



EclipseTM Tour

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Introduction

Form & Vision Eclipse® is one of the most powerful highend image editing packages available.

Eclipse's proprietary, resolution independent and objectbased ShapeLayer technology allows users to quickly and nondestructively work with large volumes of data. Eclipse makes it possible to manipulate the contents of ShapeLayers in real time, with complete visual control.

In conjunction with an intelligent memory caching system, its ShapeLayer technology also makes Eclipse one of the fastest production tools for image editing, retouching and compositing.

Until the rendering process, file size is generally not a factor: 300 MB files can be manipulated just as easily and in the same variety of ways as can 10 MB files.

Some of the Special Effects in Eclipse, such as Warping and Warp Shading, a 3D effect, are unique and not available in any other 2D program.

Other effects derived from 3D applications include Eclipse's Glow brushes.

Form & Vision will continue to develop these and other features while continually working with customers to expand and improve Eclipse's functionality.

With each new program version, Form & Vision Eclipse® users will find useful and surprising new tools at their disposal.

About this Tutorial

The Tour, the Basic and Advanced Tutorials are each designed to take you through the process of creating an image from start to finish.

If you wish, you can begin with the Basic Tutorial; however, you will gain a better understanding of the program if you start by taking the Tour.

The Advanced Tutorial builds on the basic knowledge introduced in the Basic Tutorial.

If you are not yet familiar with Eclipse, please begin with the Basic Tutorial to become familiar with the program's most important features.

If you are already an Eclipse user, you will find the Advanced Tutorial — and perhaps the Basic Tutorial as well — filled with many enhanced techniques and tips for the current version.

The Tutorials provide step by step instructions, helping you build each compositing yourself, so you can learn the program from the basics. You are given many opportunities to experiment with your own ideas, but you always have the option of using the intermediate files we have prepared for you.

The images in this tutorial were created from screen captures and are intended to approximate their appearance on your monitor.

Requirements

Before you begin the Form & Vision Eclipse® Tutorial, you should be familiar with your computer's operating system. You should know how to use a mouse, standard menus and commands. If needed, refresh your skills by reading your computer's documentation or use the online help.

Conventions

In this tutorial, commands, dialogs, shelves and tools as well as keyboard entries are indicated in **bold**. Names, e. g. of files and folders, are set in Monotype.

If the text instructs you to click or doubleclick without indication of a specific mouse button, this always refers to the left mouse button.

The background of the program window is referred to as the canvas, and the background image is called the canvas image.

All illustrations in this tutorial are from the Windows NT® version of the program.

Restoring the default settings

The settings for some commands are stored in default setting files.

To ensure that everything works exactly as described in each lesson, you will need to delete these files each time before beginning a lesson.

To restore Eclipse's default settings under Windows NT, proceed as follows:

- Quit Eclipse.
- In the **Windows Explorer** go into your user directory under C:\WINNT\Profiles.
- Delete the file .EclipsePrefs by pressing **Shift + Delete**.

Start

This tour will familiarize you with the most important functions of this program. For more detailed information, please refer to the tutorials that follow. The example compositing for this exercise was designed for the cover of an eye training CD-ROM.

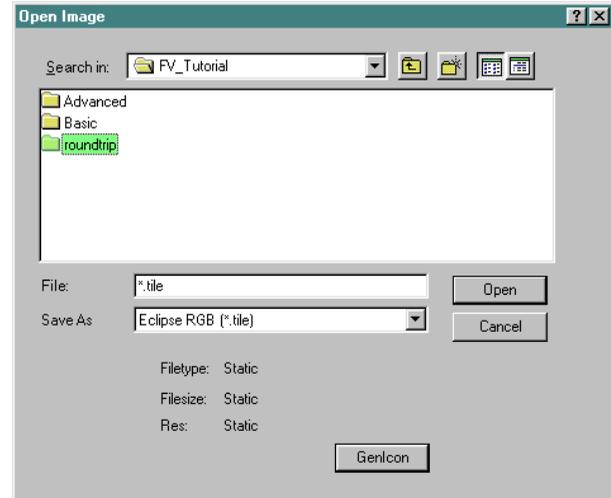
This exercise incorporates two scanned photographs and a file created in an illustration program.

Launch Eclipse

Start Menu → Programs → Eclipse

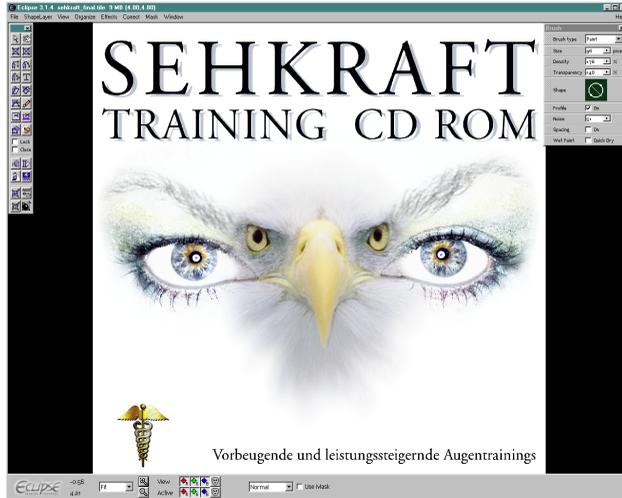
Open and close a file

From the menu bar, select **File** → **Open** → **Image**. In the **Open Image** dialog, navigate through the directory where you installed **Eclipse** until you find `FV_Tutorial\roundtrip`. Open the directory by doubleclicking the folder icon.



Select the file `sehkraft_final.tile`. Click on the **Genicon** button to have Eclipse generate a preview of the image. To open the file, doubleclick the file or click on the **Open** button.

The following picture shows the finished compositing, as you will now create it step by step.

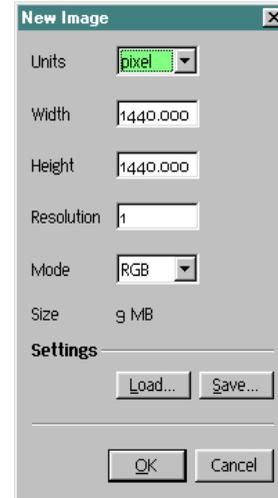


- Select **File** → **Close** to close the image.

Create a new file

First you will create a background image (hereinafter referred to as the canvas) on which the various elements of the compositing will be assembled.

- From the menu bar, select **File** → **New**. For **Units** select the option **Pixels**; for **Width** and **Height** enter **1440** pixels. Make sure that the **RGB** color space is selected.



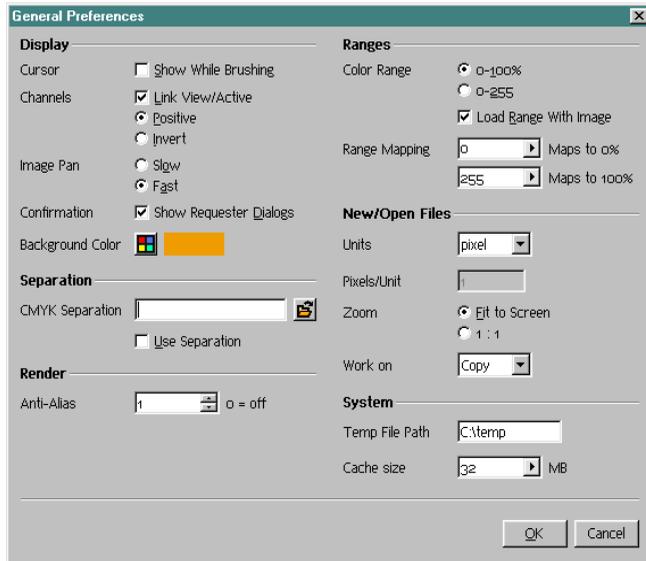
- Click **OK** to close the dialog.
- Your canvas is displayed. The program window's title bar indicates the name and file size of the image; the image dimensions are indicated in parentheses.



Preferences

The settings you select for image measurement units in the **General Preferences** dialog are indicated next to the image name in the program window's title bar.

