogonal Move*; pressing *m* turns it off.

Turn on *Orthogonal Move* by pressing *M*. Move several rectangles to observe the effect of *Orthogonal Move* being turned on.

Orthogonal Move may be combined with *Copy/Paste-in-Place* to create visually aligned arrays of objects.

Orthogonal Line Draw

- Middle-button-click on the new window background and select *Display Properties* to bring up the window property box.
 - Set *Orthogonal Line Draw* to Yes

Orthogonal Line Draw constrains line node positioning operations horizontally or vertically with respect to the previous node location.

Notice that the keyboard shortcut keys, (*L/m*), next to the label *Orthogonal Line Draw*. These keys may be pressed to control this attribute without calling up the window properties. Pressing *L* turns on *Orthogonal Line Draw*; pressing *l* turns it off.

Turn on *Orthogonal Line Draw* by pressing *L*. Create several line-objects to observe the effect of *Orthogonal Line Draw* being turned on.

Align Left/Right/Top/Bottom

With more than one object selected, a middle-button-click on the display window background calls up a menu which includes the *Align* item. Selecting *Align* calls up a sub-menu containing *Left*, *Right*, *Top*, and *Bottom*. Selecting one option aligns the respective edges of all objects. *Align-Right* aligns all objects with the right-most object, *Align-Left* with the left-most object, and so on. The order in which objects are selected has no effect on these operations.

If you like, experiment with the *Align* operations on several rectangles.

Distribute

Unlike the *Align* operation, the behavior of this operation depends on the order in which objects are selected. The first selected object is used as a reference object. All remaining objects are manipulated with respect to the reference object.

With more than one object selected, a middle-button-click on the display window background calls up a menu which includes the *Distribute* item. Selecting *Distribute* calls up a sub-menu containing *On Vert Axis*, *On Horz Axis*, *Midpt on Vert Axis*, and *Midpt on Horz Axis*, and *2-D*. See the on-line help topic *Alignment* for an explanation of each operation.

Note that the *2-D* option is not yet described in the on-line help. Use this option to produce a row/column matrix of center-aligned objects.

If you like, experiment with the *Distribute* operations on several rectangles.

Center

Like the *Distribute* operation, the behavior of this operation depends on the order in which objects are selected. The first selected object is used as a reference object. All remaining objects are manipulated with respect to the reference object.

With more than one object selected, a middle-button-click on the display window background calls up a menu which includes the *Center* item. Selecting *Center* calls up a sub-menu containing *On Vert Axis*, *On Horz Axis*, and *On Both Axes*. See the on-line help topic *Alignment* for an explanation of each operation.

If you like, experiment with the *Center* operations on several rectangles.

Size

Like the *Distribute* operation, the behavior of this operation depends on the order in which objects are selected. The first selected object is used as a reference object. All remaining objects are manipulated with respect to the reference object.

With more than one object selected, a middle-button-click on the display window background calls up a menu which includes the *Size* item. Selecting *Size* calls up a sub-menu containing *Height*, *Width*, and *Width & Height*. See the on-line help topic *Alignment* for an explanation of each operation.

If you like, experiment with the *Size* operations on several rectangles.

Close Display File

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