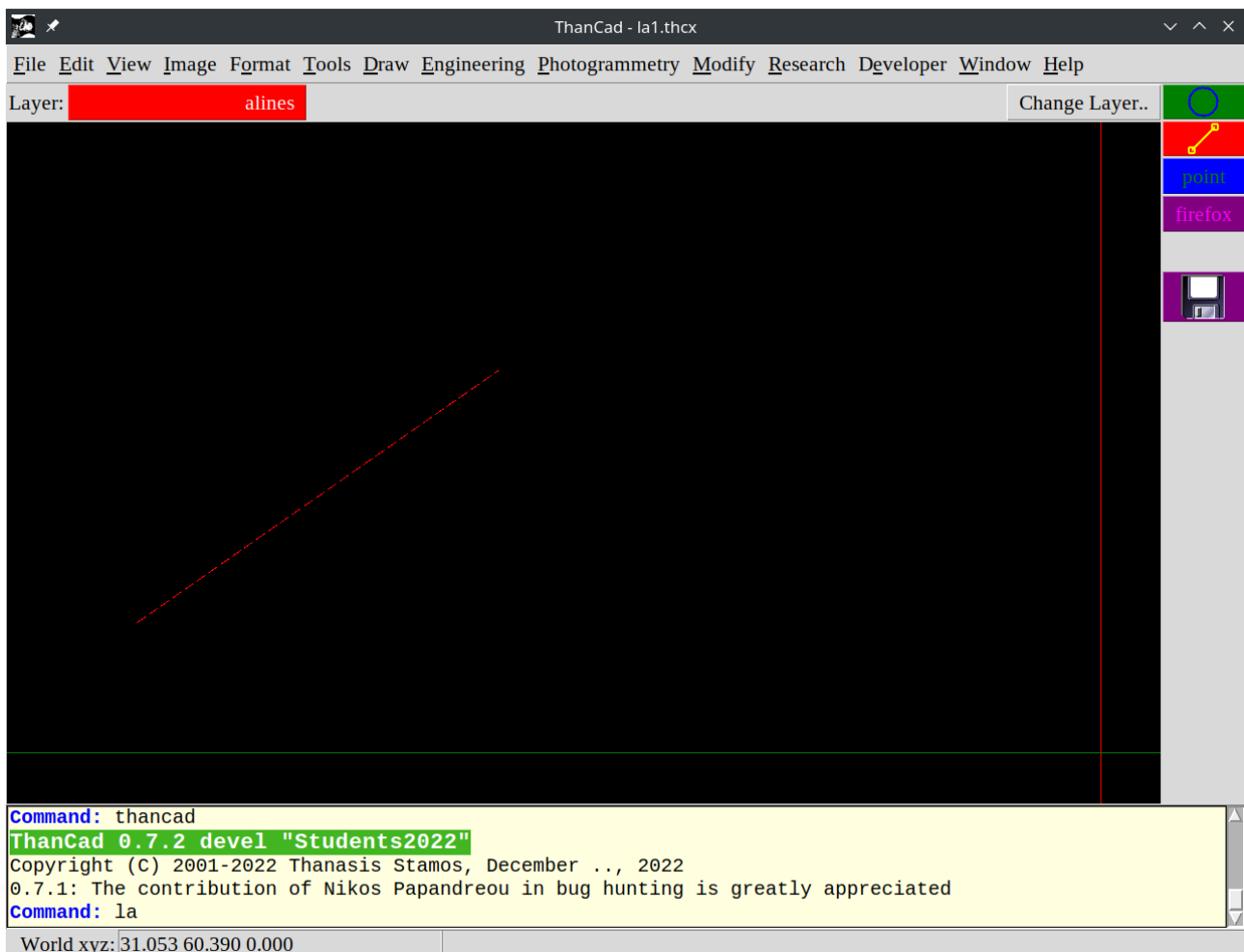**Change the pen thickness attribute of a layer**

ThanCad supports pen thickness for line-oriented elements such as lines, circles, arcs etc. The pen thickness is measured in mm, and it is independent to any scale. When you zoom in (for example with the mouse wheel), the thickness is not affected at all – it remains constant. When a drawing is plotted on parer, the thickness is also not affected by the plot-scale of the plot.

