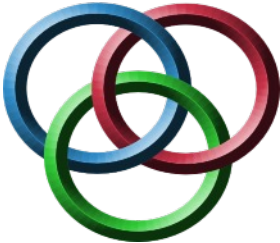


An easy way to draw interlocking rings using basic shapes and the Paste Inside command. You will also use various options on the Effects Panel and the Edit menu.

## LINKING RINGS.

This tutorial is written at a Beginner + level which assumes you know where to find the various tools and commands within the program.

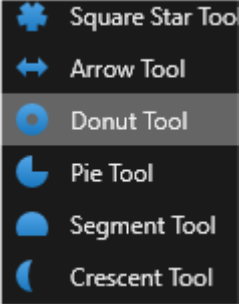


We are going to make a set of three locking rings using the Paste Inside command.

### LETS GET STARTED

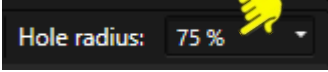
Open a new document, size 600 by 600 pixels and DPI 72.

Click the **Shapes** down-arrow on the left toolbar to show the list of shapes. Select the **Donut** shape for this project.



Hold the **Shift Key** and drag out a 300 pixel donut at the top of the document near the left hand side.

On the **Context** toolbar, change the **Hole Radius** to 75



In this tutorial we will be using the **HSL Colour Wheel** to select three bright colours for our rings. This will make it easier to see how the process works.

We will be using a bright blue, bright red, and a bright green colour as we work through creating our rings.

Set your **Fill** colour to blue a bright blue. **Stroke** is set to none.

In the **Effects** panel, check **Bevel/Emboss**, then click the small cog icon to open the **Layer Effects**.

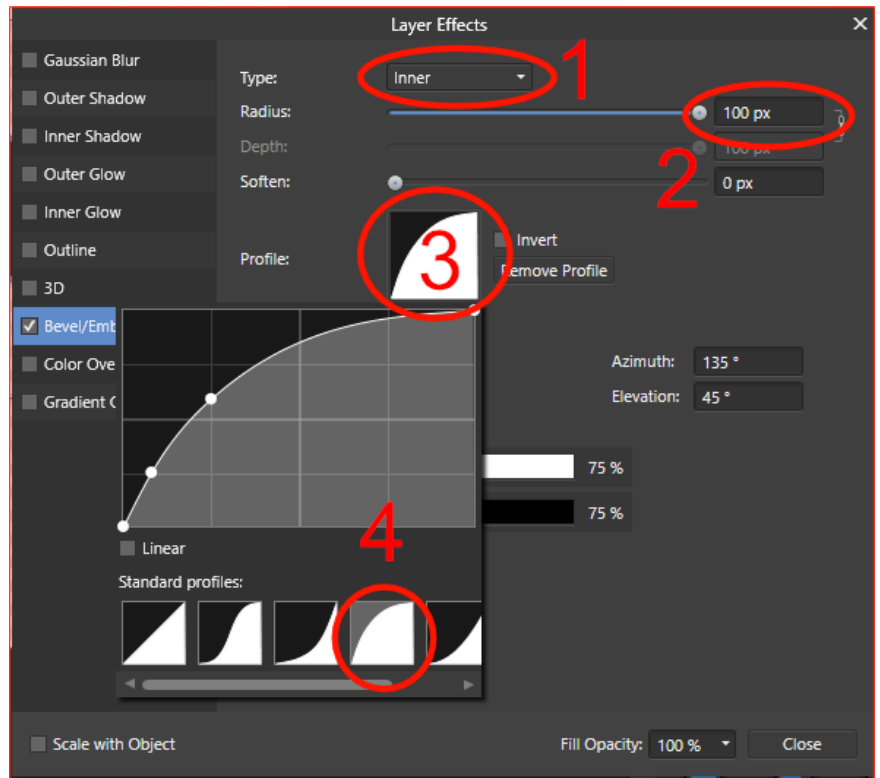


### ADDING A HIGH BEVEL TO THE RING

1. Change the **Type** to Inner
2. Change the **Radius** to 100
3. Click inside the black **Profile** box to display the various preset profiles.

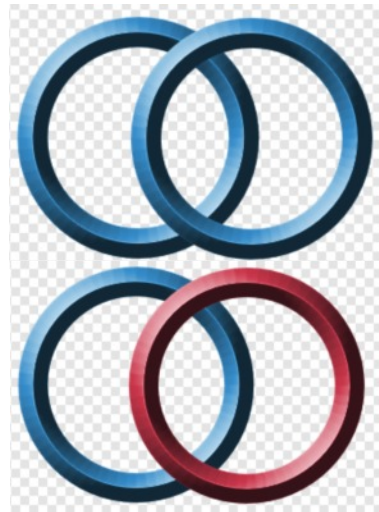
4. Choose the fourth bevel from the left

Your ring should look similar to the one below.



