

DoodleCAD Help

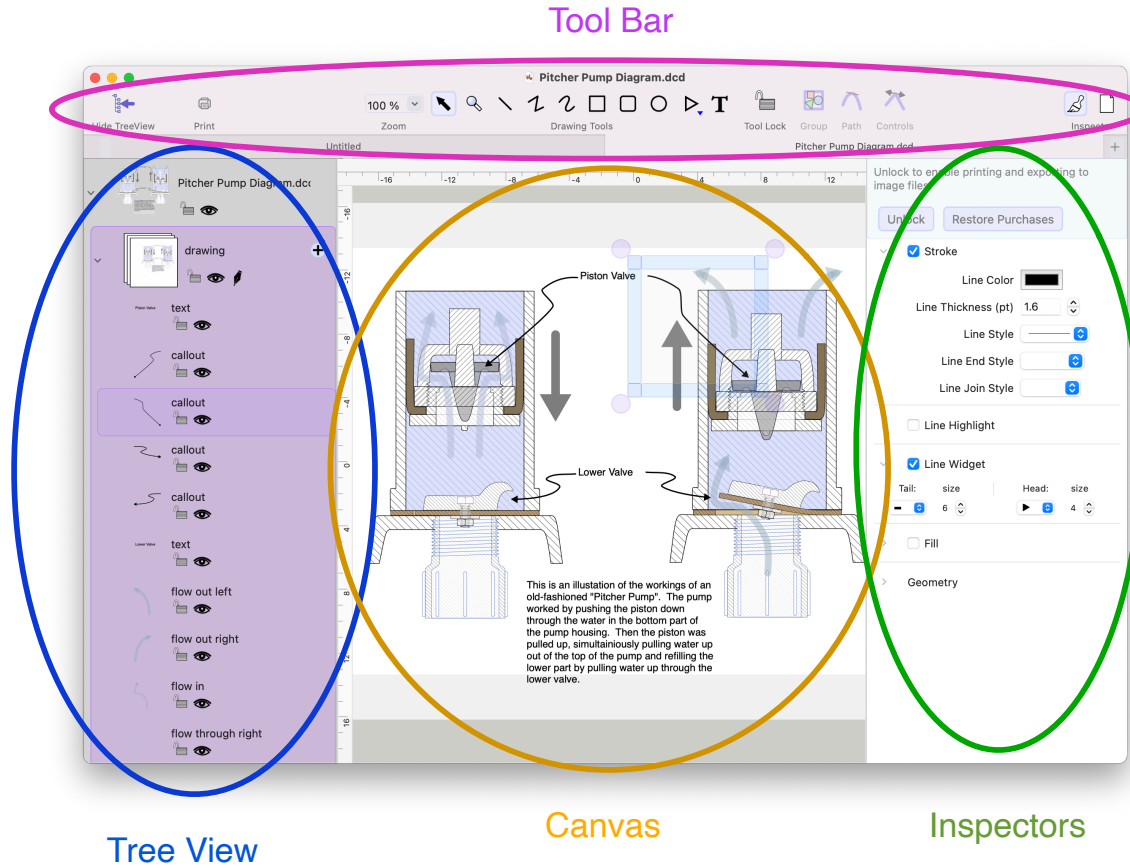
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General Layout



Tool Bar

The toolbar at the top of the document window primarily provides a set of buttons for selecting a drawing tool. Additionally there are buttons for opening/closing the tree view, printing, zooming on the canvas, group/ungroup and inspector choice.

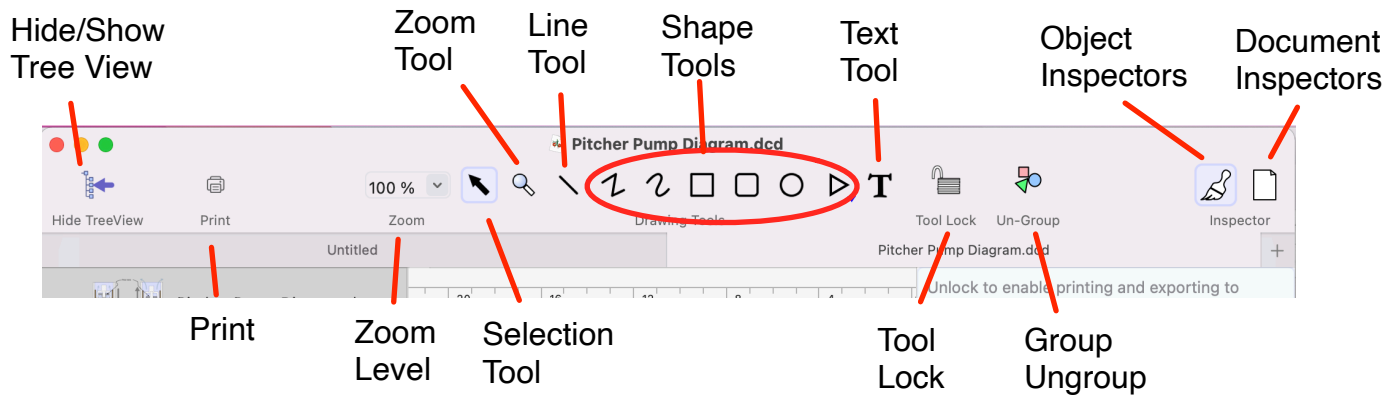










Figure 2











Drawing Tools

All of the shape tools work in the same basic way. Click the tool in the tool bar to select it and then drag the shape out on the canvas by click-dragging to get the desired shape. The exception to this is the path drawing tools which are used by clicking on the canvas where each new point in the path should be.

	Straight Line Tool	Click first point, click second point. Stops on second point.
	Straight Segments Path Tool	Click first point, click additional points. Finish by clicking first point or click space bar. The path points can be edited by selecting the shape and then clicking the path.
	Curved Segments Path Tool	Click first point, click additional points. Finish by clicking first point or click space bar. The path points can be edited by selecting the shape and then clicking the path.
	Rectangle Tool	Click-drag on canvas to create the shape.
	Rounded Rect Tool	Click-drag on canvas to create the shape.
	Oval Tool	Click-drag on canvas to create the shape.
	Polygon Tool	Click-hold on tool button to select the polygon to draw. Click-drag on canvas to draw shape.
	Text Tool	Click or click-drag where you want text to be. Edit text in the text inspector.

Function Buttons

In previous versions of DoodleCAD the function buttons in the toolbar included buttons to edit a path vertex. Those buttons have been moved to the vertex geometry inspector (see Figure 15 in Path Vertex Geometry).

	Hide Tree View	Closes the tree view panel.
	Show Tree View	Opens the tree view panel.
	Print Button	Starts a print session. Locked if DoodleCAD hasn't been purchased or rented.
	Zoom	You can select or enter a zoom level for the canvas.
	Selection Tool	Click, shift-click or click-drag on shapes on the canvas to select them for editing.
	Magnify Tool	Click on the canvas to zoom in on that spot.
	Lock	Click to lock the drawing tool selection. Button icon shows current lock state.
	Unlock	Click to unlock the drawing tool selection. Button icon shows current lock state.
	Group	If multiple shapes selected, group the selected shapes.
	Ungroup	If single group is selected, ungroup.
	Show Object Inspectors	Show the object inspectors (stroke, fill, geometry etc.) in the inspectors, panel.
	Show Document Inspectors	Show the document inspectors (page size, margins, scale etc.) in the inspectors, panel.