ThanCad also supports line thickness which is a similar concept. The difference is that the line thickness is measured in user data units, and thus it is affected by zoom and plot-scale.
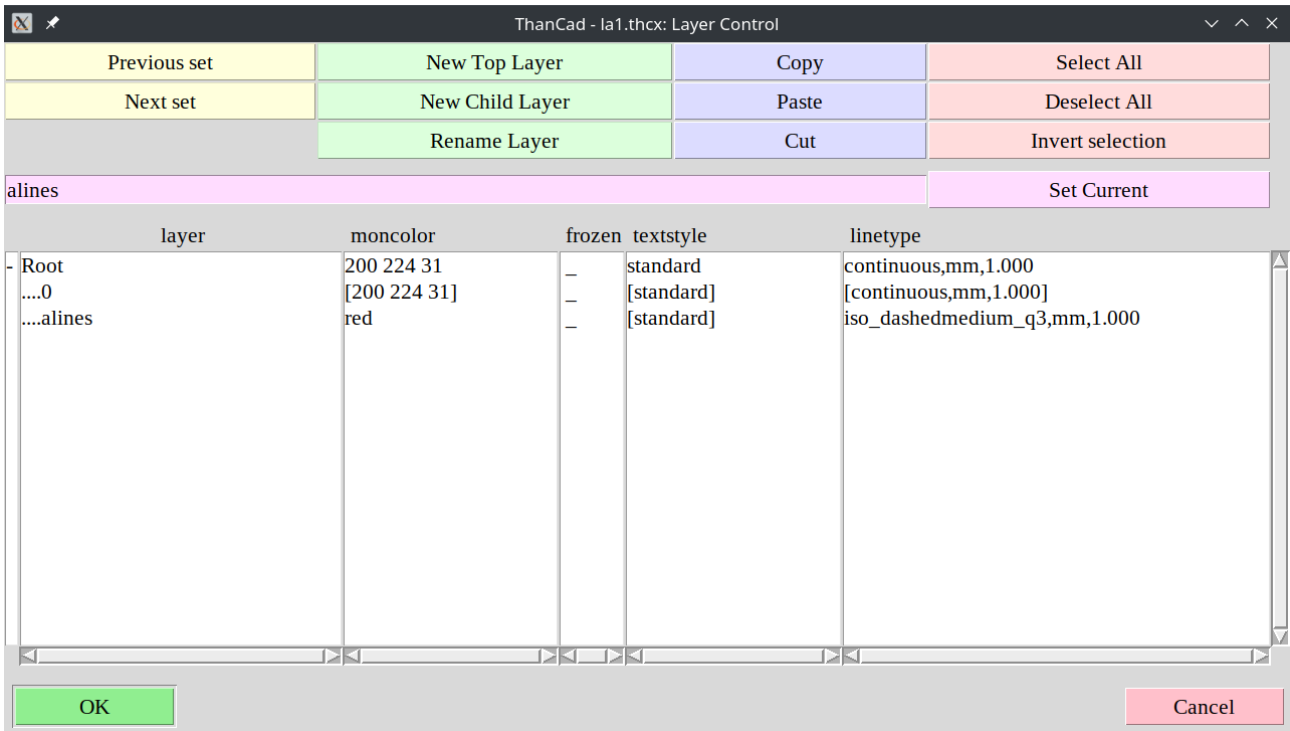
When a drawing is plotted with a certain plot-scale, the line-thickness is converted from user data units to mm using the plot-scale. The elements are then plotted with this thickness, unless the pen thickness is bigger. In this case they are plotted with the pen thickness.