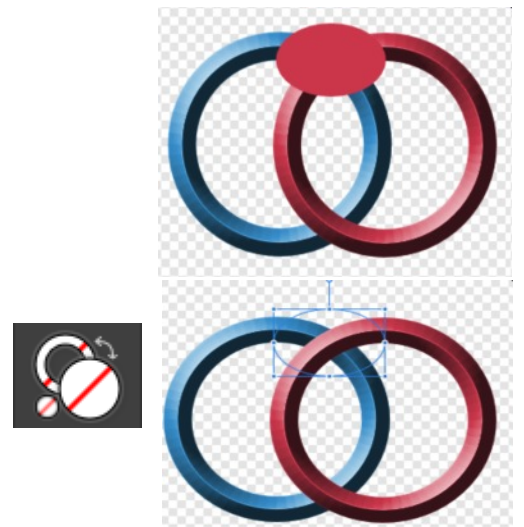
Hold the **Ctrl** down and with the **Move** tool, drag a copy of the ring across and place it so it overlaps by about half.

Change the colour of the second ring to **red** by clicking anywhere in the outer ring of the **HSL Colour Wheel**. This will affect only the **Hue**.



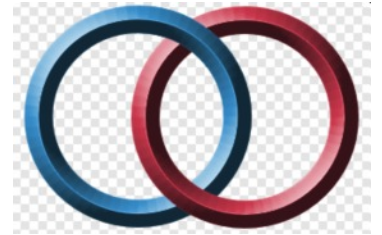
## LINKING THE RINGS

1. Click on the **blue** ring to select it.
2. Right-click and choose **Copy**.
3. Click the very top layer in the **Layers** panel (in this case it is the red ring).
4. Select the **Ellipse** shape from the toolbar and draw out a small ellipse over the section that we want to interlock.
5. In the **Colour** panel, set the **Fill** to none.
6. Go to the **Edit** on the top menu and select **Paste Inside**.



Your rings should now be interlocked and should look like this.

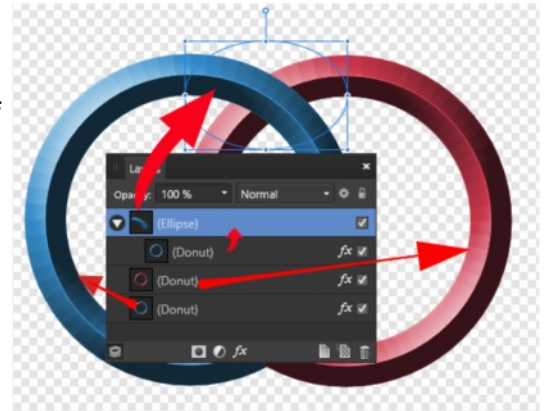
### WHAT THE.... What just happened??



We clipped the blue copy of the ring to the small ellipse.

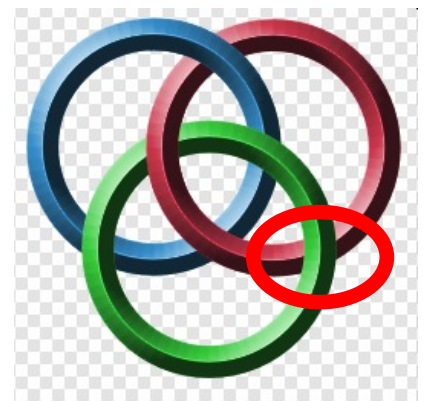
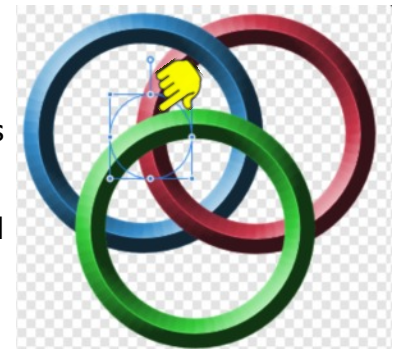
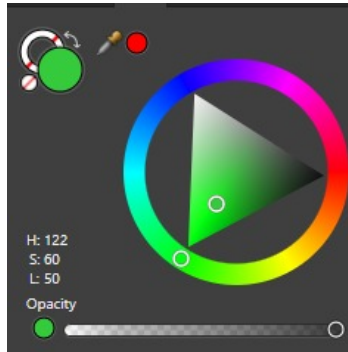
If you open your ellipse in the **Layers** panel, you will see the whole ring but because it is clipped to the ellipse, it covers a small part of the red ring.

You don't have understand it at this point. It will work if you follow the steps. After doing it a few times, it will become clear how this works.