Tree View

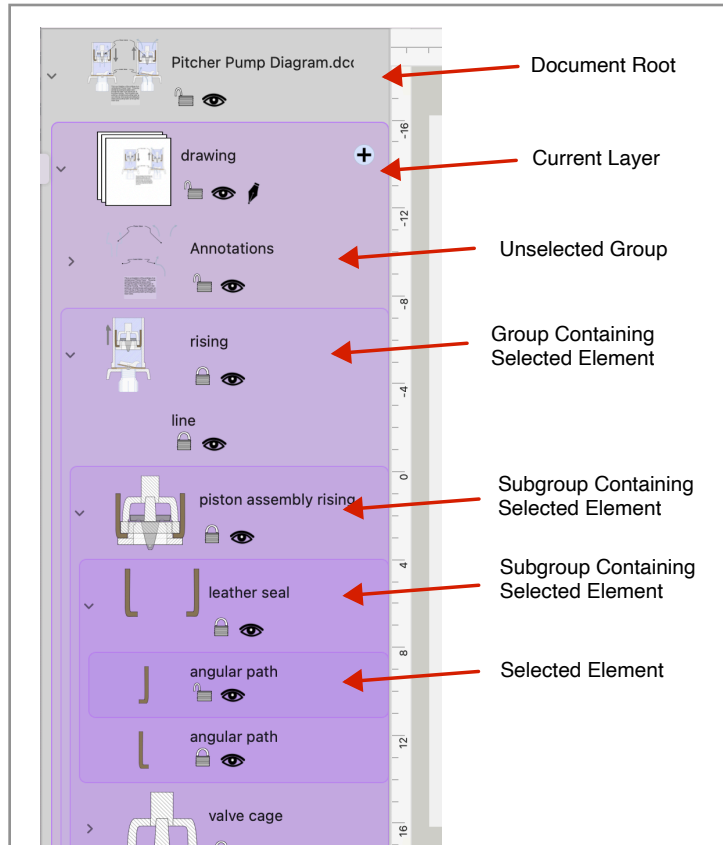








Figure 3

The object tree view on the left side of the document window displays the structure of the drawing. Elements in the tree view can be selected and will become editable in the canvas even when inside a group (Figure 3).

Elements in the tree view can be dragged to rearrange them by click-drag up or down on the thumbnail image.

The elements name can be edited by clicking on the label to edit it and then entering new text.

-  Add Layer Add a new layer above this one.
-  Current Layer Indicates, along with highlighting, that the layer is currently editing.
-  Element Unlocked Click to lock the element.
-  Element Locked Click to unlock the element.
-  Element Visible Click to hide the element.
-  Element Not Visible Click to show the element.

Inspectors



Object Inspectors

Stroke

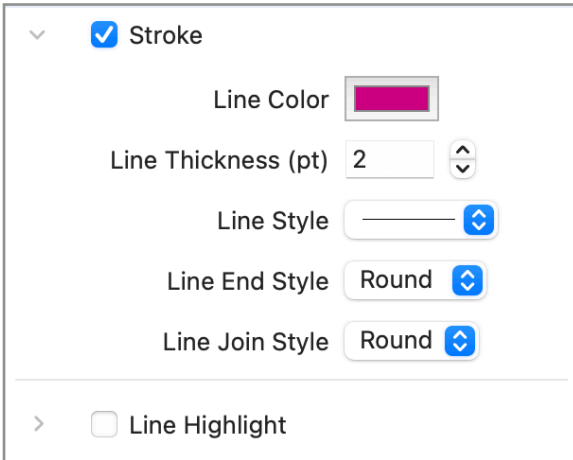


Figure 4

Line stroke properties can be enabled/disabled with the checkbox at top of inspector (see figure 4). This inspector is pretty self explanatory with color selection, line thickness, line style (eg solid, dashed etc.) and other properties.

Line End Style is how the end of a line is drawn when the path isn't closed.

Line Join Style is how the line transitions from one path segment to another.

Line Highlight

Line Highlight is available if stroke is enabled and the Line Highlight checkbox is checked (see figure 5). Line highlight draws a thicker line under the stroked line to provide a highlight as shown in Sample 1 below.

The drawing order is fill, highlight, stroke.

Line highlight does not enclose line widgets.

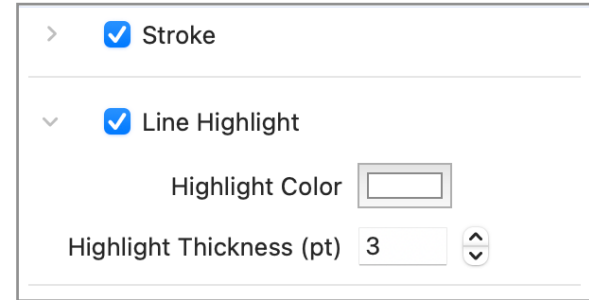
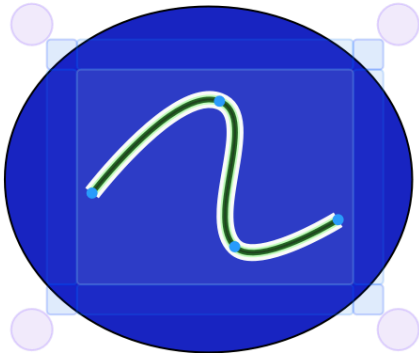


Figure 5



Sample 1

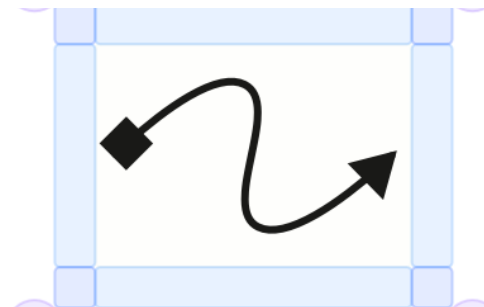
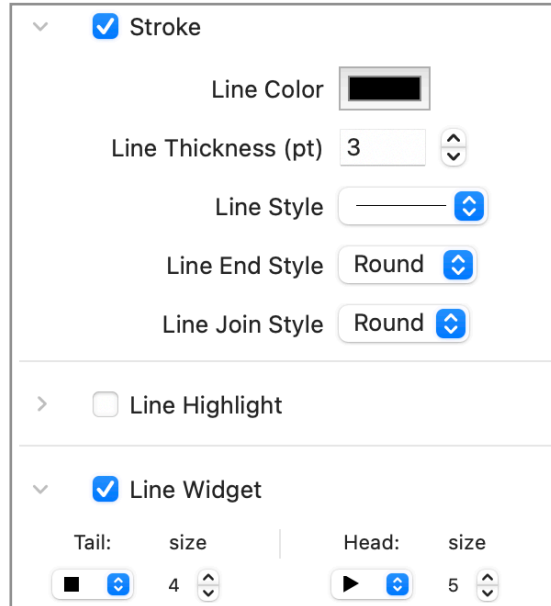
NOTE: We plan to add additional changes to this feature to allow different line end styles, and turning off/on highlight on inside/outside of a closed path as well as highlighting line widgets in the near future.