Pen thickness and line thickness are attributes of layers. A layer has a pen thickness and a line thickness which are inherited by all the elements that belong to it.
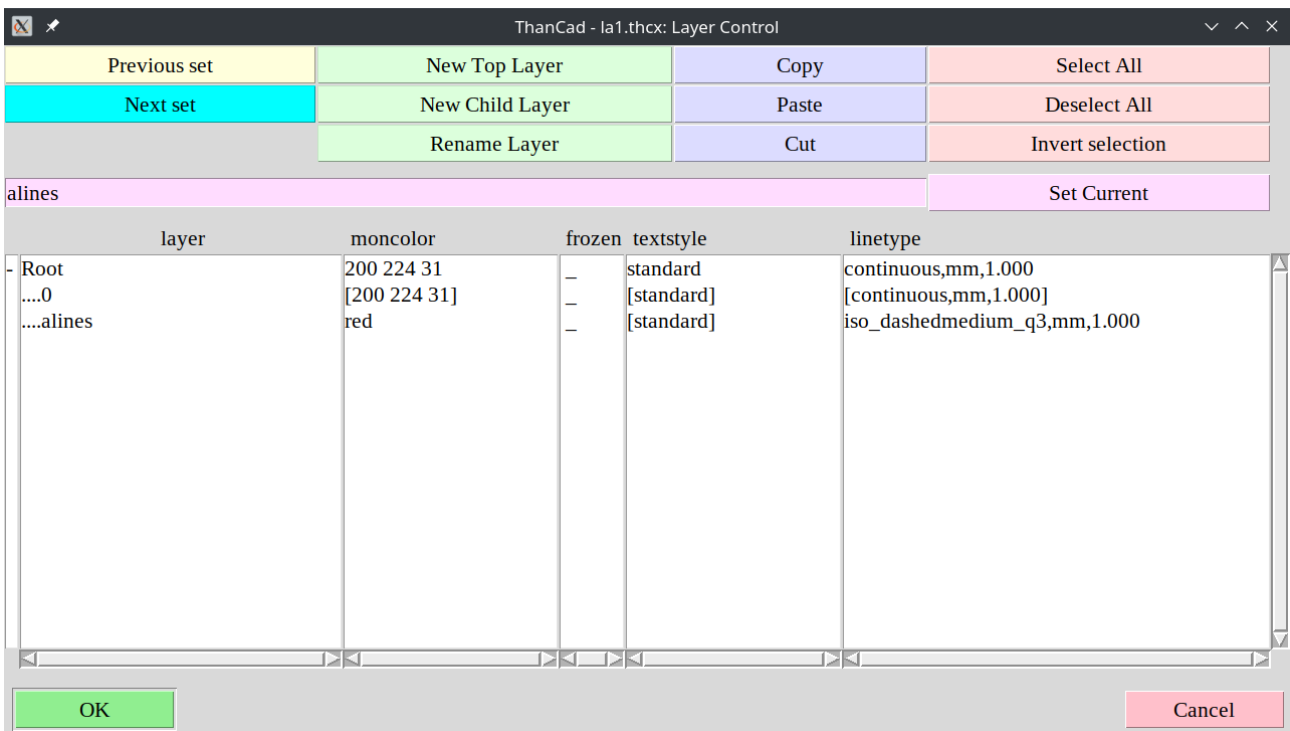
In order to change the pen thickness of a layer (or any