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Chapter 4 – Drawing Tools

This chapter will have a look at Vector Persona Drawing Tools, Pen, Pencil, Vector Brush and Pixel Persona Paint, Erase, Pixel and Smudge Brushes. Press the? to see where these tools are located.

It is easy to place a shape on the canvas and alter it. A variety of shapes can be placed on the canvas to make many things. The drawing tools provide a way to easily sketch, paint and create a great illustration. These drawing tools let any artist have an abundance of tools to create their master piece

A word about snapping. Snapping is the ability to control precision as an object aligns to a grid or another object. Designer can display a grid on the canvas to help laying out your artwork if needed. Grids can be toggled on or off and can be customized to your liking. Grids do not have be on for you to use Snapping controls as you can snap to an object's bounding box. Also note Snapping generally refers to adjusting an object location to something. Within Designer there are a lot of snapping options.

Snapping behavior is based on colored dynamic guides and target nodes, which are:
Red line snaps to target horizontally.
Green line snaps to target vertically.
Yellow node snaps to objects key points or geometry.

Once Snapping is enabled via the magnet icon on the right, then choose Node Snapping on the left for more options.

Dynamic guides will also show distance based on the unit of measurement selected when the New Document is created. This graphic shows the Snapping and Grid Icons with Snapping activated.

This graphic shows the Snapping and Grid Icons with Snapping activated.

Snapping Toggle

Icon to Grid Controls
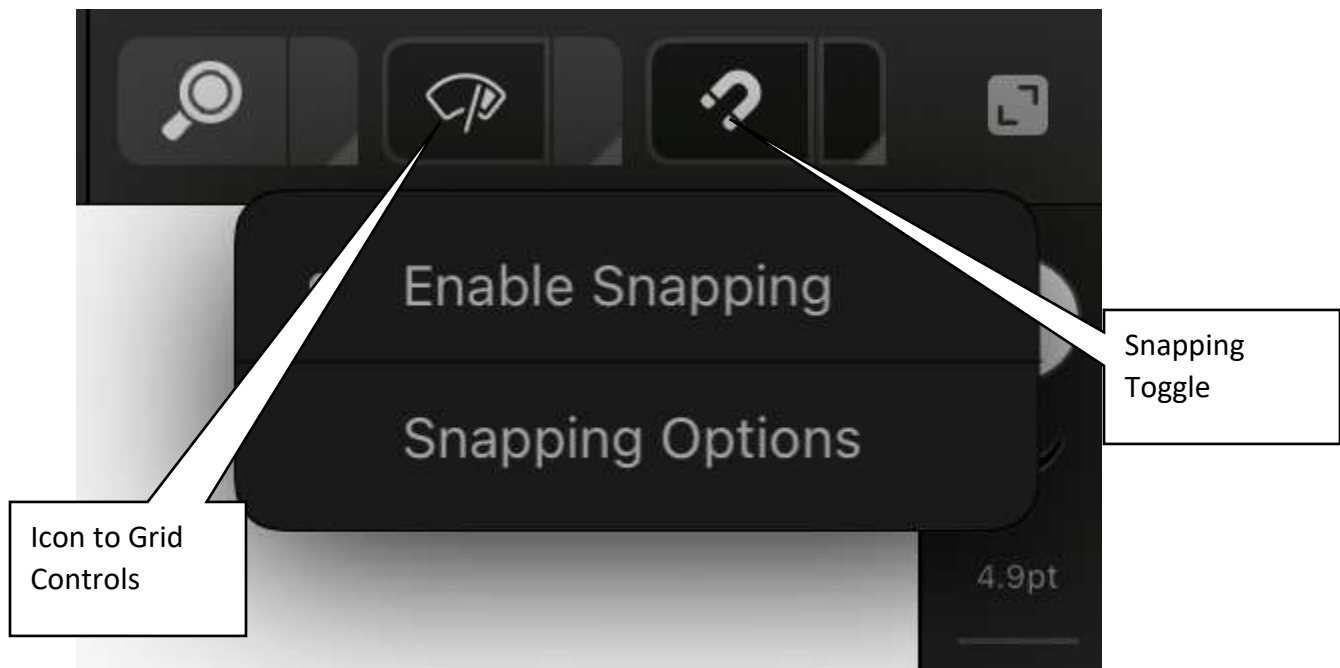
This graphic shows the Node Snapping Control dialog box.