- Select **File** → **Preferences** → **General** and check your settings. Set the **Units** to pixels and adjust all other settings as shown below.



ShapeLayers

ShapeLayers are the basis of image editing in Eclipse. ShapeLayers are resolution independent vector objects which are oriented to the metrics of the canvas image. You can fill ShapeLayers with images, colors, color and transparency vignettes, or masks. You can open or create as many ShapeLayers as desired in an image, for instance to arrange multiple images into one compositing. You can use ShapeLayers for retouching and color correction, to apply effects to the image or portions of the image and to manipulate images or parts of images through distortion or warping.

Create a ShapeLayer

First, you will use the **Rectangle Tool** to create a simple rectangular ShapeLayer.

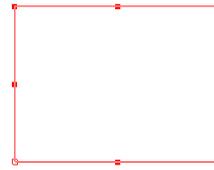
- In the **ShapeLayer Toolbox**, click the **Rectangle Tool**.



- Click anywhere in the image, and drag to create a ShapeLayer of any size.

NOTE

A ShapeLayer is active (selected) when its handles are visible.



Click anywhere in the ShapeLayer to move it.

*When working with ShapeLayers, you can go one step backward or forward using the keyboard shortcuts **Ctrl+Z** and **Ctrl+X**.*

*To delete a ShapeLayer, press the **Delete** key.*

Fill the ShapeLayer

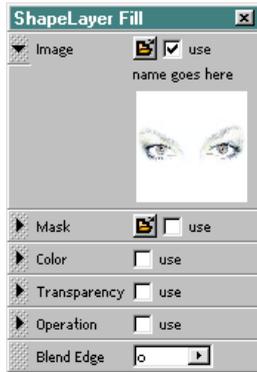
You will now load an image into the ShapeLayer.

- Select the **Hand Tool** (hereinafter referred to as **Hand**) from the **ShapeLayer Toolbox**.



- Using the **Hand**, doubleclick in the ShapeLayer to open the **ShapeLayer Fill** shelf.
- Click the **Open File** button of the **Image** section at the top of the **ShapeLayer Fill** shelf to bring up the **Open** dialog.

- Open the FV_Tutorial\roundtrip directory and doubleclick the file augen.tile.



- Click the **Rollout** arrow to open the whole section and thus see a preview of the image.
- Now activate the **use** check box to make Eclipse utilize the image as a ShapeLayer fill.

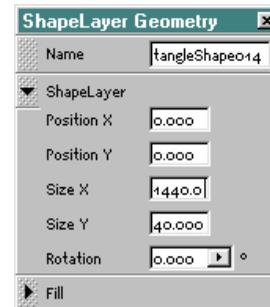
NOTE

Once you have selected an image for a ShapeLayer fill you can switch it on or off with the **use** check-box. Eclipse keeps the preview visible in any case.

- In the **ShapeLayer Toolbox**, click the **Pointer Tool** (hereinafter referred to as **Pointer**).



- Doubleclick the transparent corner handle at the bottom left, the **Magic Handle**, to fit the ShapeLayer to the loaded image.
- Doubleclick in the ShapeLayer to bring up the **ShapeLayer Geometry** shelf. In the **Position** text boxes, enter **0** for the **X** and **Y** values to position the ShapeLayer precisely on the canvas. Click on the close button in the shelf's title bar to close the shelf.

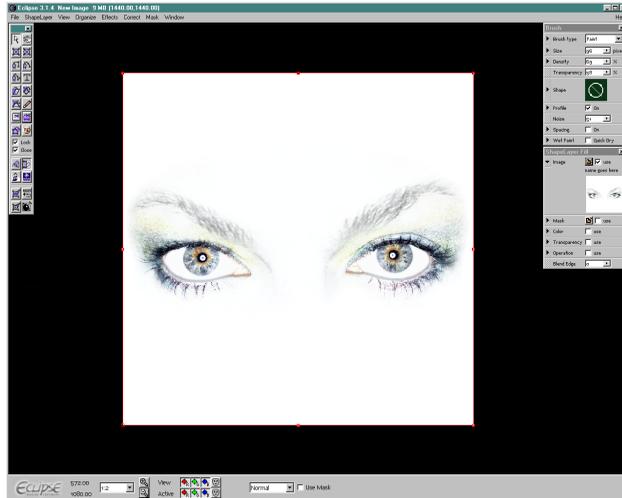


Render the ShapeLayer

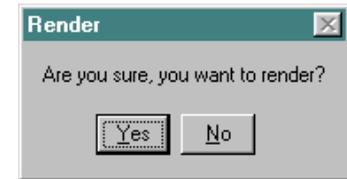
You will now render this ShapeLayer on the canvas to create the basis for the compositing.

To make your work easier, select a different image view:

- In the status bar at the bottom of the main window, click on the **Zoom Out** button to switch to the **1:2** view.

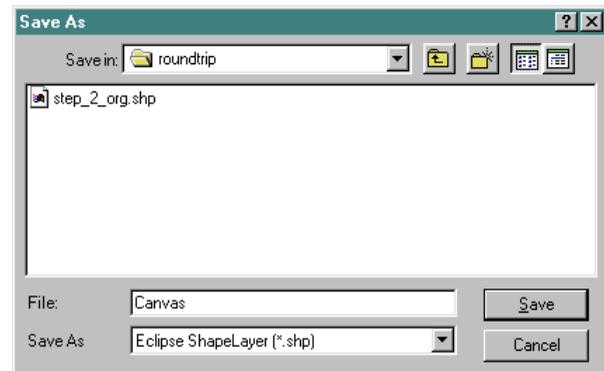


- In the **ShapeLayer Toolbox**, click the **Render** button and confirm your choice.



Save the ShapeLayer

- Select **File** → **Save As** → **ShapeLayers**, then in the **Save As** dialog, navigate to the `FV_Tutorial\roundtrip` directory, enter `Canvas` as the name and click **Save**. Eclipse automatically appends the extension `.shp`.

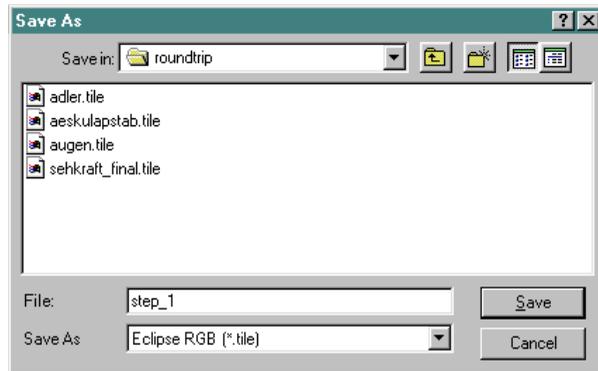


- Press the **Delete** key to delete the ShapeLayer from your canvas.

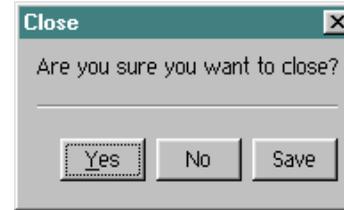
Save the file

Since this file serves as the ongoing basis for your compositing, you will need to save a copy.

- Select **File** → **SaveAs** → **Image**, and in the **Save As** dialog, navigate to the FV_Tutorial\roundtrip folder. Enter step_1 as the name. Eclipse automatically appends the extension .tile.
- Select **Eclipse RGB** in the **Save As** menu at the bottom of the dialog.
- Click **Save** or press **Enter**.



- Close the image by selecting **File** → **Close** and confirm your choice in the **Close** requester dialog.



Using ShapeLayers to select image elements

You can select image areas in Eclipse either by creating a mask or by framing the desired portion of the image with a ShapeLayer.

Open a file

- Select **Open** → **Image** from the **File** menu. In the **Open Image** dialog, select the file `adler.tile` from the directory `FV_Tutorial\roundtrip`.

Create a ShapeLayer using the Curve Tool

- Select the **Curve Tool** from the **ShapeLayer Toolbox**.



