

The Move Function

Another method to move nodes, lines, and items is to use the **Move function** from the **Edit** menu. You can also press and the M key when the mouse is not touching any geometry. The screen will change as seen in Figure 13-1.

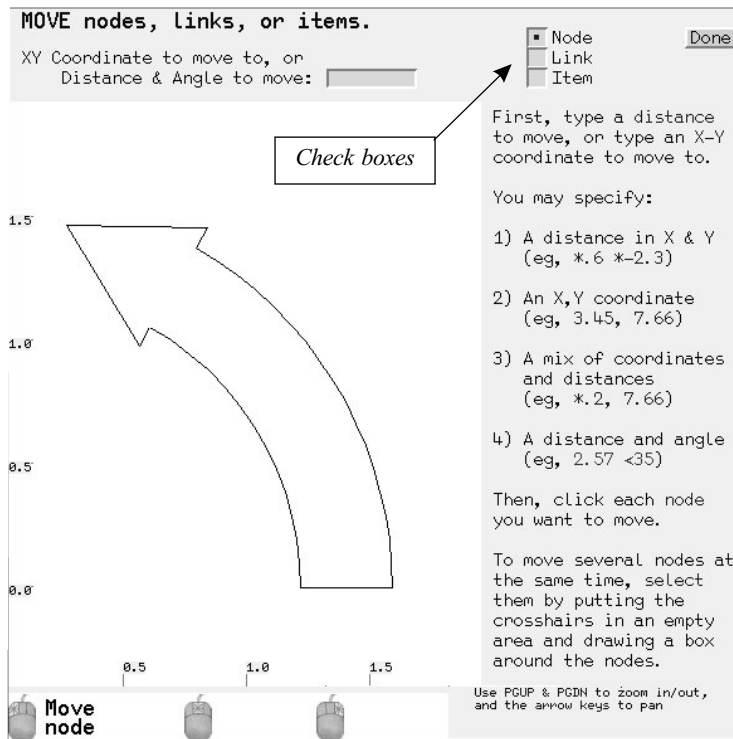


Figure 13-1

There are three “check boxes” at the top of the screen where you can choose between *node*, *link*, and *item*. If you click the *node* box, then only nodes will move, and if you click the *Link* box, then only links will move.

There is one data entry box on the screen. This is where you enter the distance you want the items to move.

The first thing you do with this function is to specify the distance you want to move. The prompt message on the right side of the screen will remind you that you can specify distances, angles, or coordinates, and it shows how to do it.

For example, assume you want to move several nodes a distance of 0.5 inches at an angle of 60°. You start by specifying the distance and angle. As discussed on the first page of Chapter 6, the format to follow is to enter the distance first, then a < or > character, and then the angle. You can type this *without* first clicking on the data entry box. MillWrite knows what you’re doing when you start typing because there is only one data entry field on the screen. Therefore, type **.5<60** and press **Enter**.

After you specify a distance and angle you can click any node to move it by that distance and angle. Figures 13-2 and 13-3 show the before and after of clicking the node at the corner of the arrow head. The node moved .5 inches at 60° from where it was. If you click on another node, it will also move .5 inches at 60° from wherever it is.