Node Snapping
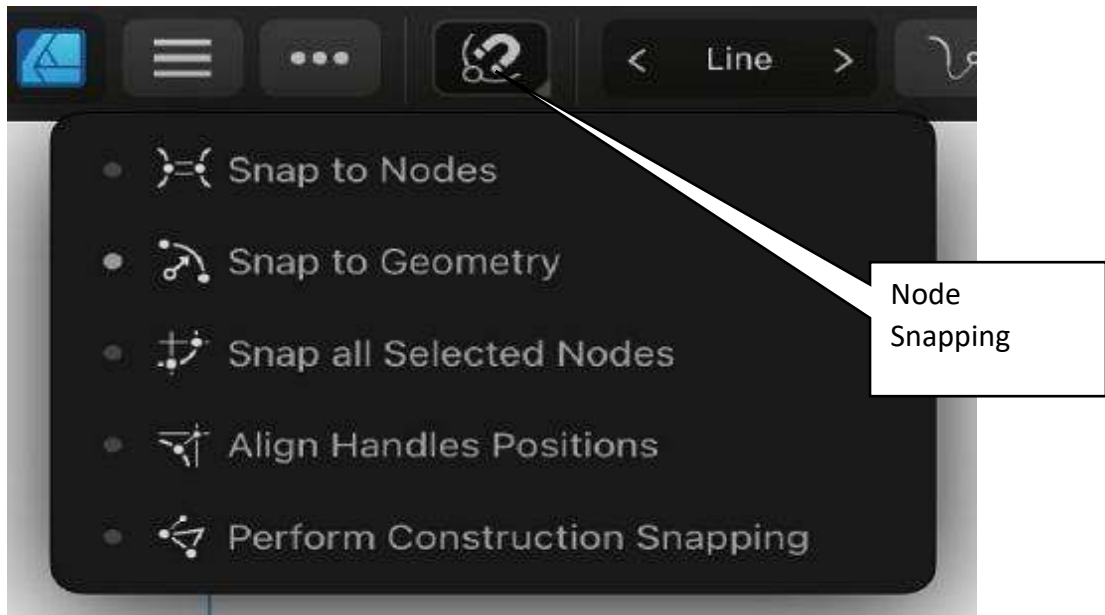
This graphic shows the Grid, Column, and Guides drop down choices.