Line Widget

Line Widgets are available if stroke is enabled and the Line Widget checkbox is checked (see figure 6). Line widgets are just doodads like arrows, boxes or circles on either end of a line or path. The tail widget is on the end where you started the shape and the head widget is on the last point drawn. In Sample 2, the tail is the square and the head is the arrow.

Widgets can be attached to any line, open or closed shape and draw with the same color as selected in stroke.

The size of the widget is proportional to the line thickness.



Sample 2

Figure 6

Solid Fill

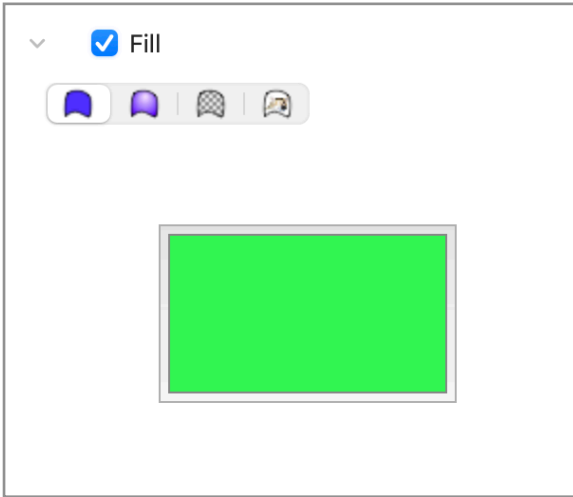
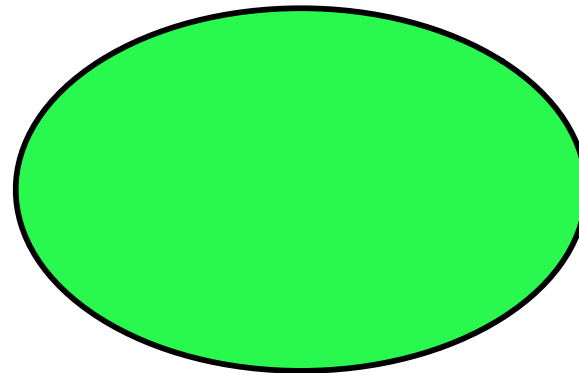


Figure 7

Solid fill is the simplest of the fills. Click the fill color selector to bring up the color selector.



Sample 3

Linear Gradient Fill

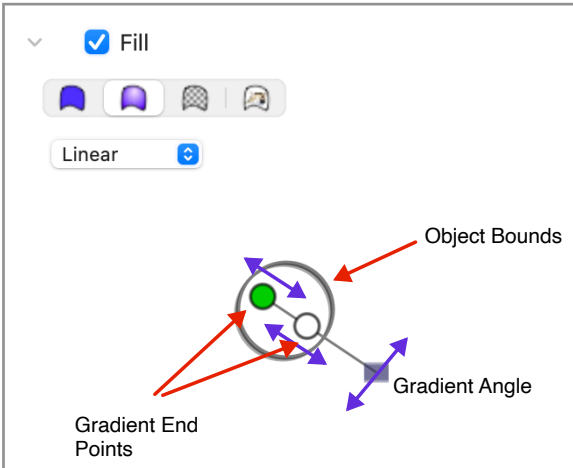
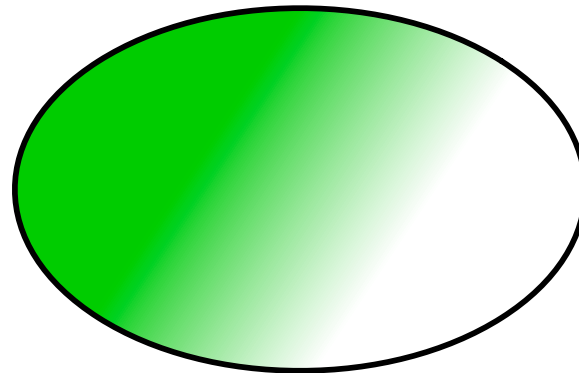


Figure 8

The linear gradient fill inspector is in the gradient fill panel and picked with the drop down menu.

The linear gradient fill inspector consists of a control that provides two end points and an angle handle. You adjust the gradient angle by moving the angle handle and the position of the end points by moving the round “knobs” in or out (see Figure 8). End points can extend from the center to well outside the object bounds allowing a smooth gradient.

End point colors are selected by clicking the end point to bring up the color selector and then select the color.



Sample 4

Radial Gradient Fill

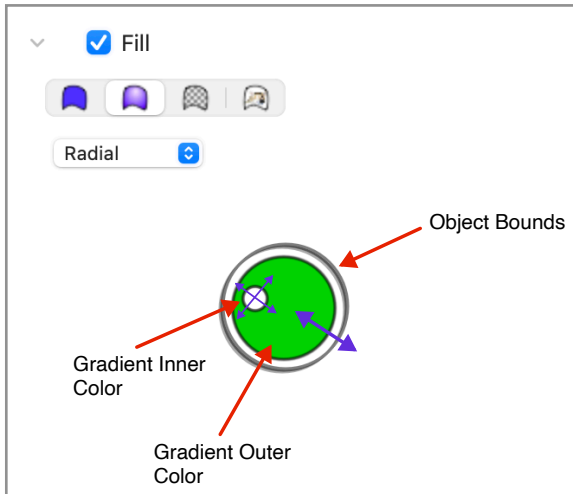


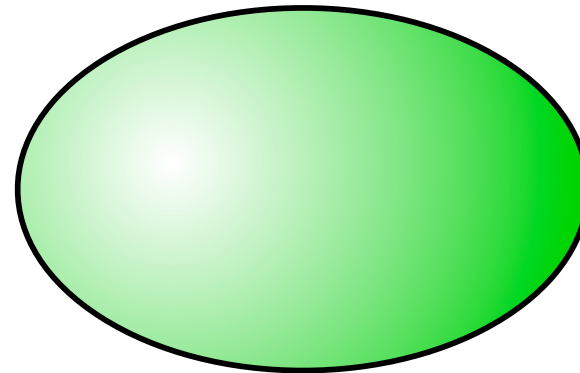
Figure 9

The radial gradient fill inspector is in the gradient fill panel and picked with the drop down menu (Figure 9).

The radial gradient fill inspector consists of a control that provides a gradient inner color knob and an outer color adjustment.

The inner color knob can be dragged to any position inside or outside of the object bounds and the color is selected by clicking the knob to bring up the color picker.

The outer color adjustment is made by click-dragging the edge of the outer color area in or out and can extend from the center to outside of the object bounds. The color can be set by clicking the outer color adjustment area to get the color picker.