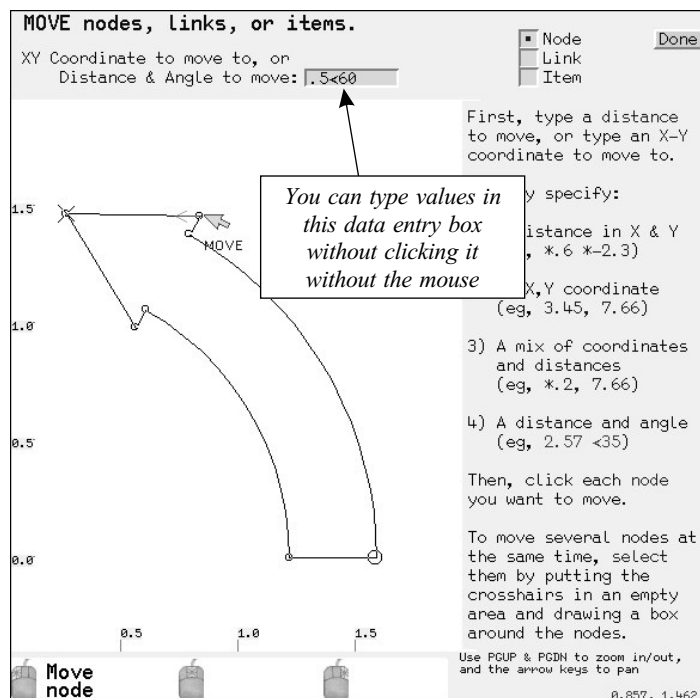


Figure 13-2

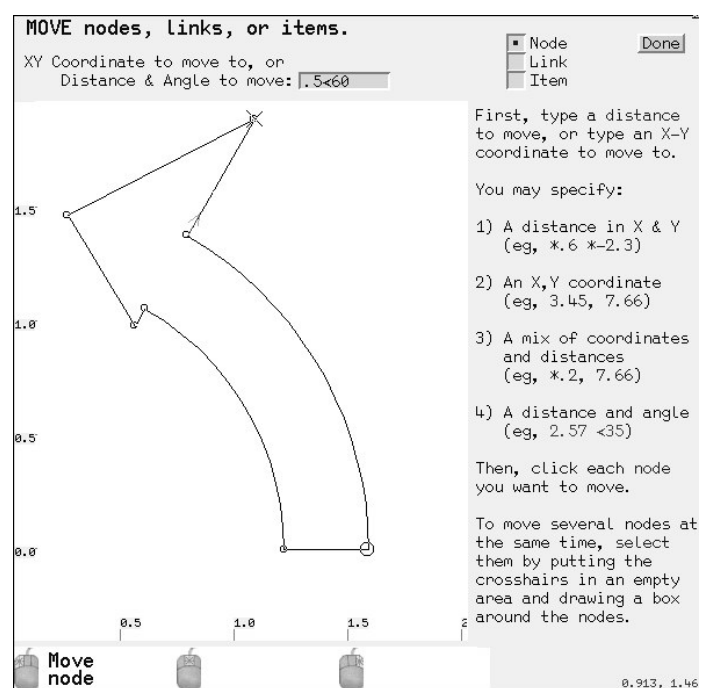


Figure 13-3

If you are moving **only one** node there is no advantage to using this method compared to using the method described at the beginning of this Chapter 6. However when you have to move several nodes by the same distance, this method is much faster.

MOVE A GROUP OF NODES

The **Move** Function allows you to select **several** nodes and then move them as a group. You have the option of **dragging** them to a new location, or moving them by whatever distance and angle you specified in the data entry box.

To select a group of nodes, put the mouse in an area that doesn't have anything in it and click the **left** mouse button. Then draw a window around the nodes you want to select, as seen in Figure 13-4.

As soon as you select some nodes MillWrite will draw the selected nodes in blue and add more options at the top of the screen (Figure 13-5). MillWrite adds the option to **drag** the selected nodes or move them by the distance you specified in the data entry box. MillWrite also added a button to **un-select** all the nodes.

The functions of the mouse buttons has changed also. The left mouse button will let you select more nodes, and the right mouse button will **un-select** them. To un-select nodes, either click the **right** mouse button on the nodes, or put the mouse in an area that doesn't have anything in it, click the **right** mouse button, draw a box around the nodes that you want to un-select, and click the **left** button to when the box is finished.

After you have selected all of the nodes you want to move as a group, click the **left** mouse button on any of the **selected** nodes to let MillWrite know you're ready to move them. Figure 13-6 shows the result. All of the selected nodes moved by 0.5 inches at 60°.

If instead of specifying a distance and angle, you had selected the **Drag** option, then when you clicked on one of the selected nodes, all of the selected nodes would move as you moved the mouse.

USES FOR THE MOVE FUNCTION

Three of the ways you can use this **Move Function** with a group of selected nodes are:

- You can set all of their X coordinates to an **absolute** value, **without** changing their Y coordinates.
- You can set all their X coordinates to an absolute value, and **increment** their Y coordinates by a specific value.
- You can move **all** selected nodes to the same X Y coordinate.