Toggle Preview Mode options

Pen Tool

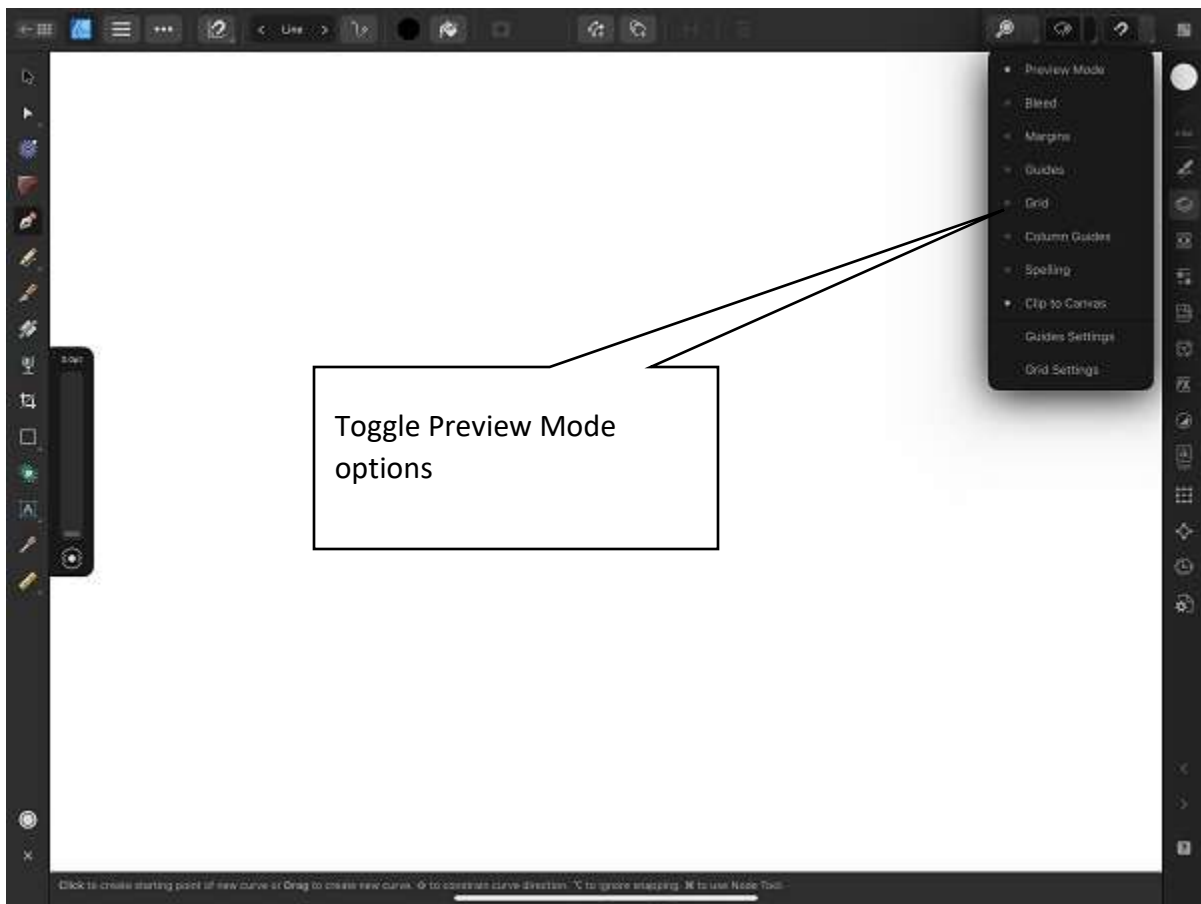The Pen Tool is accessed within the Designer Persona and is used for precision artwork. It is used for drawing Vector Shapes. The Pen Tool uses two or more nodes to create a shape. Once two nodes are placed on the canvas, a path is created for a line to be formed. The nodes can be used to edit the line drawn. Once the Pen Tool is selected, a slider bar is shown next to the Tool bar that controls stroke width. The Pen Tool modes can be changed from the Context Menu, which are, Pen, Smart, Polygon, and Line modes. The Rubber Band Mode on the Context Menu shows a preview of the next segment to be drawn before placement of a new node. Black is the default color for the stroke of the pen and a 0-stroke width.

The Pen Tool allows the user to place complex lines and curves anywhere on the canvas. Each line segment drawn starts its own independent layer. If you are a first-time user to this kind of graphics program the Pen Tool can take a little getting used to. Each line drawn is associated with a brush type. This means any line can be changed to represent a brush type chosen from within the Brush Studio.

If you are a brand-new graphic artist just learning basic techniques, tracing is a great aid. Designer does not have a tracing tool that many would like. The purpose of a trace tool is to covert a pixel to vector. Hopefully in the near future, that feature will be added. In the meantime, The Pen Tool offers a way to trace around a sketch. It works by placing nodes where you want lines present. Once a line is placed with the Pen Tool with two or more nodes and that line is now complete it must be de-selected for you to draw a new line or the original line will continue. If a mistake occurs, two finger tap on the canvas will undo your last action. Three fingers will re-do.