other of its attributes) type "layer" at the command prompt (it can be abbreviated to "la") and press enter, or click "layer" in the "Format" menu.
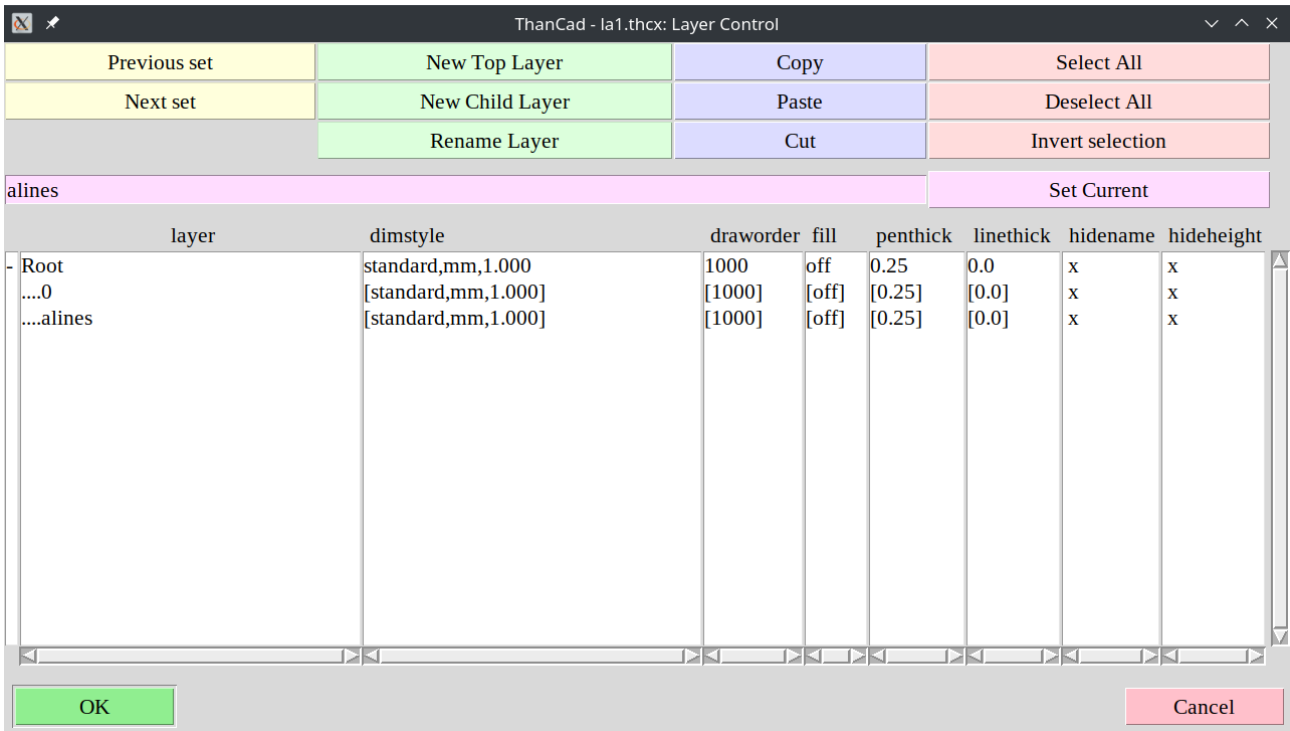
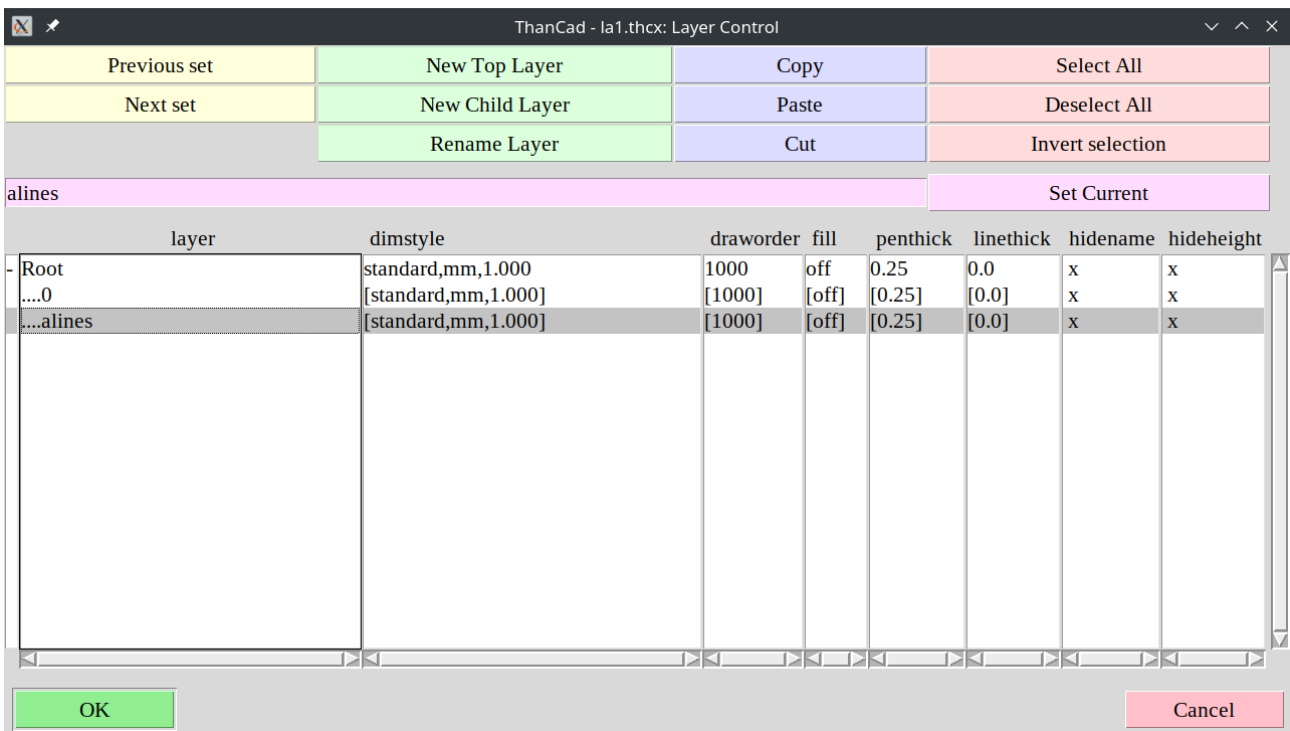The main Layer window appears:

The pen thickness attribute is on the second page of the main Layer window. Click on the "Next set" button on the upper left corner of the window (cyan):
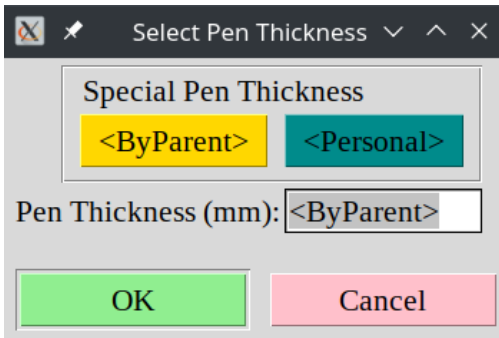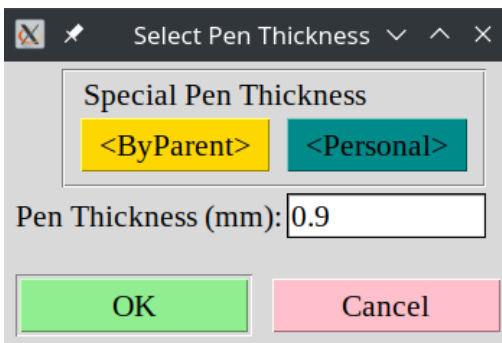
The second page of the main Layer window appears:

Previous set	New Top Layer	Copy	Select All
Next set	New Child Layer	Paste	Deselect All
	Rename Layer	Cut	Invert selection

alines | Set Current

layer	dimstyle	draworder	fill	penthick	linethick	hidename	hideheight
- Root	standard,mm,1.000	1000	off	0.25	0.0	x	x
....0	[standard,mm,1.000]	[1000]	[off]	[0.25]	[0.0]	x	x
....alines	[standard,mm,1.000]	[1000]	[off]	[0.25]	[0.0]	x	x

OK | Cancel

To change the line type of a layer, select the layer (here "alines") by clicking
on the name of the layer:

Previous set	New Top Layer	Copy	Select All
Next set	New Child Layer	Paste	Deselect All
	Rename Layer	Cut	Invert selection

alines | Set Current

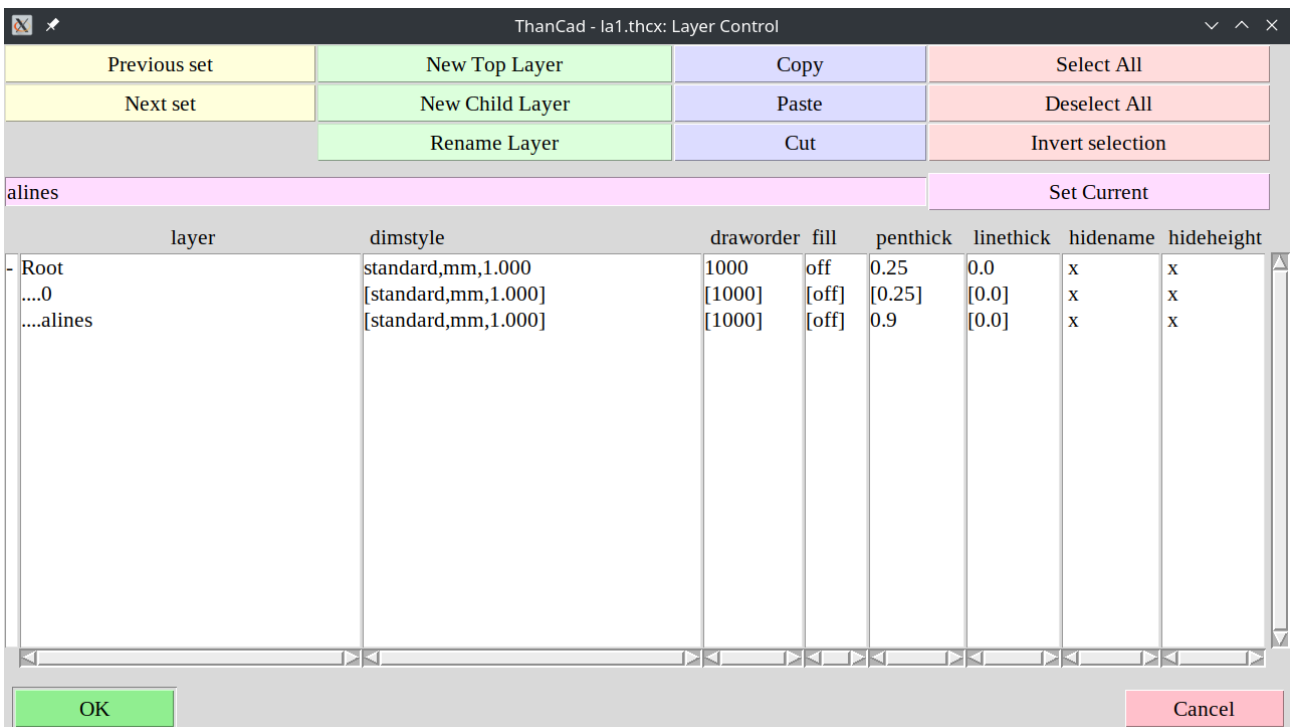| layer	dimstyle	draworder	fill	penthick	linethick	hidename	hideheight
- Root	standard,mm,1.000	1000	off	0.25	0.0	x	x
....0	[standard,mm,1.000]	[1000]	[off]	[0.25]	[0.0]	x	x
....alines	[standard,mm,1.000]	[1000]	[off]	[0.25]	[0.0]	x	x