Sample 5

Pattern Fill

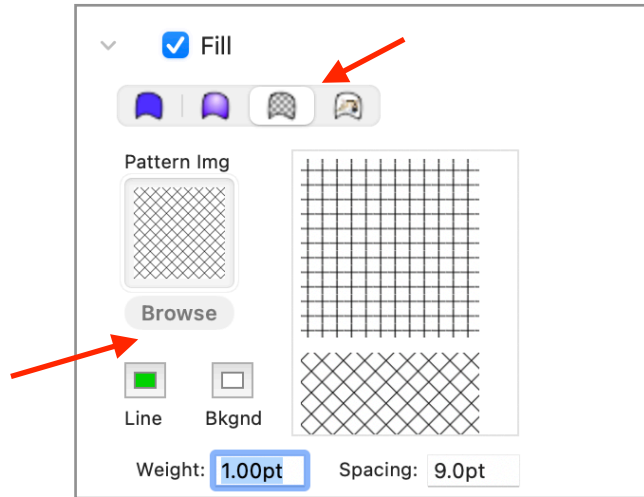


Figure 10

Known Issues that will be fixed in future releases:

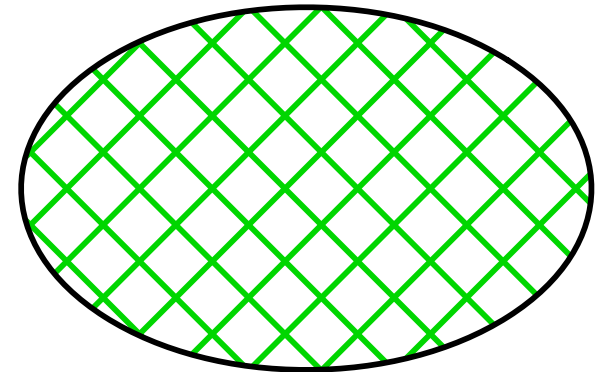
- You can no longer drag/drop an image file onto the image well.
- You can no longer adjust the x, y offset of the pattern.
- Selecting an image by browsing doesn't update the image well.

The pattern fill inspector allows you to set a repeating pattern as a fill on your object.

Select a fill type from the list or click “browse” under the pattern image view to select an image to use for the **repeating pattern** (see Figure 10).

Tip: You can create a pattern on the canvas and then export the selected pattern component as an image which you can then add as a fill pattern.

- Set the line color with the line color selector.
- Set the line weight with the weight field.
- Set the line spacing with the spacing field.



Sample 6

Image Fill

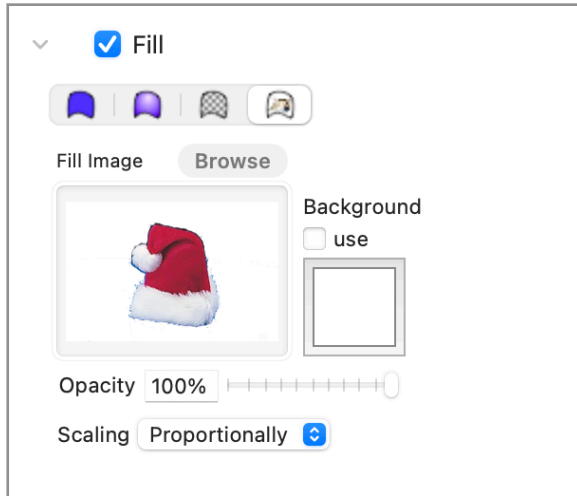


Figure 11

The image fill Inspector allows you to use an image as fill for the selected object (Figure 11).

- Set the fill image by browsing the file system or dropping an image file onto the image well.
- Set the background color (for images with transparent backgrounds by using the color well.
- Set the image opacity with the slider.
- Scaling Menu:
 1. Proportionally - maintains image dimensions ratio
 2. To Fit - scales the image to fit inside the object bounds
 3. None - doesn't scale the image

When using no scaling you can set the image center relative to the object by click-dragging on the image well.



Text

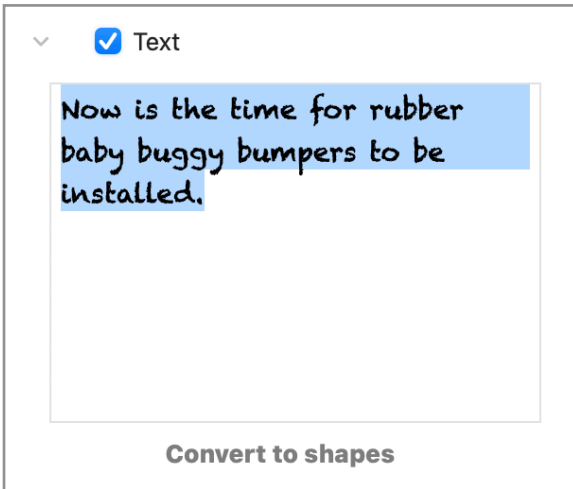


Figure 12



In versions of DoodleCAD before 1.7 the text inspector was presented in a popup that would appear when a text object was selected. To comply with recent changes to the OS, the text inspector has been moved into the inspectors panel with all the other property inspectors on the right side of the window.

With a text object selected on the canvas you can edit the text in the text inspector. The text inspector is not visible for non-text objects.

Tip: The font selector, font size, color etc. are currently exposed just below the toolbar when text is selected.

Tip: text can be converted to editable bezier paths. This is accomplished by clicking the “Convert to shapes” button below the text editor (see Figure 12). A group containing a shape object for each character is created and the original text is hidden.

The new shapes can be edited like any other shape.

Object Geometry

Reset the rotation value back to zero without unrotating the object itself.

The units to use for measurements.

Use slider or number entry field to adjust objects rotation.

Pick top or bottom dimension line

Pick left or right dimension line

Set offset of top or bottom dimension line.

Set offset of left or right dimension line.

Click drag the corner size knob to change objects width and height.

Click drag the rotation "knob" to rotate the object.

Click drag the vertical size knob to change objects height.

Click drag the horizontal size knob to change objects width.

the coordinates of the objects center and the size of the object.

Geometry

Units: Inches

Reset

Center X: 4.54 in

Center Y: 5.36 in

Width: 1.51 in

Height: 1.64 in

Dimension Lines

W: None

Offset: 0

Alternate Text

H: None

Offset: 0

Alternate Text

0.0°

Figure 13

Line Object Geometry

measurements.

Geometry

Units: Inches

Ends Length

Tail.x: 2.76 in y: 6.22 in

Head.x: 4.90 in y: 6.81 in

Dimension Lines

Is Dimension Line

Alternate Text

Position:

Orientation: Horizontal

Set the orientation of the dimension line label.

Click drag the center to drag the whole line.

Click drag end knob to move the lines end.

The x, y coordinates of the line ends.

Make the line a dimension line with a label and head and tail arrow heads.

Position of label between head and tail of the line.

The image shows a software interface for configuring a line object. The 'Geometry' section includes a 'Units' dropdown set to 'Inches', and two tabs: 'Ends' and 'Length'. Under 'Ends', there are input fields for 'Tail.x' (2.76 in), 'Tail.y' (6.22 in), 'Head.x' (4.90 in), and 'Head.y' (6.81 in). Below this is a 'Dimension Lines' section with checkboxes for 'Is Dimension Line' and 'Alternate Text', a 'Position' slider, and an 'Orientation' dropdown set to 'Horizontal'. A 3D model of a line with a center knob and two end knobs is shown at the bottom. Red arrows point from text annotations to these various UI elements.