The Context Menu allows for several options. Some of these options are toggle switches that must be tapped to turn on and tapped again to turn off. There are four Pen Modes: Pen, Smart, Polygon, and Line. The Mode allows you to choose which of the four Pen types to choose from.

The Pen mode that follows the Bezier Curve functionality. This allows for a control point to be able to control a curve or path. Smart Mode created flowing curves. Polygon uses nodes for shapes with straight edges. Line mode places single segment lines.

Pen Mode

Pen Mode is the mode turned on by default when Pen Tool is selected and is the most powerful for drawing Bezier curves. Pen Mode is the standard tool used in many other similar designer programs. For beginners, this mode is somewhat challenging. Pen Mode is a combination of the other modes. Pen Mode allows nodes to be placed along a line or curve with the ability to access a handle to bend the shape.

If no width or color has been pre-selected, the node line will appear as a blue line as shown in the next graphic.

The next graphic shows the two segments. This will create one layer. If you continue to place nodes the segments will continue until you de-select and start a new line.

Start Node

End Node
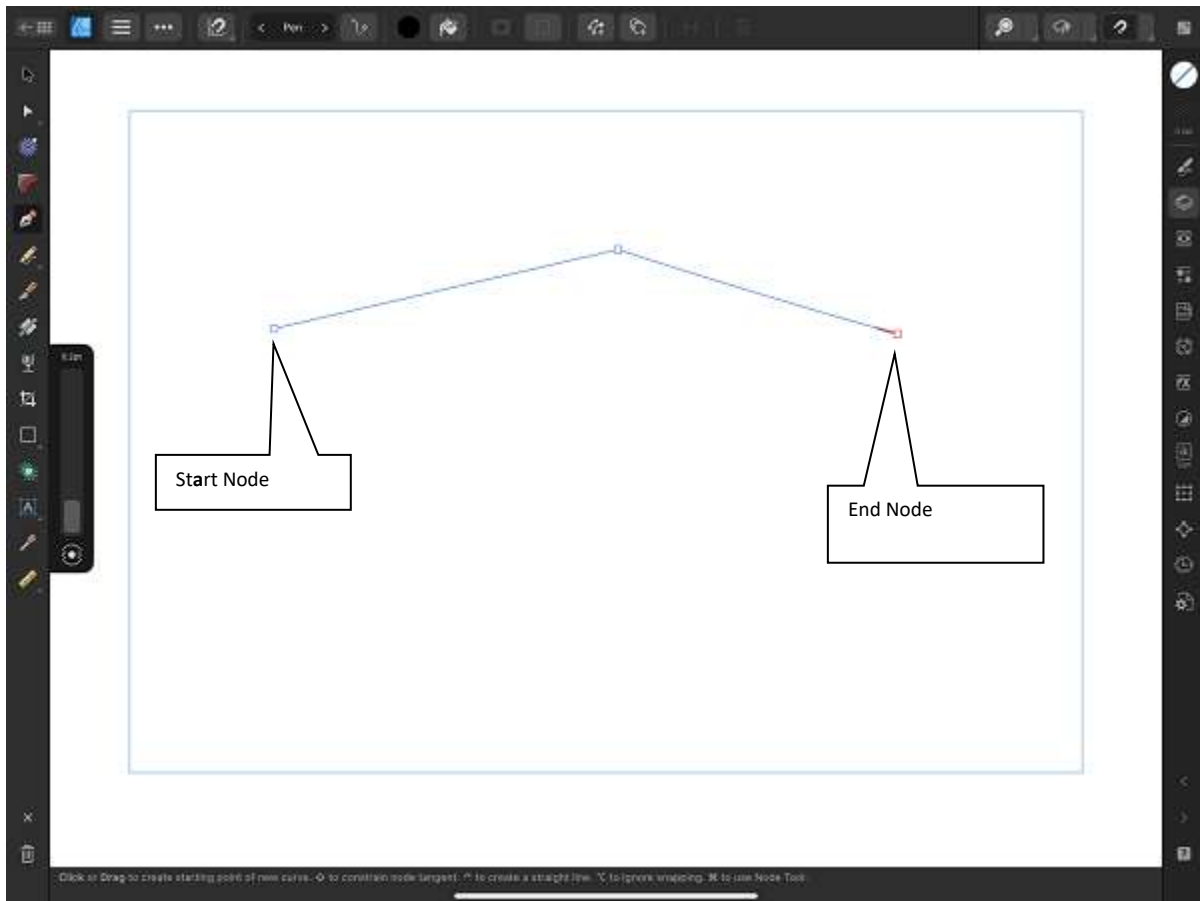
**PEN MODE TWO SEGMENTS**

Line Mode