### MORE LINKING

1. Hold the **Ctrl** down and with the **Move** tool, drag a copy of the red ring to make another ring.
2. Place it at the bottom but overlapping the blue and red ring by about half.
3. Change the **Fill** colour to a bright green by clicking on the outer ring of the **HSL Colour Wheel**.
4. Click on the **red** ring to select it.
5. Right click and choose **Copy**.
6. Click the very top layer in the **Layers** panel (in this case it is the green ellipse)
7. Select the **Ellipse** shape from the toolbar and draw out a small ellipse over the section that we want to interlock.
8. In the **Colour** panel, set the **Fill** to none.
9. Go to the **Edit** on the top menu and select **Paste Inside**. This is known as a Hopf link, all rings are linked to one other ring.



For the next step, click the top layer again to activate it.

Draw another **Ellipse** over the area indicated in this sample .

Go to **Edit** on the top menu and select **Paste Inside**.



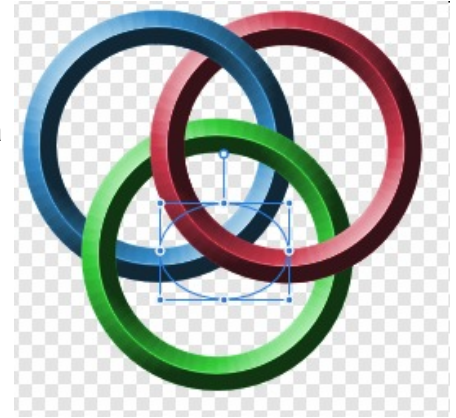
And now, for the final step.

With the **Move** tool click the **blue** ring, right click and **Copy**.

Click the top layer in the **Layers** Panel and draw an **Ellipse** over the area indicated in this sample .

Go to the **Edit** on the top menu and select **Paste Inside**.

This is known as Borromean Rings, any two rings are linked together with the third ring.



### TIPS

If this process doesn't seem to work check that you have your transparent ellipse at the very top of the **Layers** panel

If you have not clicked the top Layer before drawing your Ellipse you will find it further down the layers stack OR within another ellipse.

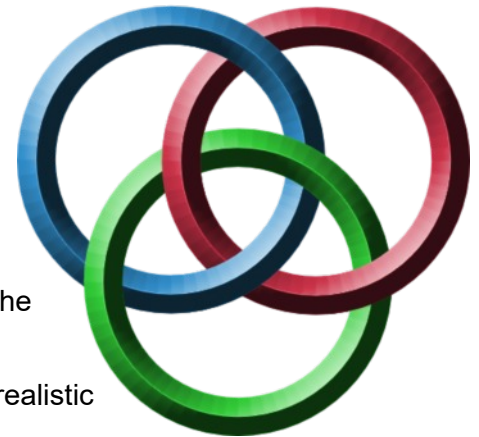
Always click the top layer before drawing the Ellipse

These are the interlocking rings I made for the tutorial.

Once you are comfortable with these steps you can make any combinations you can think up

The second sample has an outer shadow applied to the first shape, then the shape was duplicated.

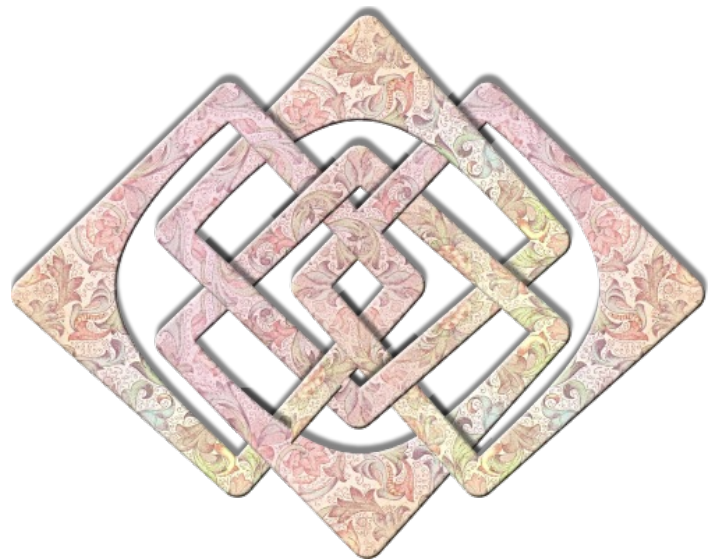
When copied and pasted inside, the shadow is copied and gives a more realistic look to the over and under illusion.



What ever you decide to link,

Have fun!

Love, Teejay x



---

You're invited to join the [PIRCForum](#). This is an active forum for Affinity Designer for Windows users. You'll find a wonderful group of warm, friendly, talented, and knowledgeable people who are ready and willing to share their expertise with you. There are creative activities for all skill levels. This forum is "family friendly", 100% free, and everyone is welcome.