Figure 14

Path Vertex Geometry

The image shows a software interface for editing path vertices. At the top, there is a 'Geometry' section with a dropdown arrow and a 'Units' field set to 'Inches'. Below this is a 'Path Controls' section with two icons: a smooth vertex and a cusp vertex. Further down are 'X' and 'Y' coordinate fields, both set to '3.90 in'. An angle dimension is shown as a circular arc with '90.0°' inside. Below the angle is a 'Dimension Lines' section with checkboxes for 'Vertex Dimension Arc' and 'Alternate Text', and an 'Offset' field set to '0'. At the bottom is a diagram of a square with a green path and several control points (blue and red).

The units to use for measurements.

Expand or collapse vertex controls.

Toggle between smooth or cusp vertex type.

Set x and y location of vertex.

Turn on the angle dimension for the selected vertex.

The angle from Point A to Point C around B. Point B moves while A & C stay fixed.

Use slider or text field to change angle subtended by vertex and the adjacent vertices.

Offset of vertex angle dimension,

Click drag the path vertex to move it.

Click drag vertex control point to adjust shape of path at selected vertex.

Figure 15

Path Segment Geometry

The image shows a software interface for editing path segments. The 'Geometry' section includes a 'Units' dropdown set to 'Inches', a 'From A to B' dropdown, and a 'Straighten' button. Below this is a 'Length' field set to '0.90 in' and a description: 'The angle from Point A to Point C around B. Point B moves while A & B stay fixed'. The 'Dimension Lines' section has a 'Segment Dimension Line' checkbox (unchecked), an 'Offset' spinner set to '0', and an 'Alternate Text' field. A diagram at the bottom shows a square frame with a green path segment and a red arrow pointing to it, indicating it can be moved.

Annotations:

- Set how the segment will be straightened. (points to 'From A to B')
- The units to use for measurements. (points to 'Inches')
- Adjust segment to horizontal, vertical or in between at 45 degree increments. (points to 'Straighten')
- Set length of segment numerically. (points to '0.90 in')
- Turn on segment dimension line. (points to 'Segment Dimension Line')
- Adjust the offset of the segment dimension line. (points to 'Offset: 0')
- Click drag selected path segment to move it. (points to the red arrow in the diagram)

Figure 16

Document Inspectors

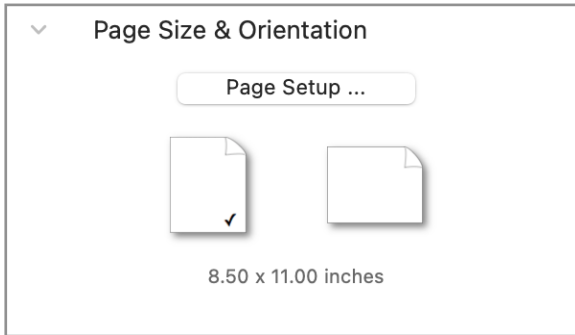


Figure 17

Page Size, Orientation & Margins

DoodleCAD documents are intended to be printed to standard paper sizes. To set the document size click “Page Setup...” to get the standard printer paper size selector.

To set landscape or portrait orientation click the appropriate page icon (Figure 17).



Figure 18

Document margins are set by selecting the appropriate field and entering the desired margins (Figure 18). You can tab from one to the other.

Tip: The units for margins are always in inches.

Canvas

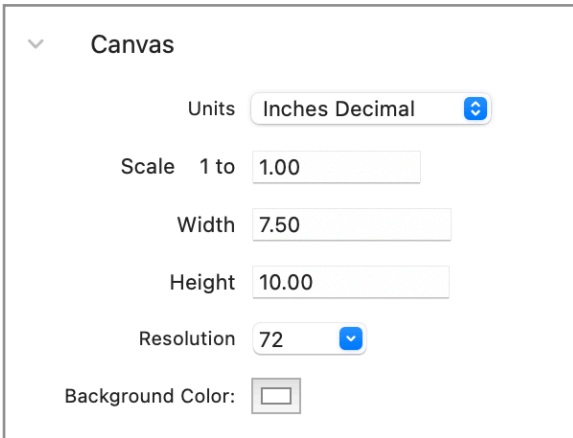


Figure 19

The Canvas inspector allows you to set the default units used by the canvas ruler as well as the scale of the canvas (Figure 19).

Canvas scale is a measure of how many units of object width or height (or ruler length) fit into one unit of actual screen width or height at 100% zoom. For example a scale of 1 to 4 means that something 4 inches wide fits into 1 inch of space on the canvas.

An easy way to set scale is figure out how big an area needs to fit on the page. For example setting the width to 100 feet to draw my backyard would set a scale of 1 to 160.

This inspector also sets the background color of the document.

Grids

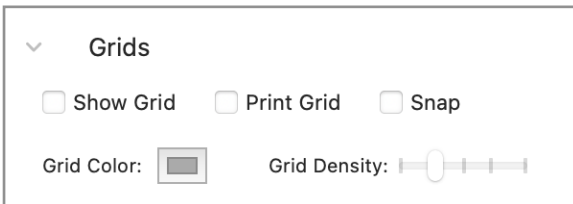
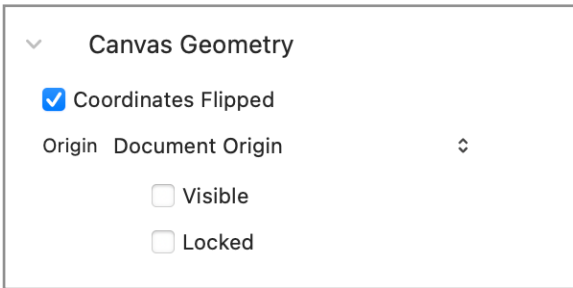


Figure 20

The grids inspector lets you turn on grids, allow the grids to print and also turn on limited snap to grid.

Grid color is set with the color well and how many subdivisions in the displayed grid is set with grid density.

Canvas Geometry



The canvas geometry inspector lets you set whether the coordinate system is flipped (origin in upper left corner) or not flipped (origin in lower left corner). You can also set where the origin, zero point, of the document is by selecting from the origin selector. Choices include document or margins origin or center or arbitrary. Arbitrary allows you to move the origin marker by click dragging it to where you want it.

Figure 21

Tip: All measurements on the canvas rulers as well as object coordinates are measured from the canvas origin.

Dimension Lines



The Dimension line inspector lets you specify the exact characteristics of all dimension lines on the canvas.

Offset units is the distance the dimension lines move when setting the offset of a dimension line.

Other settings are the dimension arrow style, arrow head size, color, line weight and font for labels (Figure 22).

Figure 22

How To's

Using the Text Tool

Earlier versions of DoodleCAD employed a popup window near the selected text. Later versions of the MacOS caused strange artifacts in the popup window, making the tool unusable. In this version, we moved text editing into an inspector in the inspectors panel on the right side of the document window which is more consistent with all the other property inspectors (See Figures 23, 24, 25).