Line Mode is the simplest Mode in the Pen Tool. As the name suggests, each time it is used, it makes a single straight line from staring pointing to ending point. The starting tap becomes the starting node as indicated by a blue filled square. The next tap becomes the end node shown as a red outlined square. The nodes remain visible until the line is deselected. Each line placed on the canvas creates a separate layer. Let's experiment with the Line Tool.

1. Open a new Document.
2. Tap the Pen Tool. Look at the Context Menu at the top of your screen. Pen Mode is the default.
3. Tap Mode and scroll to select Line.
4. Tap anywhere on the canvas for your first node.
5. Tap again anywhere on the canvas for the second node.

Stroke width is set to 0pt by default. After the first line is placed on the canvas, Designer sets Width to 0.2pt. Designer does not select a Brush type. This becomes a simple line. To add character to your line, we can assign a brush type to the line.

6. Open the Brush Studio and select any other brush listed and note the change. Select different brush types see the change.
7. Place two more nodes to make a line on the canvas. Note the brush type was not carried through to the new line. When using the Pen Tool, the line drawn is a line first and you then select a brush stroke to use.

This graphic shows two lines, one with stroke added and one without.
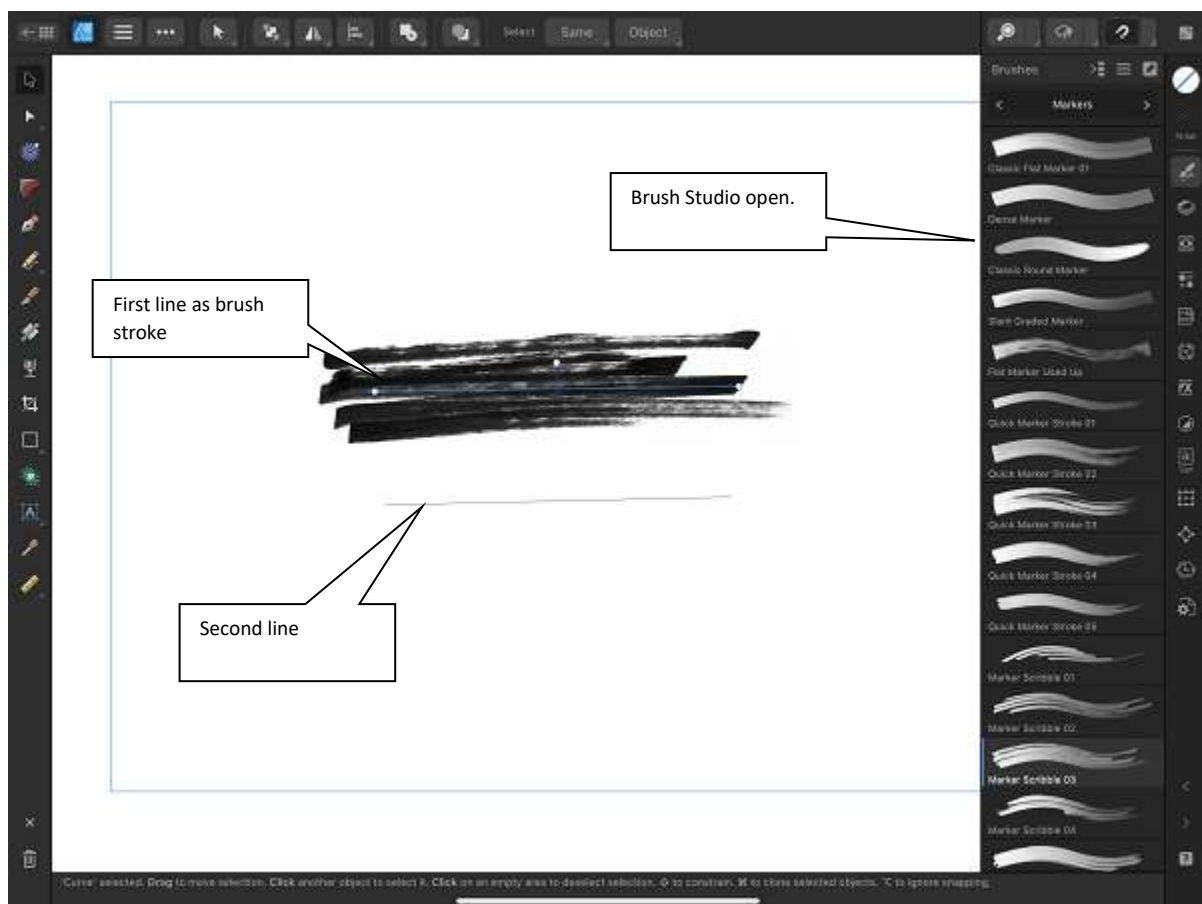
PEN TOOL - LINE MODE

Once any line is deselected, it can be edited by via the Node Tool. Each line you draw creates a new layer. I suggest opening the Layers Studio and watch as you place lines on the canvas. This becomes handy if you wish to select one or more layers to delete it while you are making the examples. You can use the Layers Studio as a method to manage what you place on your canvas by selecting any one or more layers and deleting them, etc. Draw several lines on your canvas to become familiar with the Pen Tool.

Let's clean the canvas by deleting our lines.

Delete multiple items on the canvas

Another way to delete items on your canvas is to use the Move Tool.
1. Select the Move tool, draw a box completely around all items you wish to delete and tap the Garbage Can in the lower left corner. Canvas should be clean.

Polygon Mode

1. Select the Pen Tool.
2. In the Context Menu, change the Mode to Polygon.

Polygon allows you place multiple points on the canvas forming a line. You will continue to place nodes on the canvas until you have closed the current line segment by connecting to the first node or when the final node is placed, tap the X (Deselect Tool) in the lower left portion of your screen. Each polygon creates a new layer.

3. Tap several places on your canvas to try this out. Your tapping action will begin to draw a shape. If your shape is not closed and you wish it to be closed, simply tap the on the first node you started with and the shape will close. You will not be able to start a new segment until you have pressed Deselect X or by closing shape against the first node drawn.
4. Delete all lines drawn to return to a clean canvas.

Keep in mind that fill colors can be added to any polygon drawn. If it is not closed the fill will close the shape by color only. This means there will not be a pen stroke across the unclosed polygon.

Smart Pen Mode

This mode allows for flowing curves. Smart Mode is good for tracing. Smart Mode allows you to place nodes along any point and it will duplicate that curve using line handles to expand the line to a curve. This is a great mode to experiment with. For this example, we will trace a curve to see how this Smart works. We can use Designer to place an object on the canvas for us to trace around. You can also import in any image to trace. We will place a tear shape from the Rectangle Tool bar on the canvas to trace.

1. Open the Rectangle Tool to access the Tear Tool and select the Tear. Your colors should be white Fill and black Stroke with a stroke of 3pt.
2. Place a good size tear on the canvas and then deselect the tear.
3. Select the Pen Tool and choose Smart Mode in the Context Menu.
4. Make sure tear is not selected.

