

# Corel TUTOR™



## Animation Basics

Welcome to Corel R.A.V.E.™, a powerful object-based animation program designed for creating animated graphics.

### What you will learn

In this tutorial, you will learn some animation basics, and how to implement them using Corel R.A.V.E. As you create and animate simple objects, you'll learn how to



- ! create a movie
- ! change a movie background
- ! set and change the life span of objects
- ! tween an object
- ! tween an object along a path
- ! create animated vector effects
- ! animate blends

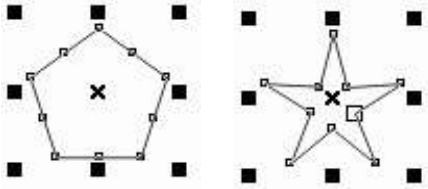
### Start a movie project from scratch

The animation projects you create in Corel R.A.V.E are called movies. You'll begin by starting a new movie project. Then, you'll create an object for the new movie--you'll draw and color a star.

1. Click **File** menu ► **New**.  
A new stage displays. The default stage size is 500 x 500 pixels.

*Stage: definition*  
*The area of the drawing window indicated by a white rectangle with a drop shadow.*


2. Open the **Object** flyout , and click the **Polygon** tool .
3. Drag to draw a polygon in the top-left corner of the stage.
4. Holding down **CTRL**, pull one of the midpoint nodes toward the center of the polygon to turn it into a symmetrical star.



5. On the color palette, click the yellow color swatch to make the star yellow.
6. Open the **Outline** flyout , and click the **No outline** button .

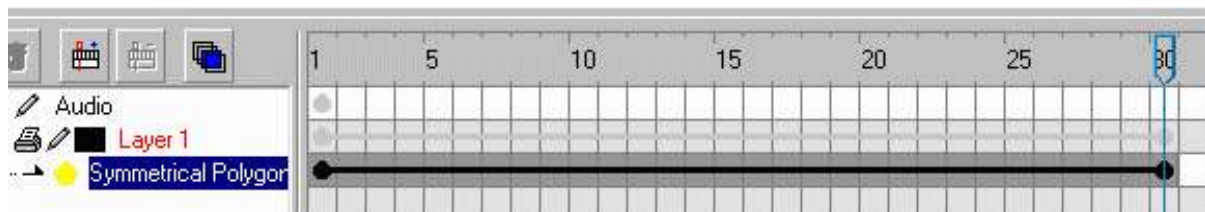
## Increase the life span of a new object

All new objects have a life span of one frame--they display for the duration of a single frame only. You'll extend the star's timeline to increase its life span. Currently, the star's timeline is represented by a black dot in the **Timeline** Docker window.

1. Using the **Pick** tool , click the star on the stage to select it.
2. In the **Timeline** Docker window, click the star's timeline (the black dot) and drag it to frame 30.

*Timeline - definition*  
The graphical representation of an object's existence in a movie.

This is how the star's extended timeline should look:



## Tween an object




Tweening lets you animate objects quickly by changing one or more object properties only at specific points during a movie. An object that is animated by tweening is called a tween.

To tween the star, you'll first add keyframes to its timeline; then you'll change the star's size and position at one of the keyframes. Corel R.A.V.E. will automatically apply the changes to the star between the keyframes, and produce an animated star that moves and expands during the movie.

Before starting this procedure, ensure that the star is still selected and the playhead is still on frame 30.

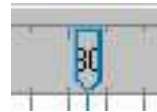
1. Click **Movie** menu ► **Insert keyframe**.  
A keyframe is inserted in the object's timeline at frame 30. Note that Corel R.A.V.E. automatically added a keyframe at frame 1 in the star's timeline.  
This is how the star's timeline should look now:



2. On the stage, drag a corner selection handle outward to increase the size of the star proportionally.
3. Drag the enlarged star to the bottom-right corner of the stage.
4. On the movie control panel , click the **Play** button  to preview the animation. The star grows while moving from the top-left corner of the stage to the bottom-right.
5. On the movie control panel, click the **Stop** button  to stop the preview.

### *Keyframe - definition*

*A frame in which you define change in an object. A square in an object's timeline indicates a keyframe.*





*The playhead lets you navigate through a movie.*

### *Selection handles - definition*

*A set of eight squares that appear at the corners and sides of an object when the object is selected. By dragging individual handles, you can scale, resize, or mirror the object.*

## Tween an object's fill

You've tweened the star's position and size to create a motion effect. Now you'll tween the star's fill to make the star change color during the movie.

1. In the **Timeline** Docker window, click the keyframe at frame 30 in the star's timeline.
2. On the color palette, click the blue color swatch.
3. On the movie control panel, click the **Play** button  to preview the animation.  
The star gradually changes from yellow to blue while moving and growing.
4. Click the **Stop** button  to stop the preview.




*Fill - definition*

*A color, bitmapped image, fountain, or pattern applied to an object.*

## Move an object along a path


When you tweened the star's position earlier, you produced a star that moved along a straight line from its original position to a new position. Now you'll create an elaborate path and make the star move along it.

## Create a path


1. Drag the playhead to frame 1.
2. Open the **Curve** flyout , and click the **Freehand** tool .
3. From the **Outline width** box on the property bar , choose **Hairline** to be able to see the path you'll create.
4. On the stage, drag to draw an irregular line from the top-left corner to the bottom-right corner.

*If you can't see the **Outline width** box:*



*You may want to expand the application window to see the whole property bar. You can do that by clicking the **Maximize***

*button  in the upper right corner of your application window.*

*When you want to return to this tutorial, click the*

***Restore** button  in the upper right corner of your expanded application window.*

## Attach the star to the path

1. Using the **Pick** tool , click the object name **Polygon** in the **Timeline** Docker window to select the star tween.
2. Click **Movie** menu ► **Attach to path**.  
The pointer changes into a curved black arrow.
3. Click anywhere along the path.
4. On the property bar, click the **Sets the tween to occur along full path** button  to make the star follow the entire length of the path.

## Preview the animation

1. On the movie control panel, click the **Play** button.
2. Click the **Stop** button.  
The star now moves along the path you created, but the path itself displays briefly during the movie. You need to make the path invisible.

## Make the path invisible

1. Drag the playhead to frame 1.
2. Using the **Pick** tool, click the path on the stage to select it.
3. From the **Outline width** box on the property bar, choose **None**.

Save the movie if you want to, and then close the file.

## Start a new movie



Now, you'll start a new movie. By default, a movie background is white, but you can change it to

any solid color. You'll make the movie background black, then create a yellow star similar to the one you created in the first movie.

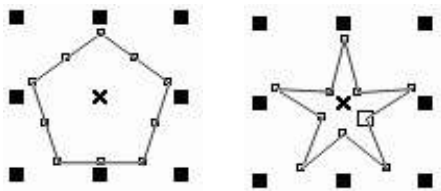
## Change the movie background



1. Click **File** menu ► **New**.
2. Click **Movie** menu ► **Movie setup**.
3. In the list of categories in the **Options** dialog box, click **Background** (under **Movie setup**).
4. Open the **Solid** color picker, and click the black color swatch.
5. Click **OK**.

## Create a star

1. Open the **Object** flyout , and click the **Polygon** tool .
2. Draw a polygon in the center of the stage.

3. Pull one of the midpoint nodes toward the center of the polygon to turn it into a star.



4. On the color palette, click the yellow color swatch to make the star yellow.
5. Open the **Outline** flyout , and click the **No outline** button  to remove the star's outline.

## Animate vector effects

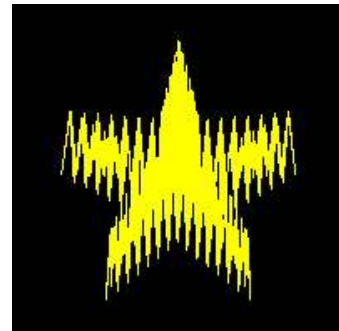
### Distortion effects

Next, you'll apply vector effects to the star over time. To begin, you'll increase the life span of the star and apply a zipper distortion effect, so that the star changes shape over time. You'll preview the animated distortion effect and then undo the effect.

1. In the **Timeline** Docker window, click the star's timeline (the black dot) and drag it to frame 30.
2. Click frame 15 in the star's timeline.  
If the star gets deselected, click the object name **Polygon** to select it.
3. Click the **Insert keyframe** button .  
A keyframe is added to the star's timeline at frame 15. Also, keyframes are added to the start and end frames of the star.
4. Open the **Interactive tools** flyout , and click the **Interactive distortion** tool .
5. From the **Presets** list box on the property bar, choose **Zipper 2**.
6. Click the **Play** button  to preview the animated zipper effect.
7. To stop the preview, click the **Stop** button .
8. Click **Edit** menu ► **Undo distortion**.

#### *Zipper distortion - definition*

*Lets you apply a saw tooth effect to the edges of an object. You can adjust the amplitude and frequency of the effect.*






*This is what the effect should look like.*

You are now ready to experiment with other distortion effects.

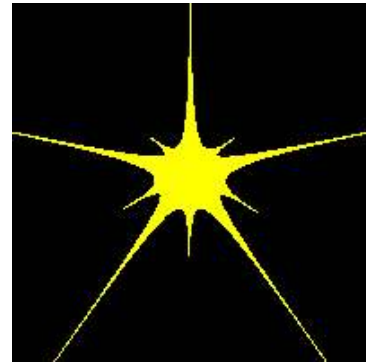
## Animate other distortion effects

Next, you'll apply two other distortion effects to the star over time--push and pull, and twister.

1. Click the keyframe at frame 15 in the star's timeline.
2. Open the **Interactive tools** flyout , and click the **Interactive distortion** tool .
3. From the **Preset** list box, choose **Push-pull 1**.
4. Click the **Play** button to preview the animated effect.
5. Click the **Stop** button.
6. Click the keyframe at frame 15 in the star's timeline.
7. On the property bar, click the **Clear distortion**  button to remove the push and pull distortion.
8. From the **Preset** list box, choose **Twister 2**.
9. Click the **Play** button to preview the animated effect.
10. Click the **Stop** button.
11. Click **Edit** menu ► **Undo distortion**.

### *Push and pull distortion - definition*

*Lets you push the edges of an object in, or pull the edges of an object out.*



### *Twister distortion - definition*




*Lets you rotate an object to create a swirl effect. You can choose the direction of the swirl, as well as the origin, degree, and amount of rotation.*





## Animate an envelope effect

In this procedure, you'll change the star's shape over time using an envelope.

1. Click the keyframe at frame 15 in the star's timeline.
2. Open the **Interactive tools** flyout , and click the **Interactive envelope** tool .
3. Move the envelope's nodes to shape the star any way you like.
4. Click the **Play** button to preview the animation.
5. Click the **Stop** button to stop the preview.
6. Click the keyframe at frame 15 in the star's timeline.
7. On the property bar, click the **Clear envelope** button  to remove the envelope effect. You are likely to notice that the star's position on the stage has changed.
8. Double-click the keyframe at frame 15 to delete it. This ensures that the star remains in the same position on the stage during the movie.

### *Envelope - definition*




*A series of segments connected by nodes. You can move the nodes of an envelope to conform an object to the envelope's shape.*

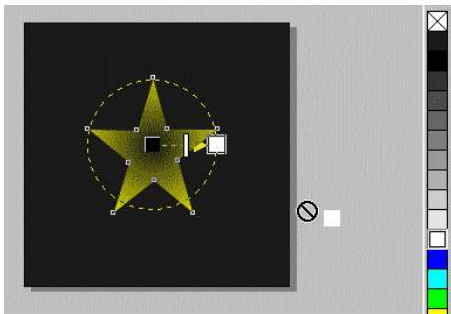


Next you'll apply a transparency to the star.

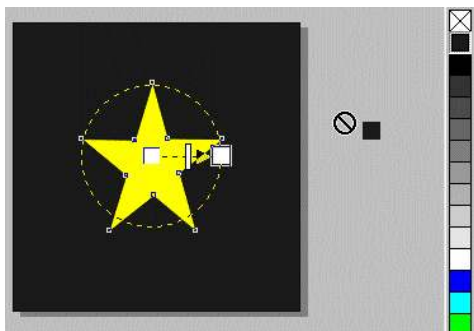
## Animate a transparency

Next, you'll apply an animated transparency effect to the star, so that it appears to pulsate. First, you'll decrease the star's life span and insert another keyframe in the star's timeline. Then, you'll apply a transparency to the star at the new keyframe. Last, you'll reverse the transparency, so that the star's center retains its opaqueness.

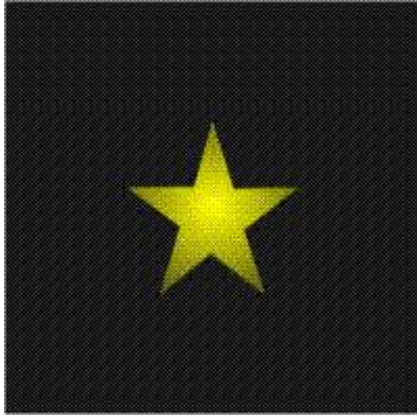
1. In the **Timeline** Docker window, click the keyframe at frame 30 in the star's timeline and drag it to frame 10.
2. Click frame 5 in the star's timeline, and click the **Insert keyframe** button  to add a keyframe.
3. Open the **Interactive tools** flyout , and click the **Interactive transparency** tool .
4. From the **Transparency type** list box on the property bar, choose **Radial**.
5. From the color palette, drag white to the start vector handle as shown below, and when the white square changes to a cursor, release the mouse button.



6. From the color palette, drag black to the outward vector handle as shown below, and when the black square changes to a cursor, release the mouse button.



7. Click the **Play** button  to preview the animation.  
The star appears to fade in and out.




8. Click the **Stop** button  to stop the preview.

## Animate a blend







Corel R.A.V.E. lets you animate blends to produce animated objects that transform their shape. In this procedure, you'll create a moving blend--you'll make the star change into a square as it moves across the stage. First, you'll delete all keyframes from the star's timeline and decrease the star's life span to make it display in one frame. Next, you'll draw a square and blend it with the star. Last, you'll animate the blend.

### Delete keyframes and change an object's life span

1. In the **Timeline** Docker window, click the keyframe at frame 10, and then click the **Delete keyframe** button  to delete the keyframe.
2. Repeat the previous step to delete the keyframe at frame 5 in the star's timeline.
3. Drag the black dot at frame 5 to frame 1 to decrease the life span of the star to one frame.






*Blend - definition*  
*An effect created by blending one object with another through a progression of shapes and colors.*

## Create a moving blend

1. Using the **Pick** tool , drag the star to the top-left corner of the stage.
2. Hold down **CTRL** and, using the **Rectangle** tool , drag to draw a square in the bottom-right corner of the stage.
3. On the color palette, click the yellow color swatch to fill the square with yellow.
4. Double-click the **Pick** tool  to select all the objects on the stage.
5. Open the **Interactive tools** flyout , and click the **Interactive blend**  tool.
6. From the **Preset** list box on the property bar, choose **Straight 20 step**.
7. Click **Movie** menu ► **Create sequence from blend**.  
Note that in the **Timeline** Docker window, Corel R.A.V.E. automatically creates a timeline with two keyframes for the new animated blend.
8. Play the movie to preview the effect.  
The star gradually changes into a square, while moving from the top-left to the bottom-right corner of the stage.
9. Click the **Stop** button  .

## Create an animated stationary blend

In this procedure, you'll make the star change into a square as it remains in the same position on the stage. You'll begin by undoing the animated blend you created in the previous procedure. Next, you'll reposition the square and the star, and you'll blend the two objects. Last, you'll animate the blend you created and preview the effect.

1. On the toolbar, click the arrow on the **Undo** button , and choose **Blend**. This will undo your last two actions--animating and creating the blend.
2. In the **Timeline** Docker window, drag the playhead to frame 1.
3. Using the **Pick** tool , drag the star to the center of the stage.
4. Drag the square to the center of the stage, and position it on top of the star.
5. Double-click the **Pick** tool to select both objects.
6. Open the **Interactive tools** flyout , and click the **Interactive blend**  tool.
7. From the **Preset** list box on the property bar, choose **Straight 20 step**.
8. Click **Movie** menu ► **Create sequence from blend**.
9. Play the movie to preview the effect.  
The star gradually turns into a square.
10. Click the **Stop** button .

## From here ...

In this tutorial, you've learned how to animate objects and interactive effects applied to objects in Corel R.A.V.E. You can continue to explore the application on your own, or you can do the other Corel R.A.V.E. tutorials to become productive quickly.