Placing New Text

- Using the text tool click-drag a new text object on the screen and then select the text in the editor to edit. You can paste text that you have copied from somewhere else into the editor.
- Copy text from some other application, eg Text Edit, Preview, Mail, Safari etc. and paste it into DoodleCAD. You can just click on the canvas with the selection tool to be sure DoodleCAD is the active application and then paste. A new text object will appear on the canvas with the copied text in it.
- Select text in another application, eg Text Edit, Preview, Mail, Safari etc. and then drag from that application to the DoodleCAD canvas. A new text object with that dropped text will be created.
- Open the finder and drag a text file onto the canvas. A new text object will be created with the contents of the file.

Editing Text

With no text object selected there are no text related fields below the toolbar (see figure 23)

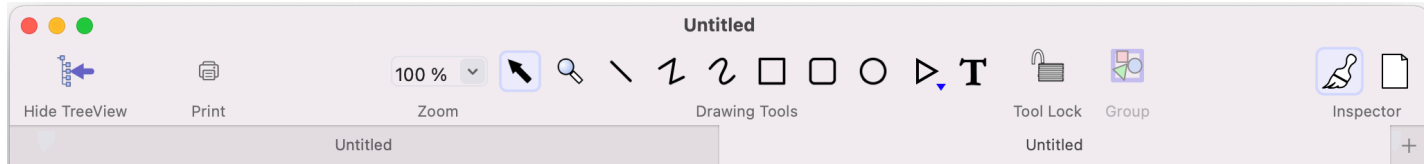


Figure 23

With a text object selected, text related elements will show below the tool bar (see figure 24).

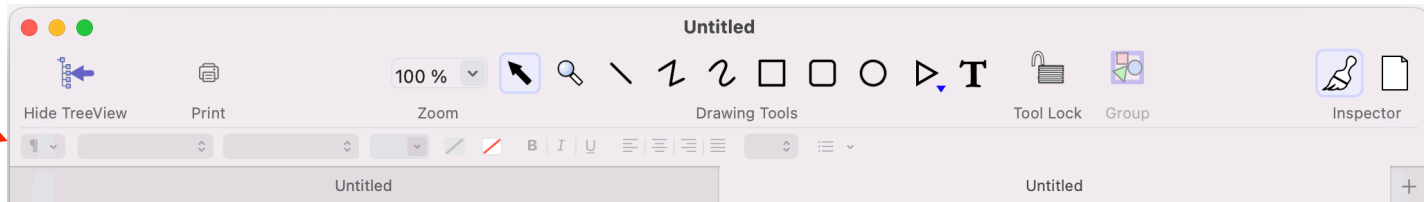


Figure 24

To edit your text, select the text you want to change. This will **enable** the text related elements (Figure 25).

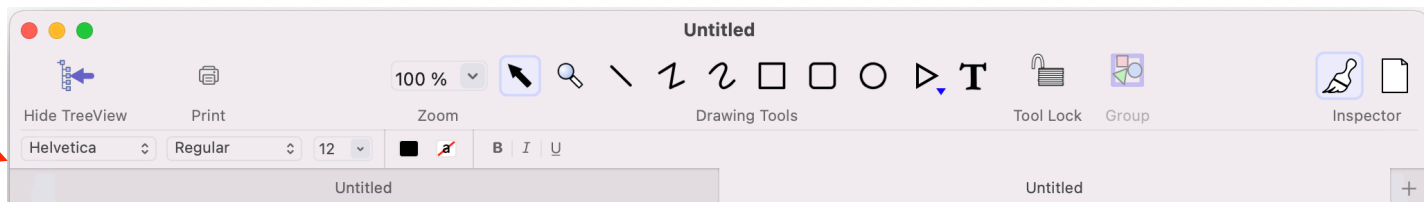
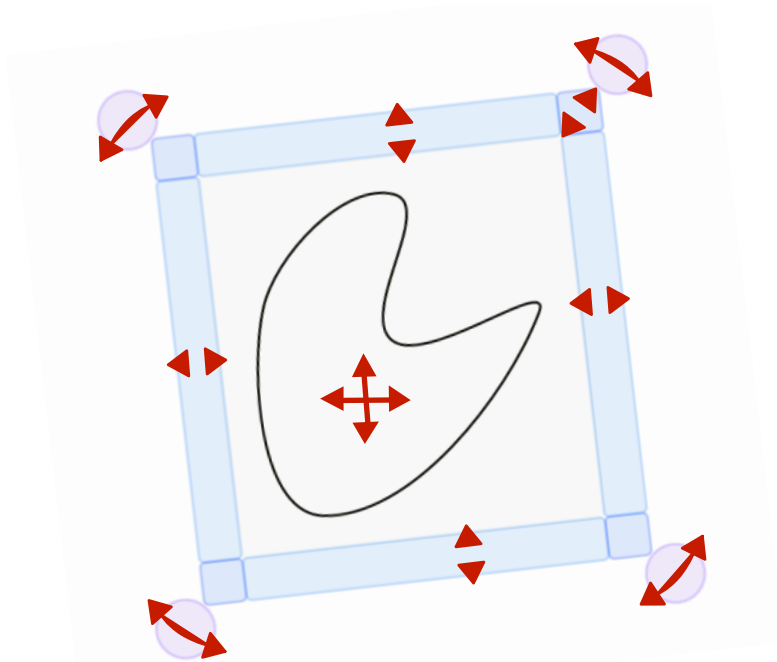


Figure 25

Shape Editing

Basic Object Editing



Sample 8

When a single object is selected on the canvas it is surrounded by a control widget that provides handles for moving, scaling and rotating the object by dragging on the parts of the control widget.

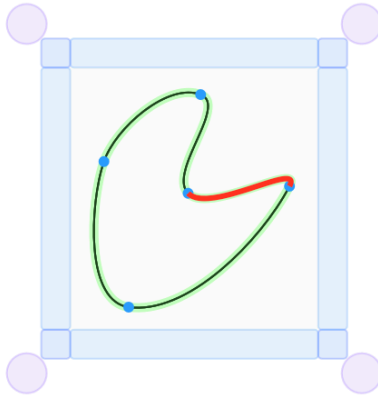
As you become familiar with selecting and editing objects on the canvas you will discover that the controls for scaling scale correctly regardless of the rotation of the object.

Path Editing

When an object is selected on the canvas you will notice that the cursor changes to a pen nib (Figure 26) when over the objects path (shapes are bezier paths). When you see the pen nib you can click on the path to select it as in Sample 9. Depending on where you click you will see either a vertex (Sample 10) or a segment (Sample 9) selected and shown in red.



Figure 26



Sample 9

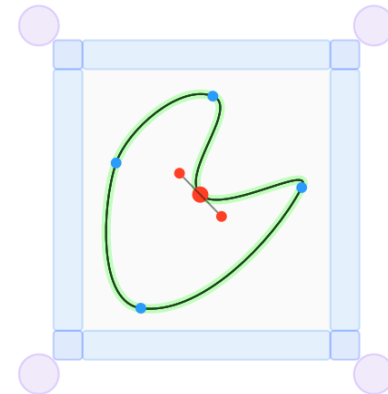
When editing a segment on the canvas you are limited to just dragging the segment to move it.

You can also delete a selected segment by using delete on the keyboard. In the geometry editor you can also set the length of a segment and also do operations like straighten.

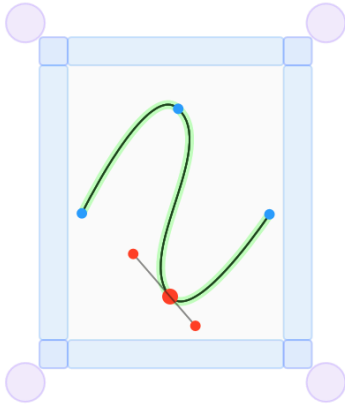
If you right-click over a segment you get a contextual menu with path operations at the bottom. One of the choices is to offset a segment by adding new vertices at either end and moving the segment a small amount.

Shown in the bottom illustration is a selected vertex. Vertex points in DoodleCAD have an important characteristic which is that they are either smooth as in the illustration or cusp. When a vertex is smooth (continuous), the

control points are linked together so that the path through the vertex is always smooth. When the vertex is a cusp (discontinuous) the controls are not linked which allows a pointy line.



Sample 10



Sample 11

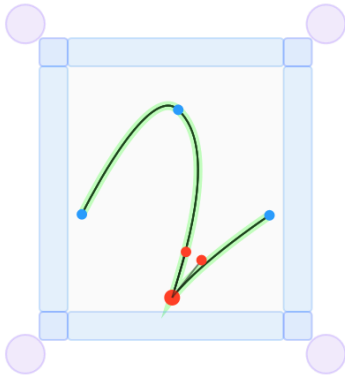
In Sample 11, you see a selected vertex that is smooth (continuous) with expanded controls. In the geometry inspector for the vertex you will see the vertex type controls below.



The vertex type selector is showing that you can make the vertex discontinuous by clicking the button.



The expand/collapse button is showing that you can collapse the controls by clicking the button.



Sample 12

In Sample 12 the selected vertex has been changed to a cusp (discontinuous) type and the controls moved to illustrate that they are no longer connected.



The vertex type selector is showing that you can make the vertex continuous by clicking the button. This will move the controls so they are all in a line forming a smooth curve.



The expand/collapse button is showing that you can collapse the controls by clicking the button.

Group/Ungroup



Grouping and ungrouping is a basic operation found in any graphics application and DoodleCAD works the same way as most others.

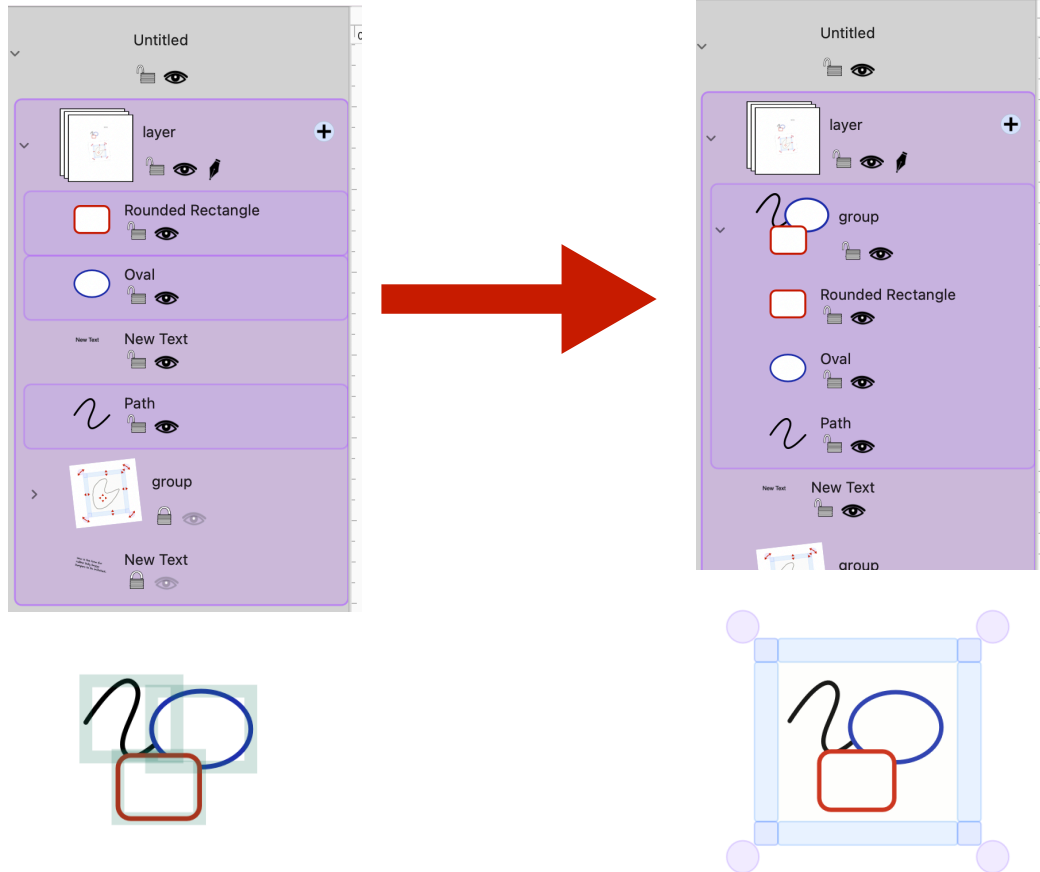


Figure 26

Purchase Options

Most capabilities are available in the free version of DoodleCAD so you can learn all the ins and outs of the application. The only limits on **the free version are you will not be able to export, copy or print** your DoodleCAD document.

Purchasing DoodleCAD **enables the ability to export, copy and print** your DoodleCAD documents.

Current Subscription Status

The current subscription status is indicated at the top of the inspectors panel on the right side of the document window (Figure 27). This area will show purchased, subscribed or locked states as well as buttons for unlocking if appropriate.

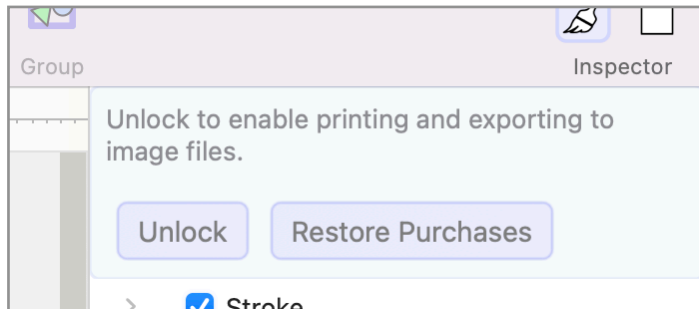
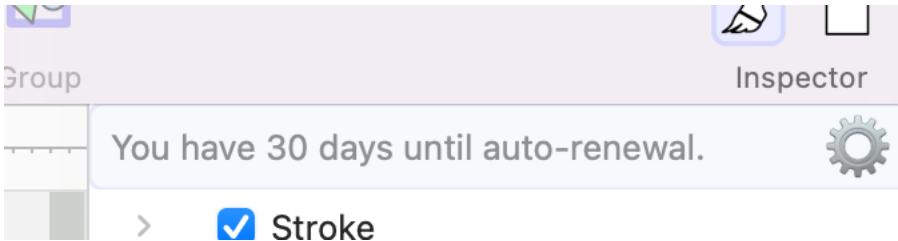


Figure 27

When you first start using DoodleCAD it will be in a locked condition. Occasionally an application can be purchased but it thinks it's not. For this reason Apple requires all developers to provide a "Restore Purchases" button that can be used to reload the purchase receipt in the case where the user believes that they have purchased the application.

Subscribed



If you have subscribed to the application to unlock it for one month you will see this. In versions of DoodleCAD before v1.7 the subscription was a single one month rental that had to be renewed manually each time. Because of the number of

Subscription Status

users who have indicated a preference for an auto-renewing subscription we have switched to that. In the image on the left you can click the gear icon on the right of the label to cancel your subscription.

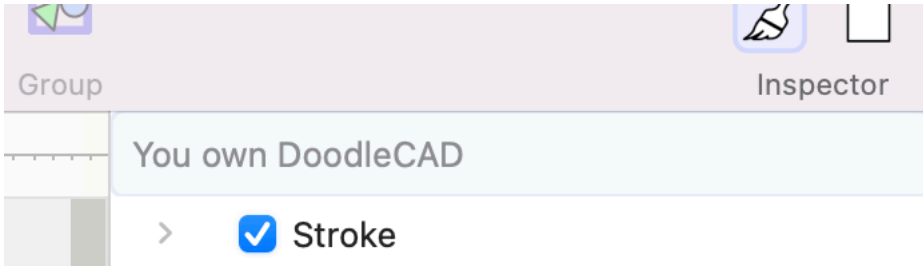
Clicking the gear icon opens the “Manage Subscriptions” panel of the Mac App Store. Subscriptions, including the DoodleCAD subscription, can be cancelled or restarted from this panel on the Mac App Store. To get to the subscriptions panel yourself open App Store, click the user icon on the lower left corner of the App Store window or the menu Store -> View My Account.... When the Account info window opens click the “View Information” button near top right of the window. Regardless of how you get here you may be asked to sign in to your account.

Once in the “Account Information” panel scroll to the bottom and click the wee blue “manage” button to the right of the “Subscriptions” line in the “Manage” panel. This will take you to the manage subscriptions panel.

Or just click the gear icon.

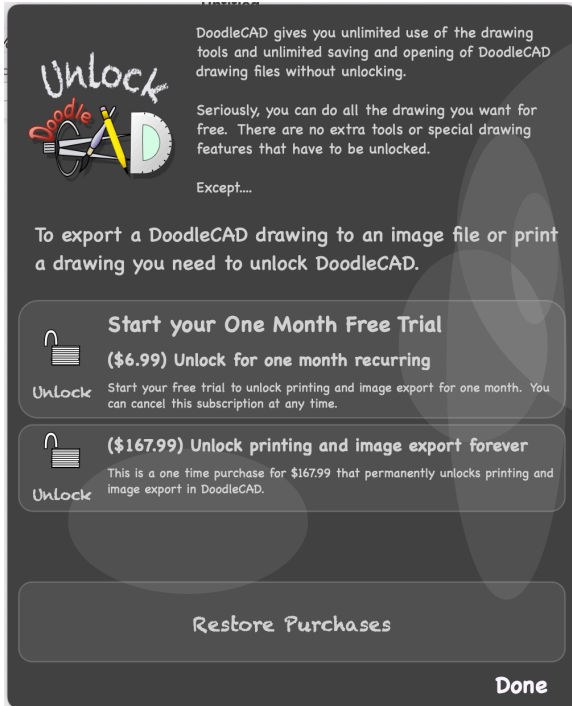
One time purchase

If you made the one-time purchase of DoodleCAD you should only ever see the “you own DoodleCAD” text in the view. If you see anything else click the “Restore Purchases” button.



Purchase

New User



If you are a new user you will see the panel to the left when you click the “Unlock” button in the document window. This panel explains what you get when you unlock. It’s worth repeating that virtually every capability of DoodleCAD is free to use regardless of whether you have purchased DoodleCAD or not. You don’t need to unlock DoodleCAD in order to make drawings. There are no extra tools or capabilities that you get when you unlock.

The reason for this policy is that the DoodleCAD file is proprietary and can’t be imported or opened in any other application. You can draw anything you want in as many projects as you want without unlocking anything because the file isn’t useful outside of the DoodleCAD application.

If you want to share your masterpiece with others by printing it or exporting it to an image file or even copying it and pasting to another application you have to unlock DoodleCAD.

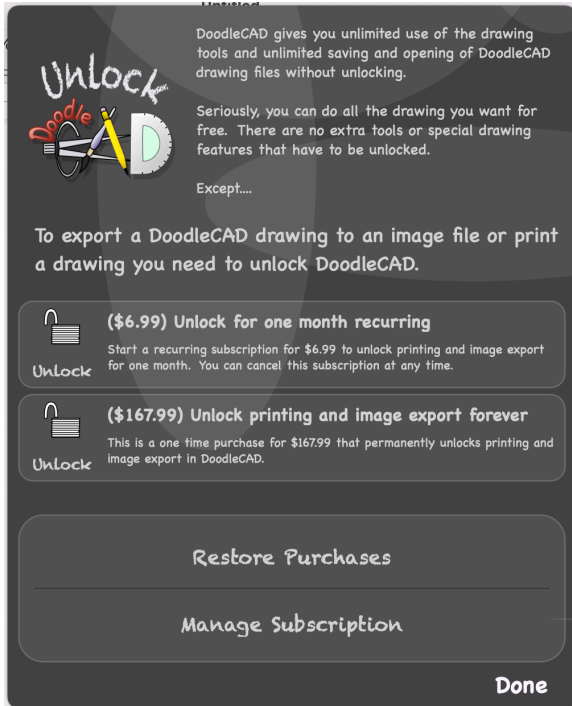
If you’ve never subscribed to DoodleCAD before you get a one month free trial at the beginning of your auto renewing subscription. As explained above you can cancel your subscription at any time.

While you do have the option of purchasing DoodleCAD, subscribing is the recommended way to unlock DoodleCAD when you are a new user since it’s a very inexpensive way to get

the print and export features. If at some point you decide that you really like DoodleCAD and want to purchase it just cancel your subscription and then when you reach the end of the current subscription period click “Unlock” and purchase DoodleCAD.

It is very important to note that, depending on how much time was remaining on your current subscription period, it can take up to 30 days for the option to unlock DoodleCAD to reappear. Be patient.

Past Subscriber



If at some point you decide to cancel your subscription to DoodleCAD you can always restart it by either clicking the unlock button for the “unlock for one month recurring” product or going to “Manage Subscriptions” by clicking the button at the bottom of this panel and restarting the recurring subscription there.

Also, as explained above, you can make a one-time purchase of DoodleCAD that permanently unlocks printing, image export and copy paste to other applications.