

# Krita 2.9

## 05 – Vector Tools

In this chapter we will look at each of the vector tools.

Vector tools in Krita, at least for now, are complementary tools for digital painting. They can be useful to draw clean shapes to paint on (using the layer group + disable alpha channel trick as explained in the layer stack chapter), to edit a shape before tracing it with the “Stroke selected shapes” action, to draw a gradient you can edit later, or to insert some text...

If you need to do some advanced technical vector work or edit an SVG file, better use a dedicated SVG editor.

To draw vector shapes, first you need to create a vector layer and select it. Then you can use any of the drawing tools on it to create vector shapes (that is any of the painting tools except those with “brush” in their name). You can also use the Text tool to add some shapes containing text, or the Calligraphy tool to draw some vector lines with variable width.



### Shape Handling Tool

After creating a shape, you can select it to edit it with the Shape Handling tool.

When some shapes are selected, you can move, scale and rotate them with the handles around them. You can use the tool options to edit them more precisely and to edit their style.

Useful shortcuts:

- while resizing, press Shift to lock the original ratio, and press Control to lock the center
- while rotating, press Alt to constrain rotation to 45° angles
- while moving, press Control or Alt to lock horizontal or vertical position

Tool options:

- Arrange (1<sup>st</sup> part): the six buttons on the left (align left, right, top, bottom, horizontal center and vertical center ) allow to align selected shapes. They are active only if at least two shapes are selected.
- Arrange (2<sup>nd</sup> part): the four buttons on the center (bring to front, send to back, raise and lower) allow to move selected shape up or down the shape stack in current layer.
- Arrange (3<sup>rd</sup> part): the two buttons on the right (group and ungroup) allow to group selected shapes together, or ungroup a group of shapes.

- Geometry: here you can change precisely the size and position of selected shapes. The first X and Y values define the position of the selected corner or center (with the squared checkboxes on the left), and the values on the right define the horizontal and vertical size.

- Line: here you can set the outline style for selected shapes. You can set a style for line start, line, line end, line thickness, cap and join, and select the color.

-Fill: here you can select the style for the fill of selected shapes. Check the first button for no fill, the second one for solid color, the third for gradient and the fourth for pattern. Then on the right-side button you can select a solid color, a gradient or a pattern. To edit further a gradient or a pattern, use the Gradient Editing tool or the Pattern Editing tool.

-Shadow: You can check the checkbox on the left to activate a drop shadow. Change the shadow angle with the dial button, the color with the drop-down button next to it, and set the distance and blur values. Shadow works on every kind of vector shape, except on multiline text.



### Text tool

The text tool can be used to add two different kinds of text shapes: Artistic or Multiline text. Select the mode you want, and click-drag on the canvas to create the text area. After doing this, the tool options docker shows different options for both kinds of text.

Let's look at them separately.

#### Artistic text shape:

When you create an Artistic text area, it is automatically filled with the default text “Artistic Text”, and the area size define the text scaling. Alternatively you can add a not-scaled artistic text shape by using the “Add shape” docker and drag'n'drop an artistic shape from it to the canvas.

Double click in the shape to edit the text.

#### Tool options:

- Font: select the font family for selected text.

- Size: select the font size for selected text.

- Text alignment: three buttons to align the text to the left, to the center or to the right.

- B: select bold style for selected text

- i: select italic style for selected text

- Superscript style

- Subscript style

- Convert to path: this button is very useful as it convert the text shape to a regular path shape, so you can edit the letters shape.

- Detach path button: actually I'm not sure if that's doing anything in Krita.. might be a leftover feature from another calligra software using this kind of shapes. Same for the slider at the bottom.

Multiline text shape:

When you create a Multiline text area, it defines the area where the text will flow but doesn't impact the scaling of the text font. If you want to scale the text without editing the font settings, you can use the transform tool on it, but I recommend to only scale text properly using font size to not spoil the font rendering.

Note: there is a little bug in text selection display, so if you select some text and deselect it, it will only appear deselected after you type a character or do something similar to refresh the display.

Tool options:

Character: these options affect the text you will type or the text selection if there is one.

- The first line gives you access to a text style manager. If you change some of character settings below it, a green + appears, click it to create a new character style from current settings. Another way to use it is to click the arrow on the right, hover the cursor to the right side and click the edit icon to open the style editor window. There are two main tabs: Paragraph and Character. Here you need to select Character and click "New" on the bottom left to create a character style. Give it a name, select the font settings you want and click Apply and Ok.

- In the second line you can choose the font family, and next to it the font size.

-In the third line you can activate some style options for selected text: bold, italic, underlined, strikethrough, superscript or subscript style.

Paragraph: these options affect the current line or paragraph (until the next newline).

- The first line of this part gives you access again to the text style manager. If you change some of the paragraph settings below it, a green + appears, click it to create a new paragraph style from current settings. Another way to use it is to click the arrow on the right, hover the cursor to the right side and click the edit icon to open the style editor window. There are two main tabs: Paragraph and Character. Here you need to select Paragraph and click "New" on the bottom left to create a paragraph style. Give it a name, select the settings you want and click Apply and Ok.

- In the second line you can activate some text layout settings: Bullet list, Decrease indent, Increase indent, change writing direction, and Align left, center, right or block.



Path Editing Tool

When a shape is selected, you can access the path editing tool from the tool docker (or just double-click on the shape, but that is hard to do with a stylus).

If the shape is not an editable path but a predefined shape like a rectangle or a circle, you can access their specific control points, or click “convert to path” in the tool option to can edit path nodes.

Useful shortcuts:

- When selecting nodes, press control to combine selections.
- When moving nodes, press control to lock horizontal or vertical position.

Tool options:

- Corner point: break tangents of selected points to make corner angles.
- Smooth point: give smooth tangents to selected points.
- Symmetric point: give symmetric tangents to selected points.
- Insert point: insert point between selected points (need at least two points selected).
- Remove point: delete selected points.
- Segment to line: make the path between selected points a straight line (need at least two points selected).
- Segment to curve: pull tangents of selected points to can make a curve (need at least two points selected).
- Make line point: push tangents to point position.
- Make curve point: pull tangents of selected point.
- Break at point: break the path at selected point.
- Break at segment: break the patch between selected point (need two points selected)
- Join with segment: create a segment between selected points (need two points selected)
- Merge points: merge two points not connected to a single point.



### Pattern Editing Tool

Select a shape you want to add a pattern on, or a shape with a pattern you want to tweak, and select the Pattern Editing tool. In the tool options, click on a pattern to apply it, and use the settings to tweak the pattern size and position. You can also use the blue square representation of the pattern to modify it quickly on the canvas.

Tool options:

- Repeat: choose the mode for the pattern (original to center and not repeat it, Tiled for classic tiled pattern, or Stretch to stretch the pattern over the shape).
- Reference Point: choose the reference point of your texture for position values.

- Reference Point Offset: move the pattern horizontally and/or vertically.
- Tile Offset: seems to be not working...
- Pattern Size: set the size for the pattern.
- Pattern list: to select a pattern to use.
- Import Resource: to import a pattern file.
- Delete Resource: to blacklist a pattern file.



### Gradient Editing Tool

Select a shape you want to add a gradient on, or a shape with a gradient you want to tweak, and select the Gradient Editing tool. In the tool options, select the target (outline or fill), the type of gradient and settings, and click on a gradient in the list to apply it. You can use the handles on the canvas to move the gradient control points. To tweak each color stop, click on the corresponding colored handle on the side of the gradient path and edit the color and position value in the color stop part of the tool options.

If you have a gradient on both outline and fill on the same shape, make sure to select the handles corresponding to the one you want to edit to access its settings.

Tool options:

- Target: apply to Line or Fill.
- Type: Linear, Radial or Conical gradient.
- Repeat: choose the repeat mode for the gradient (None, Reflect or Repeat).
- Overall opacity: global Opacity rate of the gradient.
- Color stop: color and position of currently selected color stop.
- Add to Predefined Gradients: save current gradient to the list of installed gradients.
- Gradient list: to select a gradient to use.
- Import Resource: to import a pattern file.
- Delete Resource: to blacklist a pattern file.



### Calligraphy Tool

The Calligraphy tool can be useful to trace art lines that can be easily edited (moved, scaled and rotated with the Shape Handling tool). It is also possible to edit path nodes position, but it's not recommended to not do this as “calligraphic shapes” have a bad bug that makes them move if you move a path node beyond the top and left sides of the shape..

The Calligraphy tool is also very useful as it can trace nice variable width shapes automatically following a selected path.

Tool options:

- Fill: this line of settings is actually not used in Krita, as it is using the main foreground color selected instead.
- Setting preset selector: Here you can choose from three different presets, or save your own presets.
- Follow selected path: check this option to make the tool automatically draw along the selected shape.
- Use tablet pressure: check this option to use tablet stylus pressure to control the line width.
- Thinning: increase this value above 0 to make the line thinner when drawing faster. Decrease the value below 0 to make the line bigger when drawing faster.
- Width: size for the line width.
- Use tablet angle: I guess, this is to use the Rotation sensor from ArtPen special stylus that support rotation.
- Angle: set an angle to the calligraphic brush tip.
- Fixation: controls the rotation of the brush tip. At 0, brush follows stroke direction angle; at 1, brush keep the Angle value from the settings.
- Caps: add some round overflow at line extremities.
- Mass: smoothing of the line.
- Drag: add a dynamic effect (1=no effect, 0=max effect).