OK | Cancel

The current pen thickness (penthick) of layer "alines" is "[0.25]" which means 0.25 mm (the brackets mean that 0.25 was inherited by the parent layer of "alines", but this concept is described elsewhere). Click on the pen thickness "[0.25]" to change the pen thickness of the layer. A dialog window is displayed:
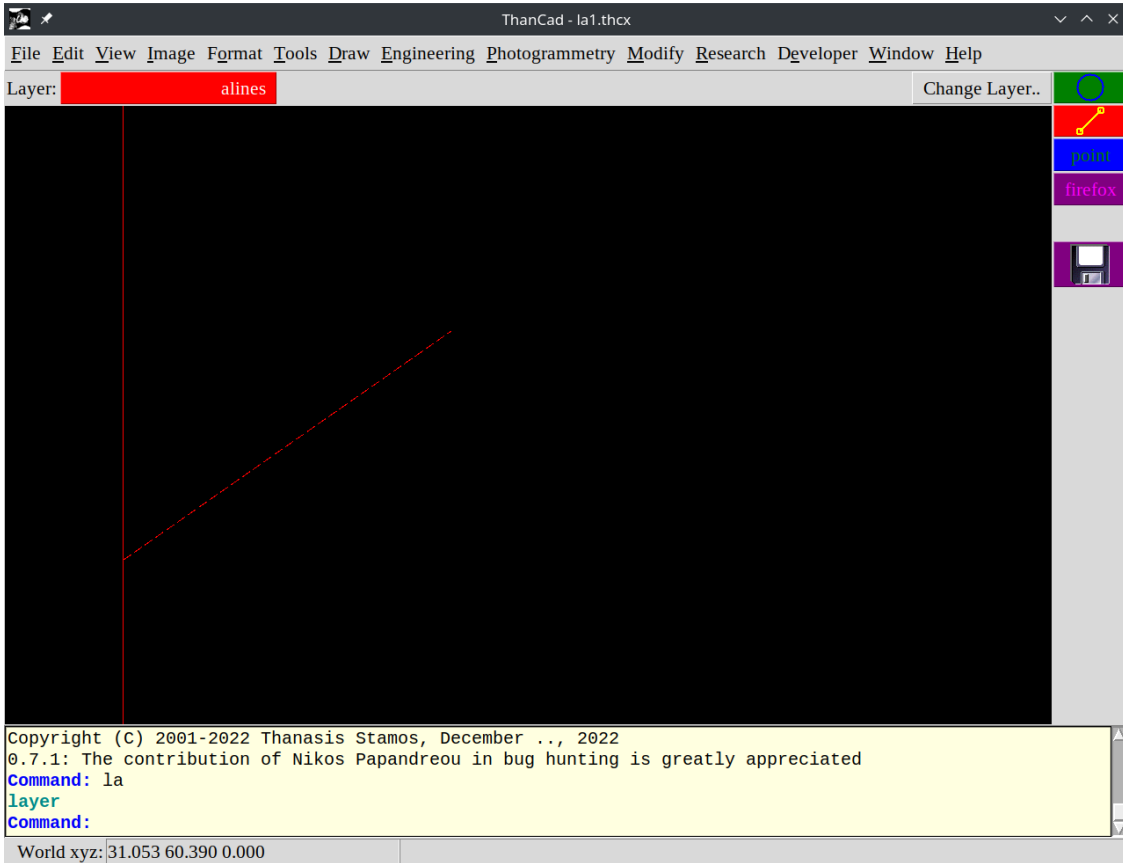

Now click on the entry widget next to the "Pen Thickness(mm):" label, delete "<ByParent>" and type "0.9":

Click on OK and the main Layer window appears. Notice that layer "alines" has a the pen thickness you typed:

layer	dimstyle	draworder	fill	penthick	linethick	hidename	hideheight
- Root	standard,mm,1.000	1000	off	0.25	0.0	x	x
....0	[standard,mm,1.000]	[1000]	[off]	[0.25]	[0.0]	x	x
....alines	[standard,mm,1.000]	[1000]	[off]	0.9	[0.0]	x	x

Click on "OK" to save the changes, and return to the drawing:

Regenerate the drawing to show the new pen thickness on the drawing, using the "regen" command. Type "regen" (it can be abbreviated to "re") in the command window and press enter: