

# Line Tool

## Super fast line creation

### Using the Line Tool

The line tool button looks like an angled line. Click and hold on the line tool button to bring up a quick list of common lines including nondirectional, unidirectional, and bidirectional. You can press the L key on your keyboard to quickly choose the line tool; repeatedly press L to cycle through the line choices.

Use the line tool to go into a line drawing mode useful when drawing lots of lines, for example when connecting several figures together with the sticky lines feature.

#### Drawing a Line

1. Click on the Line tool in the toolbar.
2. Change any attributes such as color or arrowhead shape that you wish to make the default for this line using the Shape inspector, discussed below.
3. Click and drag an area on the idea space to draw the line.
4. Repeat step 3 to draw multiple lines using the same style.

#### Drawing a Multipoint Line

1. Draw a line as described above, however, before you release the mouse button hold down the  $\text{⌘}$  (Option) key. When you release the mouse you'll find that you've dropped a midpoint and now you're placing a new endpoint. Continue holding down Option to keep dropping midpoints as you release the mouse. If you're done, just release the Option key before you drop your last point.
2. Repeat step 1 to draw multiple multipoint lines using the same style.

#### Adding and Removing Midpoints

- Right-click on a line to quickly add a midpoint at the given click location. Right-click on a midpoint to remove it.

#### Styling a Line

1. Use the Shape inspector to change the pen color (aka border color) and pen pattern.
2. Use the Line inspector with more options specific to lines such as scaling, and head and tail arrowheads.
3. Right-clicking on a line allows you to quickly change multipoint lines between straight, curved, and orthogonal line styles.

#### Sticky Lines

1. Make sure Sticky Lines is checked in the Arrange menu. If not, select it to enable the sticky lines feature.
2. Drag the endpoint or midpoint on the line.
3. As you hover that point over another figure, the figure will glow. The glow determines how the line will stick:
  - a. **Closest Connection Point**  
If you hover the point near the edge of the figure, you'll see the figure glow purple and the connection points for that figure will be displayed along the edges. Releasing the mouse will dynamically connect the line to the closest connection point even if the figure is rotated or moved.
  - b. **Specific Connection Point**  
Hover over a specific connection point to stick it directly to that point even if the figure is rotated or moved.
  - c. **Towards the Center**  
If you hover the point closer to the center of the figure, it will glow green indicating that the line will be connected against the edge of the figure pointing towards the figure's center.
  - d. **Specific Position**  
If you press the Command key while hovering the point over the figure, it will glow orange and you can connect the line to a specific position on the figure. Note the position will scale appropriately if the figure itself is scaled. Also note that if you stick a line to a position on another line it will also scale if the line is scaled.
  - e. **Non-Sticky Point**  
If you press the Control key the figure will stop glowing and the line will not stick to the figure at all. The Control key temporarily disables the sticky feature.
4. As described above for multipoint lines, if you also hold down the  $\text{⌘}$  (Option) key during the creation of a new line then you can create a multipoint line on-the-fly where any of the points on that line can be stuck to other figures using the normal sticky techniques. Note this Option key trick only works when dragging out brand new lines, not editing existing lines.

#### Adding a Label to a Line

1. Double-click on a line figure to create one or more text figures which can act as line labels. These text figures are just like regular Curio text figures, thus they support the same formatting features, but they are stuck to the line.
2. You can slide a text figure up and down along the line using the mouse or the arrow keys to reposition it. Using the arrow keys on the keyboard is generally more accurate especially for curved lines. You can also hold Shift while pressing the arrow keys to move the label in larger steps.
3. To remove the label, select it and press the Delete key.