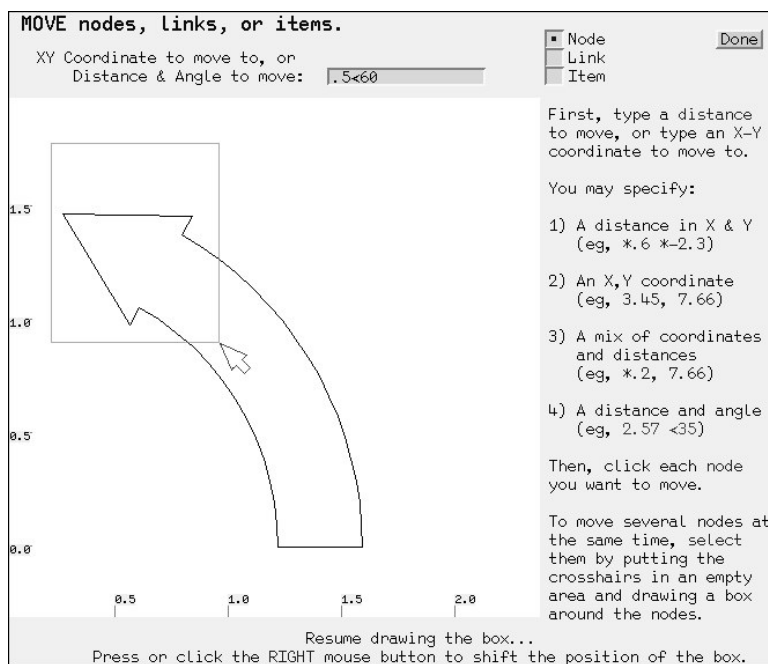


Figure 13-4

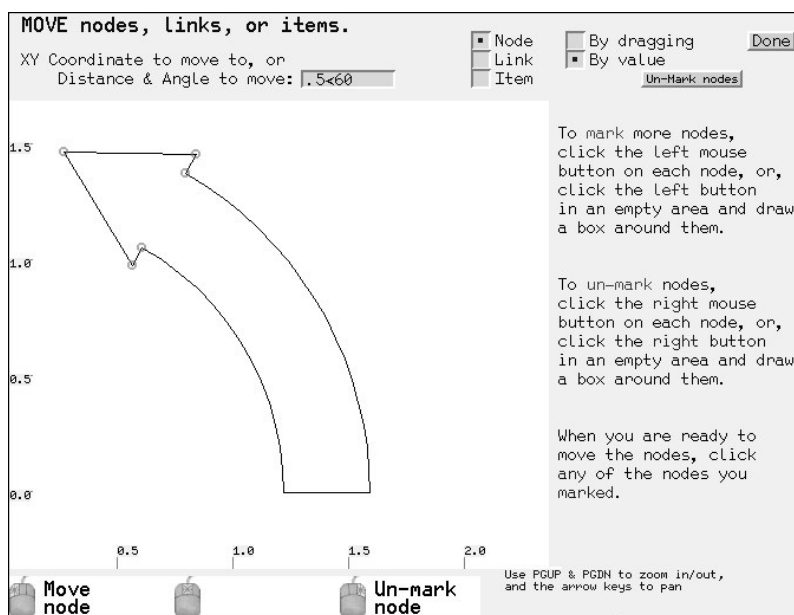


Figure 13-5

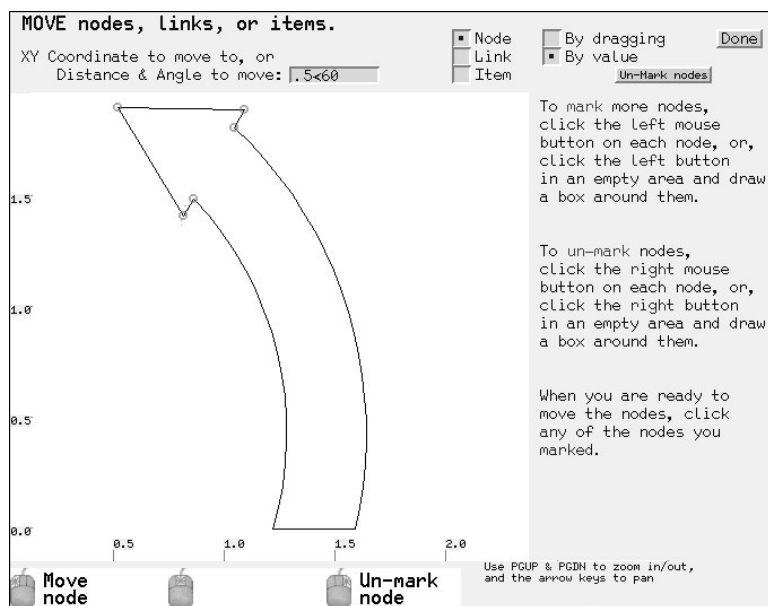


Figure 13-6

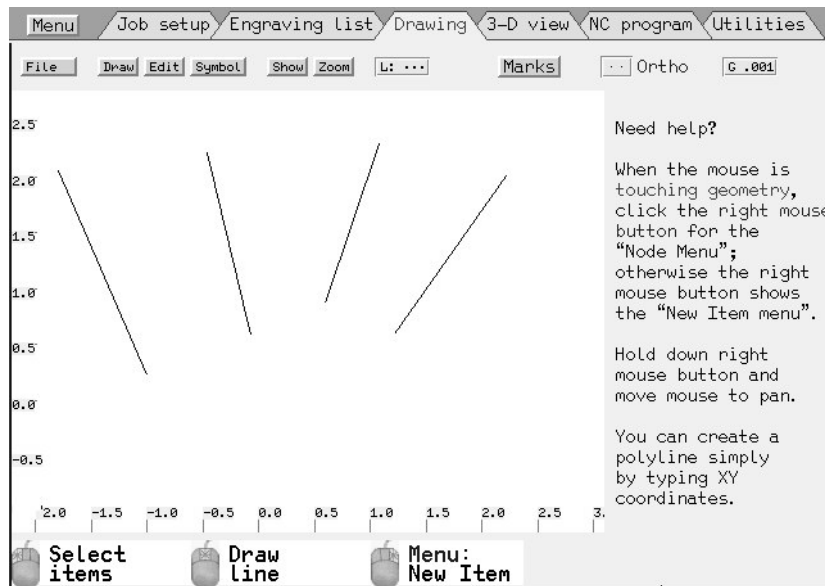


Figure 13-7

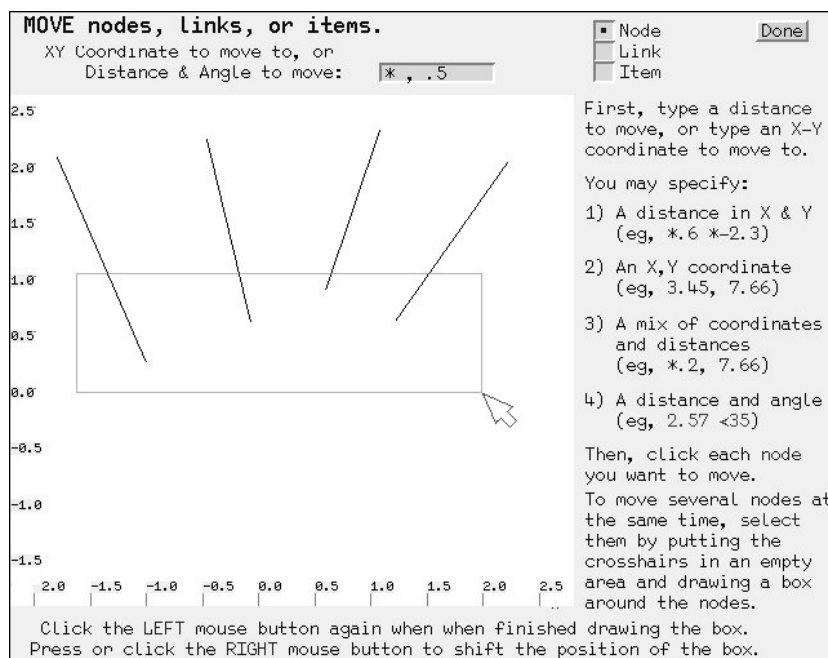


Figure 13-8

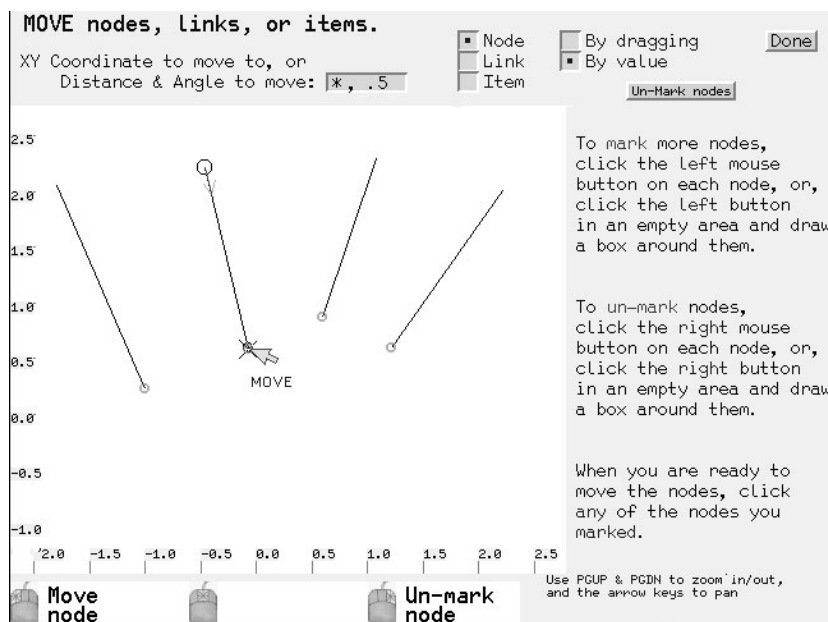


Figure 13-9

In figure 13-7 are four lines. Assume you want to move the lower of the four nodes of each of those lines to a Y coordinate of Y0.5, but without altering their X coordinates.

Start the **Move Function** by pressing the **M** key or selecting it from the menu. Then select the four nodes by drawing a box around them, as seen in figure 13-8.

After you select the nodes, specify the Y coordinate that you want this group of selected nodes to move to. But if you do not want to alter the X coordinate, you must specify the X coordinates move by a **distance of zero**.

To do that, enter an asterisk (which signifies distance), and then either enter a zero, or enter a comma to let MillWrite realize that you are not specifying a distance. In either case, MillWrite will realize that you did not specify a distance, so it knows that you don't want the X coordinates to change.

For example, you could specify this for the X value:

*,

The reason you need the comma after the * is to separate the X from the Y values. A blank space would **not** separate the values in this particular case because you are going to specify an actual Y coordinate, and if you used a space to separate the values, the result would look like this:

*.5

That value could be interpreted as meaning you want to move the X coordinates by a distance of 0.5.

However, if you specify a zero for the X value then you could separate the X from the Y with a blank space, like this:

*0 .5

In that case MillWrite can figure out that there are two values, and MillWrite will realize the first is a distance of 0 and the second is an absolute Y coordinate of 0.5. However, to play it safe, use a comma to separate the values.

After entering *, for the X value, enter the Y coordinate you want the four nodes to move to. In figure 13-9 the coordinate specified was **0.5**.

After the values have been specified for the move, put the mouse on any of those four selected nodes. The mouse icon will change as seen in figure 13-9. The mouse icon will show the word **MOVE** when you have it on one of the selected nodes.

Then click the left button and all four nodes will change their Y coordinate to Y0.5, as seen in figure 13-10. Notice that their X coordinates have *not* changed however.

MOVE NODES TO THE SAME POINT

Figure 13-11 shows the same four lines with the same four nodes selected. The only difference now is that both an X and Y coordinate have been specified. This means that each node will move to the specified X and Y coordinate. Figure 13-12 shows the result after clicking one of those selected nodes.

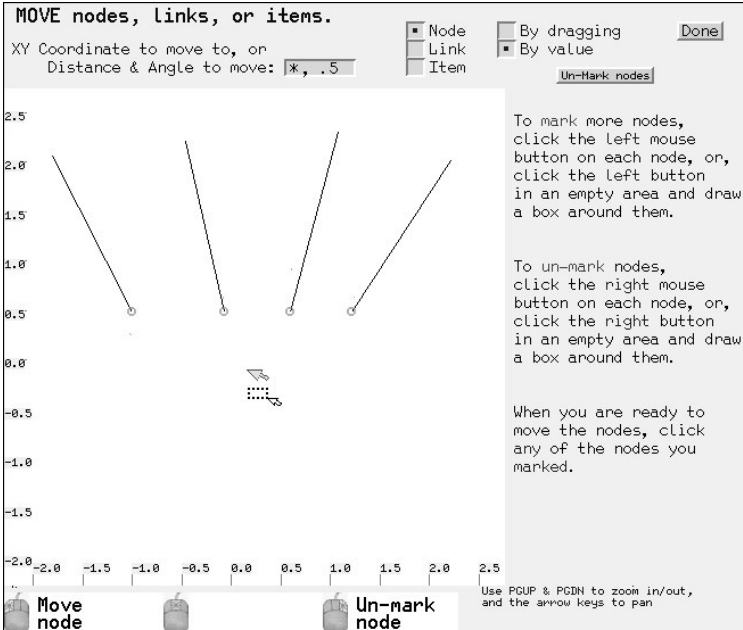


Figure 13-12

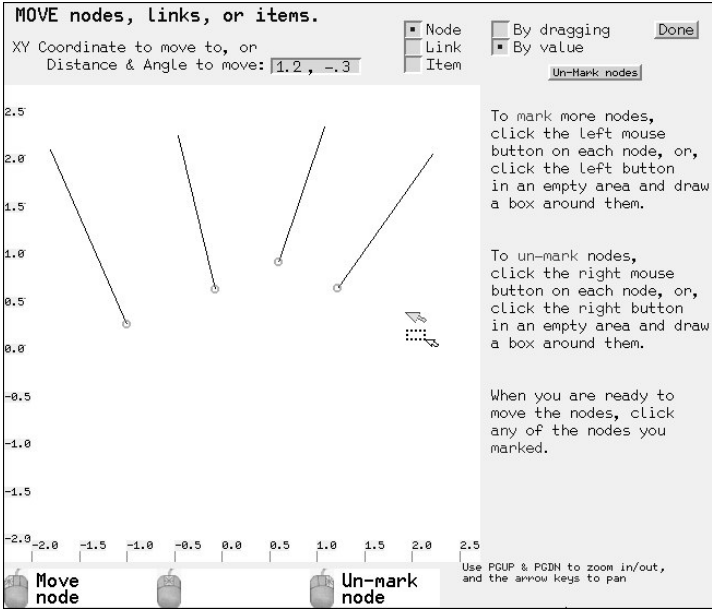


Figure 13-10

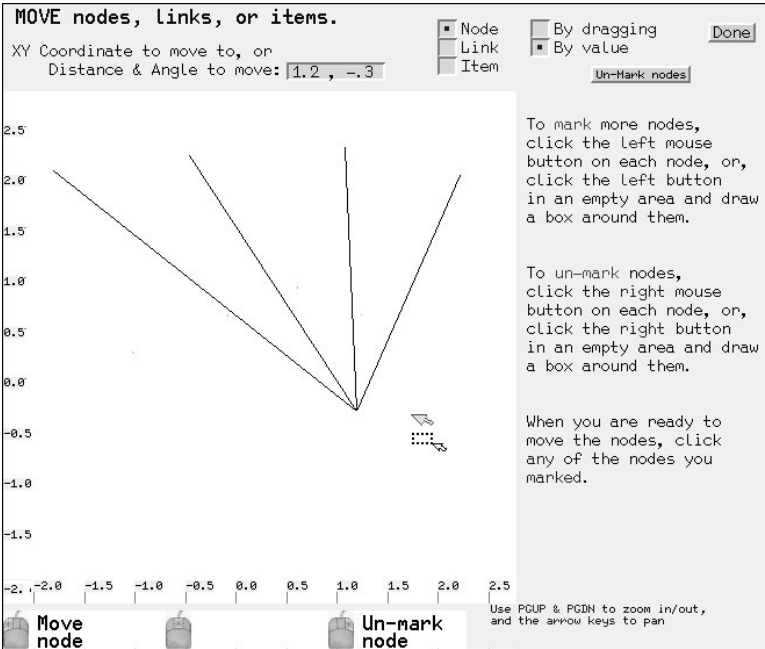


Figure 13-11