5. On the Context Menu, change Color to red by taping Color to open the dialog box. Notice the Stroke Studio; the stroke symbol changes from black to red.
6. Tap Color in the Context Menu again to close the dialog box.
7. Place nodes around the tear outline. This creates a new layer. See next graphic.
8. Open the Layers Studio new layer, unselect the Tear layer. This allows you to see your work.
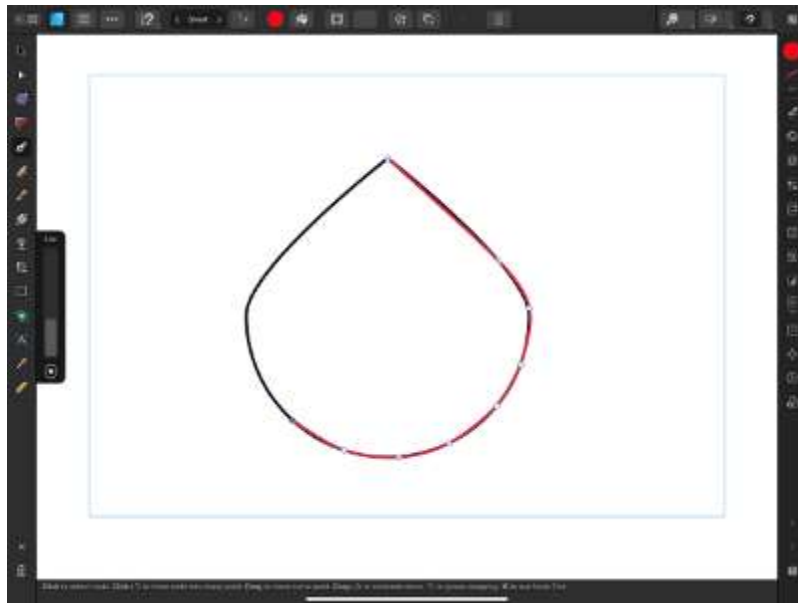
To edit your work, select the Node Tool. Any node can be moved or adjusted via the control handles.

Command Controller

The Command Controller is an option or modifier key to provide keyboard shortcuts without having to have a keyboard. Option keys are buttons on a desktop keyboard such as the Alt or Ctrl keys. The gray circle in the middle of the Blue buttons is the Command Controller access point. This can be toggled on or off via the Document Menu ☰. Once enabled, it normally appears in the lower left side of the canvas. It can be moved anywhere you like on the canvas. The blue color indicates the options that are enabled. Enabling one or more of the modifiers allow for different actions on the tool

Vector Flood Fill Tool (new in version 2.1)

As mentioned in the Preface, Serif is constantly working on improving their product. A new feature long waited for is the Vector Flood Fill Tool. Up to this point there was no easy way to fill vector areas with different colors. Now you can. The Vector Flood Fill Tool context menu options are a little complex. This is a vector painting tool.

The first thing to understand is this tool works on closed intersecting areas. Additionally, the areas to fill should be selected although it is not entirely necessary when using this tool. Selection does have an impact on what areas get filled with the chosen color. Finally, select the color you wish to apply and press in the area to color.

A great aid in using this tool is to look at the Help section "Flooding Areas". The help section provides a great example of using the tool.

The context menu allows for three main choices, Insertion Mode, Fit Mode, and Fill to Visible Boundaries. Insertion Mode provides Inside, which creates new shapes and places them inside existing shapes. In-Between Mode breaks fills and strokes and inserts the new fills in-between. When experimenting with the two Insertion Modes, expand the Layers Panel to see the effect it has as to creating new layers. Fit Mode choices are Max Fit, Min, Fit, Stretch and None. These options have to do with scaling based on the mode selected. Fill to Visible Boundaries extends to the outline of the shape ignoring edges formed by overlapping.

The next graphic shows a drawing of a bee with each layer colored using the Vector Fill Tool.