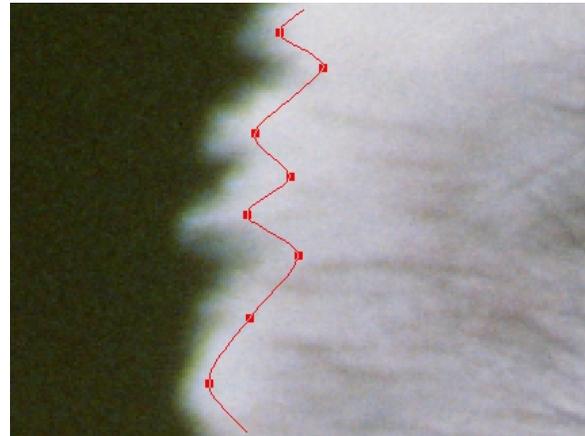
- Zoom to the **2:1** view by clicking on the **Zoom Menu** next to the two **Quick Zoom** buttons and selecting **2:1**. Then click the area of the image which you would like to view magnified.



NOTE

The message in the status bar informs you that you must first complete this action before moving on to the next step.

- Draw a line around the eagle's head. Since we do not need the outer edge of the feathers, it is enough to trace the ShapeLayer roughly. Make sure to stay well within the feather area.



NOTE

Leftclick to place points; leftclickdrag to move them. Middleclick to delete a point. To add a point to an existing segment, just click on the segment.

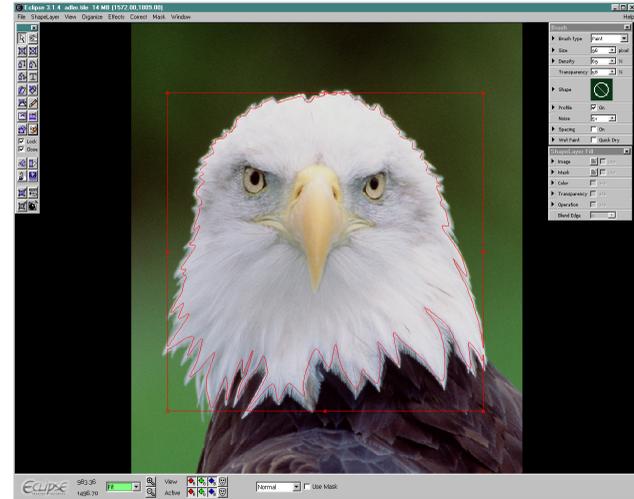
The path of the curve is defined by the next point. The curve has no handles at its points.

To create a straight line or corners, just place points closely together.

- Rightclickdrag to navigate around the image. This is called panning.
- To display a reduced view of the image for a better overview, click the **Zoom Out** button. This will zoom you out one level. Click the **Zoom In** button and then the desired area of the image to zoom back in one level.
- As soon as you reach the starting point of the curve, click the **Close** button in the **Shape-Layer Toolbox**.



- Select the **Pointer** or press **V** on the keyboard.
- The active ShapeLayer with its bounding box is indicated.



Save a selection as an image

Next, you will place the eagle head on your canvas, saving it to disk along with the ShapeLayer as an intermediate step.

- In the **ShapeLayer Toolbox**, click the **Crop-out** button.



Eclipse attempts to save a copy of this ShapeLayer selection.

- The **Save As** dialog appears. Save the image in the `\roundtrip` directory as `adler_crop`.
- Then save the ShapeLayer as `adler`.
- Close the image.

Editing ShapeLayers

Our `adler.shp` is our first compositing layer. You will now position and edit the ShapeLayer on the canvas in such a way that the angles of the eagle's beak are parallel to the eyes' angles of `step_1.tile`.

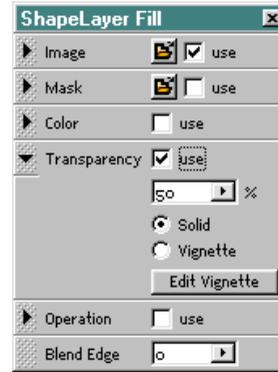
- Open the image `step_1.tile`.

Open a ShapeLayer

- Select **File** → **Open** → **ShapeLayers**, then open `adler.shp` in the **Open** dialog and click **Open**.
- Activate the ShapeLayer with the **Pointer** by clicking in the ShapeLayer. The ShapeLayer's bounding box becomes visible.

Edit ShapeLayers and ShapeLayer fills

- Select the **Hand** in the **ShapeLayer Toolbox** and doubleclick the ShapeLayer. The **ShapeLayer Fill** shelf appears.
- Roll out the **Transparency** section of the shelf. Doubleclick the text box and type in about **50** or click the arrow button to the right of the text box and move the pop-up slider to the value.
- Click the **use** check box to make Eclipse utilize this **Solid Transparency** level.



- Press **V** to switch back to the **Pointer**.

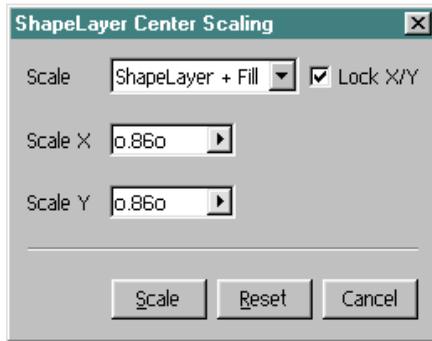
NOTE

Use the **Pointer** to edit both *ShapeLayer* and *ShapeLayer Fill*. Use the combination **Pointer + Alt** key to edit only the *ShapeLayer* without editing the fill.

The **Hand** corresponds to fills. Use it in combination with the **S** key to edit **Color Vignettes**, and with the **A** key to edit **Transparency Vignettes**. For both tools, adding the **Shift** key scales proportionally.

- Next, click and drag downward to move the ShapeLayer between the eyes.
- From the **ShapeLayer** menu, select **Scale from Center** to open the **ShapeLayer Center Scaling** dialog. Activate the **Lock X/Y** check box to link the **X/Y** coordinates. Leave the **Scale**

text box set to **ShapeLayer + Fill** for scaling ShapeLayer as well as fill. Click the right arrow button and drag the slider to about **0.860** of one of the **Scale** text boxes. Click **Scale** and confirm the command. Pull the ShapeLayer into place in such a way that the left corner of the beak is on the left corner of the eye.



- Select the **Rotate Tool** from the **ShapeLayer Toolbox** and leftclickdrag inside the ShapeLayer to turn it in such a way that the corners of the beak are parallel to the corners of the eye. Click the tool again to deselect it.



- Reposition the ShapeLayer on the left corner of the eye. Click and drag the bottom right handle of the bounding box while holding **Shift** to scale the ShapeLayer proportionally until it matches the desired ShapeLayer. Repeat this procedure until the eagle is precisely positioned.

NOTE

*If necessary, you can change the **Transparency** of the image while you work by adjusting the value in the **ShapeLayer Fill** shelf. If the shelf is obstructing your workspace, you can close it by clicking the right button in the shelf's title bar. Use the **Window** menu to reopen the shelf.*

- Open the final compositing `sehkraft_final.tile` in a new program window. After you have selected the image in the **Open Image** dialog, click **No** in the requester dialog **Eclipse: Close the current image before opening?**. Eclipse will start a second program window.
- Select **Window** → **Hide** or **Tab** to close the shelves, then resize the window to make the eagle's head visible on the right side of the screen. Do this by first clickdragging the window to the far left side. Rightclickdrag the eagle's head into view and reduce the size of your working area window as needed.

NOTE

The program window's color can change. The active window is always colored according to your adjustments in the system display preferences; the

inactive window gray. Click on a window's title bar to bring it to the front. You can reduce the program window to an icon appearing in the task bar by clicking the **Minimize** button of the title bar.

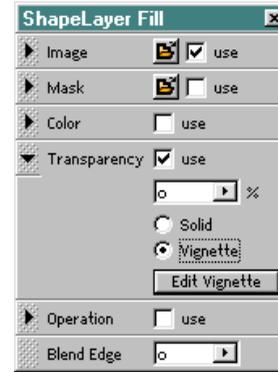
It is now apparent that you will need much less feathers for the final image, and that the ShapeLayer should be more pointed. You will adjust the ShapeLayer of the eagle's head accordingly.

- Reselect the **Curve Tool** from the **ShapeLayer Toolbox**.
- Match the ShapeLayer approximately to the final ShapeLayer by deleting or editing points on the curve as described under “Using ShapeLayers to select image elements” on page 12.

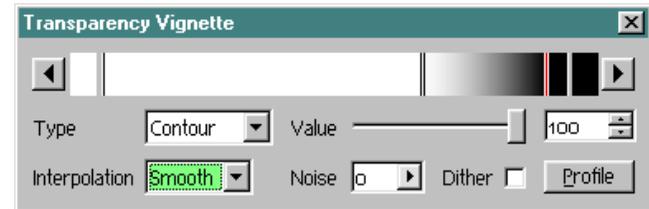
Creating Transparency Vignettes in ShapeLayers

Next, you will create a transparency gradient in the ShapeLayer, allowing the edges of the eagle to gradually blend in with the background. The display in the ShapeLayer corresponds to the final rendered version - you have full visual control at all times.

- Switch to the **Hand** and doubleclick in the ShapeLayer to open the **ShapeLayer Fill** shelf.
- Activate **Transparency** and the **Vignette** button below it. Then click on **Edit Vignette**.



- The **Transparency Vignette** dialog appears. From the **Type** drop-down menu, select a **Contour** vignette; and choose **Smooth** as **Interpolation** option.



- Click in the white area and drag the marker to the right until you have a soft gradient outwards. Pull a second marker from right to left to control the transparency from the outer edge inwards.

NOTE

White represents 100% opacity (coverage), e.g. 0% transparency; black stands for 100% transparency and 0% opacity. Experiment with the dialog, place markers and move them around. Middleclick a marker to delete it.

A marker can be edited as long as it is highlighted in red. Use the **Value** slider above the **Profile** button to adjust the degree of a marker's transparency.

Now you can edit the ShapeLayer's contour along with the **Transparency Vignette**, to match the ShapeLayer even better if necessary.

- To do this, just switch back to the **Curve Tool** in the **ShapeLayer Toolbox** and edit the curve's path as desired.

NOTE

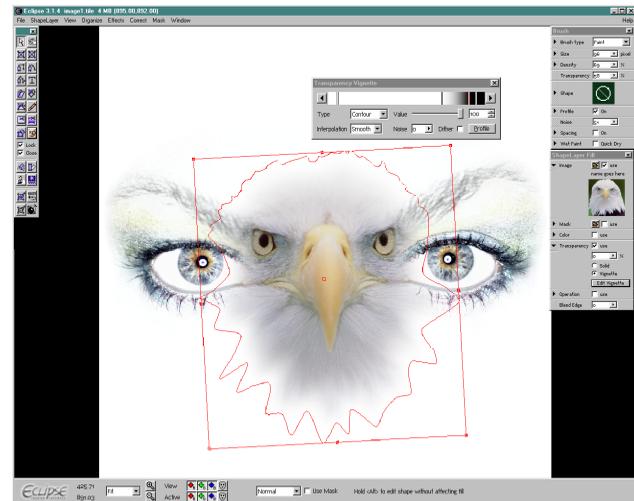
In the middle of the ShapeLayer, the focus point of the vignette is indicated by a small hollow square. Move the focus point with the **Pointer** or **Hand** to move the center of the vignette.

- After editing one or two points, always press **V** to switch back to the **Pointer**, then move the vignette's focus point and press **Ctrl+Z** to move one step back to adjust the vignette to the new path of the curve.
- Next, switch back to the **Curve Tool** and repeat this step until you are satisfied with the ShapeLayer.

NOTE

The status bar contains information relating to the currently selected keyboard/tool combination. Press **Ctrl+H** to show or hide the ShapeLayer's boundary lines for better visual control.

- Finally, check the outer edge of the ShapeLayer by hiding the ShapeLayer's boundary lines.

**Color correction in ShapeLayers**

Eclipse allows you to apply color corrections and effects to ShapeLayers. You can preview the result before applying the modifications onto the canvas.

You will now apply the first color correction to the ShapeLayer to better blend the white area of the eagle with the canvas.

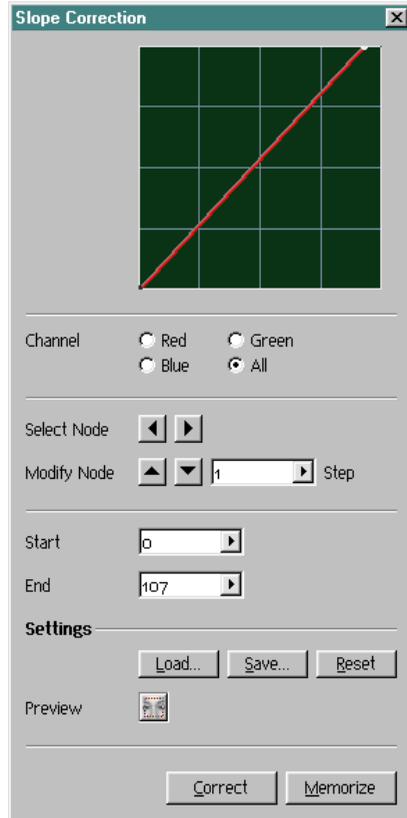
- In the **Correct** menu, open the **Slope** dialog to adjust contrast and tonal range and also reduce the amount of red.
- Click on the upper right end of the graph and drag towards the left until the value **107** appears in the **End** text box below.
- Activate the red channel **R** button and use the **Down Arrow** button to reduce red in the highlights by one point to **106**.
- In the **Start** text box, enter the value **-1**.
- Save the correction by clicking **Save** and enter the name `step2_slope1` in the **Save As** dialog. Leave the dialog open.
- Save the ShapeLayer as `step_2`.
- Next, in the **ShapeLayer** menu select the **Anti-alias** option and enter level **3**, then close the dialog by clicking **OK**.
- Render the ShapeLayer by selecting **Render** in the **ShapeLayer Toolbox**.
- Press **H** to switch to the Hand, and press the **Delete** key to delete the image in the ShapeLayer.
- Activate the **Transparency use** check box in the **ShapeLayer Fill** shelf to reactivate the vignette.

NOTE

*If you are not satisfied with the rendered result, select **Undo** from the **File** menu to cancel the rasterize command.*

Do not worry about minor imperfections in the transitions; we will fix them in later steps.

- Next you will apply the color correction. Click **Correct** in the **Slope** dialog, which closes the dialog. You have now applied the correction through the **Transparency Vignette**.



- If you are not satisfied with it, you can also load the prepared ShapeLayer `step_2_org.shp` and apply it to the image. To do this, first select **File** → **Restore** to return to the previously saved version, load the file, render it and apply the correction as described above. Save a copy as `interim`.

- Click the button in the title bar of the **Transparency Vignette** dialog to close it.
- Close the **ShapeLayer Fill** shelf as well.
- Save a copy of the current state as `interim` if you are satisfied with its appearance.

Using Brushes

Eclipse provides an extensive palette of brushes for painting, retouching, and creating and editing masks.

You can use Eclipse brushes to render portions of an image, revert them to their original state and apply effects and corrections.

Using the Restore Brush to go back to the previous version

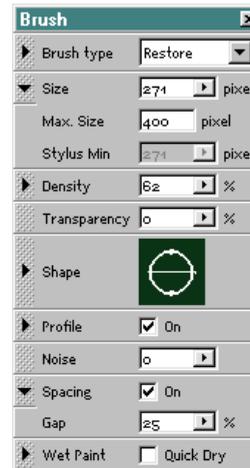
In the following steps, you will bring back portions of the original image to perfectly blend the eagle into the scenery. You can control every aspect of brushes by means of the **Brush Shelf**.

In this case, you will use the **Restore** Brush. The **Restore** Brush applies the previously saved version - in this case, the human eyes. If you do not see the shelf, open it through the **Window** menu.

- Select **Window** → **Brush Shelf**.
- Click the **Brush Tool** in the **ShapeLayer Toolbox**.



- Select the **Restore** Brush in the **Brush type** menu.
- Make sure that the **Profile** check box is **On** and thus the **Airbrush** is selected.



NOTE

*Our screenshot of the **Brush Shelf** shows the **Stylus Min** text box grayed out in the **Size and Density** (air-to-paint ratio of the airbrush) section of the shelf. This is how the shelf appears when you have not attached a graphics tablet and are working only with the mouse.*

*To achieve a continuous **Airbrush** stroke with the predefined **Density** you have to switch **Spacing On** if you are working with the mouse instead of a sty-*

lus. The lower the Gap value, the less space between drops, the "smoother" the brush stroke, and the slower the brush.

When using a graphics tablet you can specify the range for size and pressure when applying e. g. color. Use the **Stylus Min** text box or pop-up slider to adjust the starting point and the upper text box or slider to set the end point for the effective range.

- Doubleclick the **Max. Size** text box for maximum brush size in the **Size** rollout, and enter **400**. This limits the **Size** and effective range of the sliders below and above to this value, and makes it easier to change the brush size.
- Next, partially restore the eye and eyebrow areas by "painting" with the saved version of the image. Vary the **Density** and **Size** of the brush. Middleclick to delete a brush stroke.

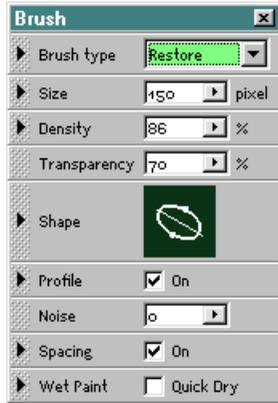
NOTE

As long as you do not change the **Transparency**, switch to a different brush or select a different tool, you can always middleclick to delete what you have just painted.

- The preview in the **Shape** section represents the current brush shape. You can directly adjust the shape and the angle of the brush by clicking on the **Shape Preview** and dragging. By rolling out the section you get access to the numeric values in the text boxes.
- Specify an oval brush shape and a suitable angle to match the brush shape to the eyes' shape.



- Set the **Transparency** to about **70%**, allowing the corners of the eyes to again show through the feathers.



If you have changed the **Transparency** again and want to revert to the brush stroke you used before the previous one, just use the **Render Brush**.

Applying ShapeLayer fills with the Render Brush

Use the **Render Brush** to partially apply ShapeLayer fills. Earlier, you saved an interim version of your image as `interim.tile`.

- Create a new ShapeLayer as described under “*ShapeLayers*” on page 8, and load this file into the ShapeLayer. Make sure that the ShapeLayer is positioned correctly.
- Now, when you switch back to the **Brush Tool**, the ShapeLayer fill view is hidden thus you see the current image version.

Applying ShapeLayer fills with the Render Brush

- In the **Brush type** menu, choose the **Render Brush** and apply the previous interim version by painting it on. To paint the eye version, switch back to the **Restore Brush**.
- As soon as you are happy with the transition, select the **Pointer**, then **ShapeLayer** → **Delete** to delete the ShapeLayer, and save the image by selecting **File** → **Save**.

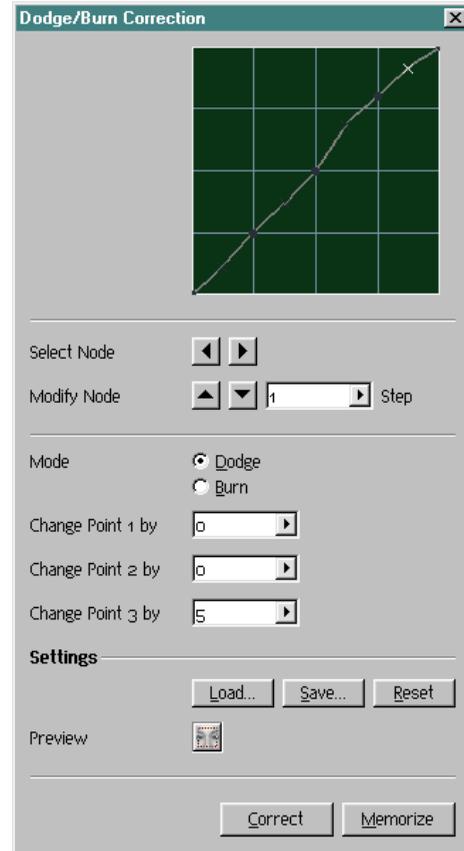
The eagle still seems a bit dark, but you can brighten it up by applying a correction.

Correcting colors using the Correct Brush

Select **Dodge/Burn** correction. This is the equivalent of photographic lightening and darkening of prints in the darkroom.

- From the **Correct** menu, select **Dodge/Burn**.
- In the dialog, select **Load...** and open the file `DodgeBurn1.corr`.
- With the **Dodge** setting, you can only slide the points on the graph upwards. Use the mouse or click the corresponding **Node** arrow buttons to select and move the graph **points** and **crosses**.
- Note how the image changes as you move the points.
- Click **Reset** to cancel your changes. Then reload `DodgeBurn1.corr`.

- In the **View** menu, select **Preview** to turn off preview or click the **Preview** button of the dialog. Repeat the command to see the effect of the correction.
- Make sure that **Preview** is turned on, and close the **Dodge/Burn** dialog by clicking the **Memorize** button.



- Select the **Brush Tool** and in the **Brush Shelf**, select the **Correct Brush**.
- Now apply the correction across the entire eagle head with a large brush, changing the brush size as desired. Middleclick to bring back the eye

sockets, the upper corner of the eagle's beak and the corners of its eyes.

- Select **File** → **Retain**.

NOTE

*Use the **Retain** command in the **File** menu to save the current image state. If at this time you choose the **Restore** command or use the **Restore Brush**, you will return to this point. To return to the original version, i. e. the last saved version of the image, you must close and reopen the file.*

Masks

Eclipse offers numerous options for creating masks and applying them to an image. In the following steps, you will create a mask using the **HSL Auto Mask** tool and partially apply it with the **Auto-Mask Brush**.

By default, masked areas are indicated in blue.

Masking with the AutoMask Brush

You will now mask the eagle's beak and eyes to protect the surrounding areas.

- In the menu bar, go to the **Mask** menu and select **HSL Auto Mask**.
- Zoom to the **1:1** view.

You are now working in masking mode.

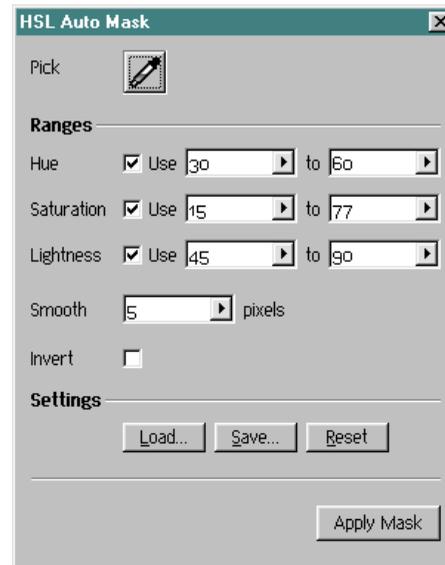
NOTE

Next to the **Quick Zoom** buttons you will find the buttons for individual color channels. The top bar (**View**) represents the monitor display; the bottom bar (**Active**) indicates which channel is currently active.

*Please note that Eclipse has automatically activated the mask channel in the bottom and top bar. You can read the message next to the **Use Mask** check box.*



- Click **Load...** In the **Open** dialog, select the prepared settings file `gelb.hs\automask`.



As you can see, this color value cannot be cleanly masked, and the blue masked areas extend beyond the beak.

Also, if you left the mask as it is, it would be much too hard edged. Do not worry about this now, but instead become familiar with how this tool works.

- Begin by clicking **Reset** in the **HSLAutoMask** dialog, to bring all settings to zero.
- Activate the **ColorPicker** by clicking on the **Pick** button. Click to sample color values from

the beak, or click and drag to sample an area of color to be masked. The sampled values are added together. Middleclick to remove the mask. Adjust a **Smooth** value to create soft transitions from the masked areas to the nonmasked areas.

- Now reload the `ge1b.hs1automask` file. To save the settings from sampling new values by mistake, disable the **Pick** function by clicking the **ColorPicker** in the dialog.

Next, you will partially apply the mask using the **AutoMask Brush**. Since you will blur the mask later, it is a good idea to test the result of the blur effect.

- In the **Effects** menu, select **Gaussian Blur** and adjust a setting of **27**.

Eclipse allows you to fade in effects that you will apply later, even when you are currently using a completely different **Brush Tool**. This gives you absolute visual control when applying the mask with the brush.

- Now close the **HSL Auto Mask** dialog, select the **Brush** from the **ShapeLayer Toolbox** and the **AutoMask Brush** in the **Brush type** menu of the **Brush Shelf**. Select the **Airbrush** in the **Brush Shelf** by clicking the **Profile** check box **On**.
- Paint the mask on while viewing the blur effect. Apply the mask to the beak, and try to achieve a soft transition to the feathers. In addition, mask

the eagle's eyes and the irises of the pair of human eyes.



Now you will still need to apply the effect to the mask.

Editing with the Effects Brush

- Close the **Gaussian Blur** dialog, select the **Effect Brush** in the **Brush type** menu, and apply the effect.
- Select **File** → **SaveAs** → **Mask** and enter the name `ge1b` in the **Save As** dialog. Eclipse automatically appends the extension `.tmsk`.

NOTE

You can also apply the effect by selecting the **Blur** command from the **Gaussian Blur** dialog. Since you are working in the mask channel, the effect is only applied to the mask.

Applying Masks

Now you will use this mask to apply an additional effect to the image.

- Invert the mask by selecting **Invert** from the **Mask** menu, and confirm the operation in the **Requester** dialog. Now all image areas except the beak and eyes are protected.
- You are still working in the mask channel. Reactivate the color channels by clicking **RGB** in the **Active** bar, and activating the **Use Mask** check box in the status bar. The **Active Mask** button is once again grayed out, i. e. inactive. You will also need to deactivate the **View Mask** button.



- Now you are once again working within the color channels and are using the mask.

Effects

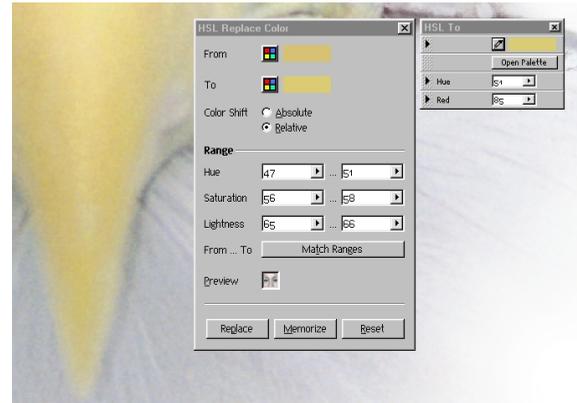
Eclipse provides a series of effects for manipulating images. You have already become familiar with **Gaussian Blur** and applied it to the mask.

Applying Effects to the canvas

Now you will use the **HSL Replace Color** to make the yellow image areas more glaring.

- In the **Effects** menu, select **HSL Replace Color**.
- First, click the **From ColorLink** button in the **HSL Replace Color** dialog; the **HSL From Color Editor** appears.
- Click the **Color Picker** next to the color swatch in the **HSL From Color Editor** and sample a dark color value from the lower, darker beak area. This value is entered as an initial color in the **From** color swatch of the **HSL Replace Color** dialog.
- Click the **Match Ranges** button in the **HSL Replace Color** dialog so that the **To** color matches the **From** color.
- Start with changing the **Hue To** color values. Click the arrow button to the right of the corresponding text box and drag the pop-up slider to the desired value.

- Similarly, change the **Saturation** and **Lightness To** values until you achieve a bright yellow tone.



- If you want to return to the initial values just click the **Match Ranges** button again.
- When you are satisfied with the color, select **Replace** to apply the effect to the image.

NOTE

Select **View** → **Preview On** or **AltGr+P** resp. click the **Preview** button of the dialog to preview the result of the effect, before you apply it. After applying the effect, select **View** → **Track Changes** to compare the **modified** version to the **saved/retained** image version.

- Select **File** → **Retain**.

- Deactivate the **Use Mask** Option by clicking the check box in the status bar.

Corrections

You have already become familiar with some of the numerous color correction options in Eclipse. Now you will continue to edit your compositing by creating multiple ShapeLayers, then placing and combining them.

Applying various corrections to combined ShapeLayers

- From the **ShapeLayer Toolbox**, select the **Curve Tool**.

You used this tool earlier (see “Using ShapeLayers to select image elements” on page 12). This tool allows you to quickly draw a soft curve.



- Switch to **1:1** or **2:1** view.
- Begin by using this tool to outline one of the eagle’s eyes. Place the end point very close to the starting point, and select **Close** in the **ShapeLayer Toolbox**.
- Switch to the **Pointer**, and click outside the ShapeLayer to deselect it. Select the **Curve Tool** again and create a second ShapeLayer by tracing

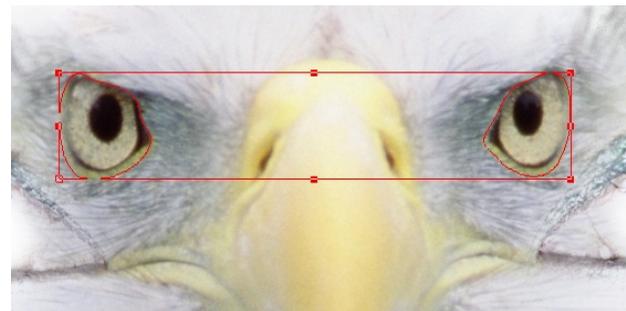
the other eye of the eagle, and close the ShapeLayer. Switch back to the **Pointer**.

NOTE

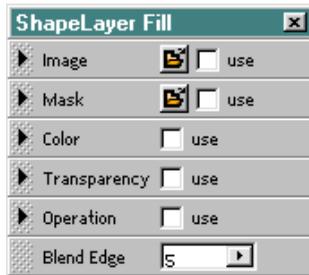
*The ShapeLayer you created last is now framed by the bounding box, which means it is selected; the points are no longer visible. Deselect the ShapeLayer by clicking next to it with the **Pointer**. If you wish to continue editing the ShapeLayer by means of the curve points, then you must reselect it with the **Pointer**, and again select the tool with which it was created – in this case the **Curve Tool**.*

- Select the two ShapeLayers by choosing the menu command **ShapeLayer** → **SelectAll** or by pressing **Ctrl A**. Or you can use the **Pointer** to select first one ShapeLayer, then the other while pressing the **Shift** key.
- In the **Organize** menu, select **Combine**.

Both ShapeLayers are framed by the bounding box.



- Switch to the **Hand Tool**, doubleclick inside the bounding box to bring up the **ShapeLayer Fill** shelf and enter five pixels for **Blend Edge**. This gives you a soft transition of the **ShapeLayer Fills** over an area of five pixels to the surrounding image area.



You have at this point already defined the manner in which later corrections to the eyes are to be applied. First, however, you will create two additional ShapeLayers to select the irises of the human eyes.

- Deselect the ShapeLayers by clicking next to the bounding box with the **Hand**.
Now you can close the **ShapeLayer Fill** shelf.
- Select the **Ellipse Tool** from the **ShapeLayer Toolbox**.



- Click and drag an elliptical ShapeLayer by starting at the top left of the iris and approximating its size. Press **Shift** while dragging to maintain the proportions.
- When you release the mouse button, you automatically switch to the **Pointer**, and the ShapeLayer is selected. Click in the ShapeLayer and position it over the iris.
- Modify the ShapeLayer for a better fit by dragging its side handles to reduce or enlarge it. For proportional scaling of both sides, drag the ShapeLayer's corner handles while pressing **Shift**.
- Copy the ShapeLayer by choosing the menu command **ShapeLayer** → **Copy** or by pressing **Ctrl+C**, pan to the right eye by rightclickdragging and paste the copy by selecting **ShapeLayer** → **Paste** or pressing **Ctrl+V** first and then clicking the desired location.
- Position the ShapeLayer directly over the iris, then press **Shift** to also select the left ShapeLayer, and combine the two ShapeLayers as described above. Enter a **Blend Edge** of five here as well.

- In the **ShapeLayer** menu, select **Render Mode** → **Selected ShapeLayers** and select the eagle's eyes.

NOTE

*If you find it distracting to have the ShapeLayer outlines visible, you can hide them by pressing **Ctrl+H**. To make them visible again, press **Ctrl+H** again.*

- From the **Correct** menu, bring up the **Slope Correction** dialog.
- Open the correction file `Adleraugen-Slope.corr`, by going to **Load** and selecting the file in the **Open** dialog and clicking **Open**.
- Toggle the **Preview** button in the dialog **ON** and **OFF**, so you can view the effects of the correction. Apply the correction by selecting **Correct**.
- Select **File** → **Retain**.
- Press **Ctrl+H** if you have hidden the ShapeLayer outlines.

Since the right eye lacks definition, you will now adapt it to better match the left.

- Undo the combination of the eagle-eye ShapeLayers by selecting **Split** in the **Organize** menu.
- Select the right eye ShapeLayer. From the **File** menu, select **Open** → **Corrections** and open

the file `Adlerauge_re_DodgeBurn.corr`. Apply the correction.

NOTE

*You can also load correction and effect files by way of the corresponding dialog or by choosing **File** → **Open**.*

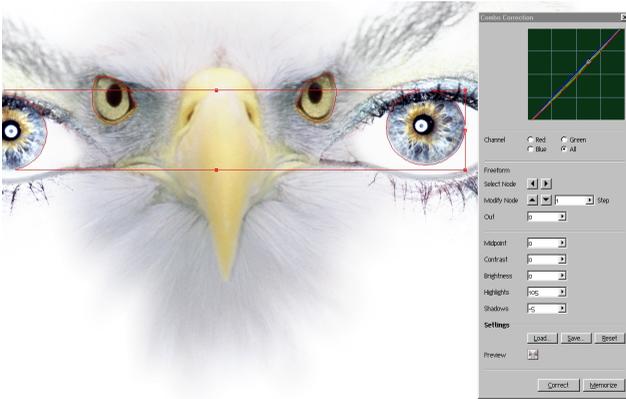
- Select **File** → **Retain**.
- Press **Ctrl+Z** to go back one step in editing the ShapeLayer, thus recombining the eagle-eye ShapeLayers.

Select the other pair of ShapeLayers enclosing the human eyes.

- In the **Correct** menu, select the **Combo** correction, and open the file `Iris_CombineCorr.corr`.

The **Combo** correction allows you to combine multiple curves that are listed separately in the **Correct** menu. In this instance, we have used the **Highlight**, **Shadow**, **Midpoint** and **Freeform** curve.

Edit the individual curves by the corresponding text boxes resp. sliders. In the **Channel** section of the dialog choose the desired color channels for editing. To edit the **Freeform** curve use the **Select Node** arrow buttons to select a graph point. Use the **Modify Node** arrow buttons to edit the graph points. With the **Step** text box or slider you determine the range of one **Modify Node** step.



- Experiment with the curves yourself. Apply your own correction or reload the file provided and select **Correct**.
- Save the current state by selecting **File** → **Retain**.
- Save the ShapeLayers as Augen.shp by choosing **File** → **SaveAs** → **ShapeLayer** and entering Augen in the **Save As** dialog.
- To delete the ShapeLayers, press **Ctrl+A** to select all of them, and then press the **Delete** key.

Final corrections using the brush

- You can manually improve the contrast in the eye socket area by intensifying the **Slope** curve at the beginning point, i. e. in the shadows.

- Apply the correction using the **Correct Brush**, then reduce the correction in the eyes again, and so forth.
- Experiment with other effects and corrections, for example in the eyelid area.
- Save the file as step_2.
- Close step_1.tile.

Organizing ShapeLayers

Text ShapeLayers can be edited just like any other ShapeLayer. They can be moved, scaled, distorted and filled with any desired combination of color, image or mask.

You will now add a headline and other text to your cover compositing.

- Choose the **Text Tool**.
- Open `step_2.tile`.
- Select the **Text Tool** in the **ShapeLayer Toolbox**.



- Ensure that **All ShapeLayers** mode is ON in the **ShapeLayer** → **Render Mode** menu.
- Click the upper area of the image on the canvas. The **Text** dialog appears.
- In the **Font** menu, select *Garamond* and *Regular* or another elegant serif font type, which seems appropriate to you.
- Activate the **Text** field by clicking it, and enter “SEHKRAFT” or “EYESIGHT”.

- In the **Font size** text box, enter a value of about **42** point.
- In the **Tracking** (spacing) text box, enter a value of about **100**, to increase spacing and spread the headline to almost full width.
- Selecting **Update** will give you a preview before clicking **OK** to confirm your choice and close the dialog.

EYESIGHT

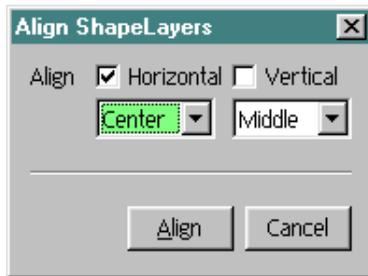


- Place the text centered at the top of the image.
- Deselect the ShapeLayer and select the **Text Tool** again; this brings up another **Text Tool** dialog.
- In the **Text** field, enter “TRAINING CD ROM”, specifying about **22** for the **size** and **Tracking** set to **0**.

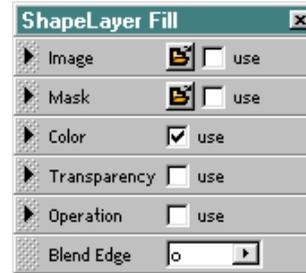
- Place this text at an appropriate spacing from the text above.

Arranging, combining and grouping ShapeLayers

- Press **Ctrl+A** to select both ShapeLayers.
- In the **Organize** menu, select **Align**.



- By activating **Horizontal** and **Center**, you center both ShapeLayers relative to one another on the horizontal plane (X-axis). Click **Align**.
- Combine the ShapeLayers by selecting **Organize** → **Combine**, as you have done previously.
- Now fill the ShapeLayers with color by double-clicking inside the bounding box with the **Hand**.
- This brings up the **ShapeLayer Fill** shelf, in which you activate the **Color use** checkbox.

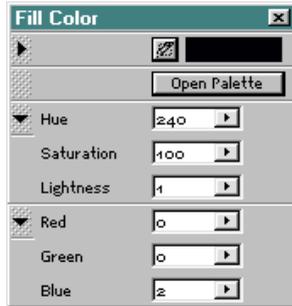


- Rollout the **Color** section and click the **Color-Link** button.

NOTE

*In this case, we have first combined the ShapeLayers before filling them with a color. When you use **Combine** to combine an already filled ShapeLayer with a second ShapeLayer, the content of the foreground ShapeLayer is applied. The ShapeLayer that was created last is automatically placed in front. ShapeLayers can be imagined as levels stacked in a specific order. You can control their stacking order through the **Organize** menu and the commands **Front** (all the way forward), **Forward** (one level forward), **Back** (all the way backward) and **Backward** (one level backward).*

The **Fill Color Editor** shelf is displayed.



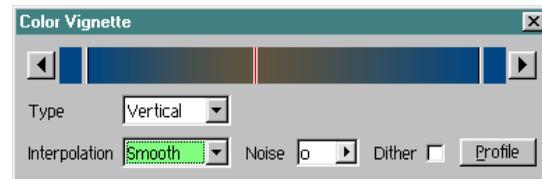
- Select the **ColorPicker** (Pick a color from image) and click to sample a color from the image for your headline. The sampled color is displayed in the color swatch next to the **Pick** button. The bottom text boxes with their pop-up sliders give you the option of editing the color by numeric values.
- Or you can open the **Color Palette** by clicking on the **Open Palette** button. Then select a color swatch in the palette. Press the **Esc** key to exit this option if requested to do so by a message in the status bar.

NOTE

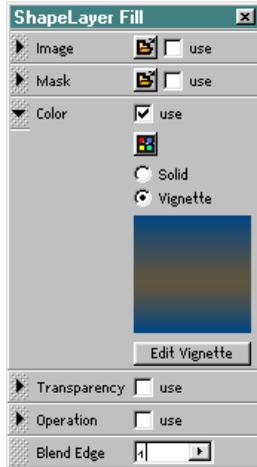
Eclipse will only make this request if you have previously started, but not completed, the Pick operation.



- You can also load a gradient into the type by activating the **Vignette** button in the **ShapeLayer Fill** shelf.



- A **Color Vignette** is created in the same way as a **Transparency Vignette** — except that you assign color instead of transparency values to the markers in the **Vignette** dialog.
- Experiment with the colors, or move the **Vignette** within the ShapeLayer by pressing **S**; try loading a **Transparency Vignette** in the ShapeLayer as well...



- Specify a **Blend Edge** of one pixel.
- When you are satisfied with the appearance of the headline, close all dialogs and shelves that you do not need at the moment, and switch to the **Pointer** in the **ShapeLayer Toolbox**.
- Save your ShapeLayer as `Headline.shp`.

Next, you will create an additional text ShapeLayer for the bottom portion of the image.

- Select the **Text Tool** again and click in the bottom of the image. Proceed as you did with the other ShapeLayers, specify a type size of **8** points, and enter the following (or a text of your choice):

- “Eyesight Training for Prevention and Strength“. In the **Tracking** text box enter a value of about **50**. Then click **Update** and then **Ok**.

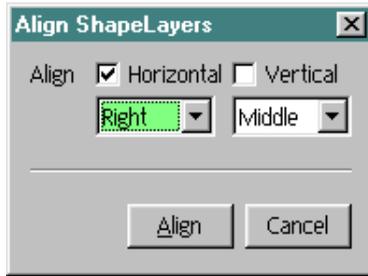
To assign this ShapeLayer the same color fill as the ShapeLayer above, proceed as follows:

- Select the upper ShapeLayer and open the **ShapeLayer Fill** shelf in the **Window** menu.
- Click the **ColorLink** button or the color preview to bring up the **Fill Color Editor**.
- Open the **Color Palette**. While pressing the **Shift** key transfer the color to one of the color swatches in the palette.
- Now, just reselect the lower ShapeLayer and click on the **ColorLink** button and the **use** check box in the Color section of the **ShapeLayer Fill** shelf. Select the predefined color swatch in the Color Palette. The color is now indicated in the **Fill Color Editor** as well as in the **ShapeLayer Fill** shelf and carried over as ShapeLayer fill.

Now you will place this line of text so as to be right-justified with the others.

- First, deselect the lowest line of text. Then select the uppermost ShapeLayer and press **Shift** while clicking, to add the lower line.
- Open the **Align** dialog and select **Horizontal** and **Right**. Click **Align**. Eclipse uses the position

of the ShapeLayer that was selected first to determine placement.



- If you are satisfied with the position, press **Alt+A** to select all, then choose **Group** from the **Organize** menu.

NOTE

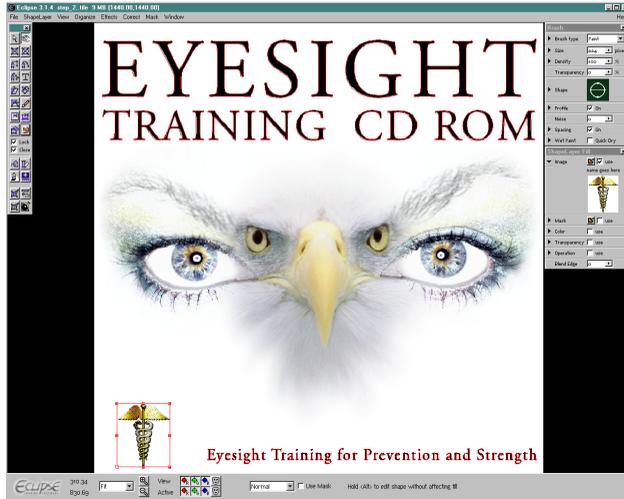
You have created a group consisting of the two combined ShapeLayers at the top and the one at the bottom. This group can now be moved and/or scaled. ShapeLayer contents can only be assigned to combined ShapeLayers, but not to grouped ShapeLayers.

- Save the file as `Headline.shp`, overwriting the previous version.

The CDROM title in the lower left area seems a bit empty, so you will insert a caduceus.

- First, deselect the ShapeLayer group.

- Using the **Rectangle Tool**, draw a ShapeLayer about 3 cm high and 2 cm wide.
- Doubleclick inside the ShapeLayer with the **Hand**, then click the **Open file** button in the **ShapeLayer Fill** shelf, select `aeskulap-stab.tile` in the **Open Image** dialog and click **Open**. Then check the image: **use** checkbox.
- Doubleclick on the lower left handle of the ShapeLayer, the **Magic Handle**, to make the contents fit the ShapeLayer.
- Reposition and resize the ShapeLayer as desired.
- Create a new ShapeLayer group by choosing **ShapeLayer** → **Select All** and **Organize** → **Group**.
- Save the ShapeLayer again as `Headline.shp`.



Special ShapeLayer Effects

Eclipse provides a variety of **Special Effects** in combination with ShapeLayers, for example **Warping** or **Luminance Compositing**.

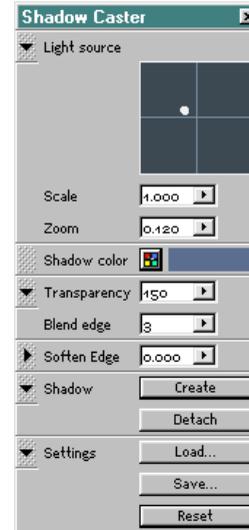
Shadow Casting

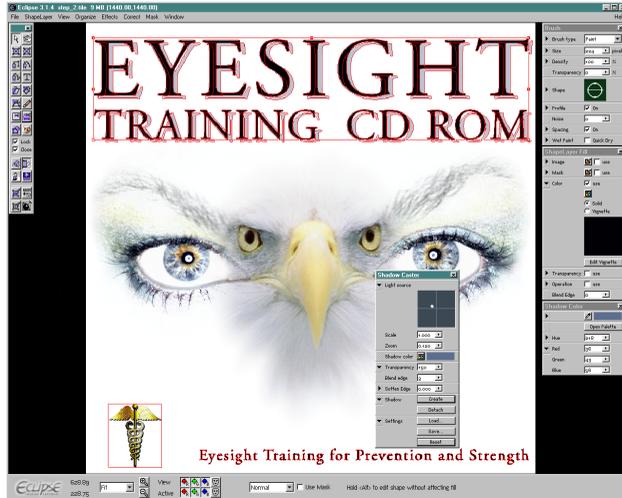
You will once again work with the headline, using the **Shadow Caster Tool** to outline the type with a shadow. In order to do this, you will first need to ungroup the ShapeLayers.

- In the **Organize** menu, select **Ungroup**. You have now ungrouped the text group from the image.
- Repeat the command to ungroup the text ShapeLayers below.
- Select the headline, and in the **ShapeLayer Toolbox** click the **Shadow Caster Tool**.



- In the **Shadow Caster** shelf, click **Load** from the **Settings** section and select `text.shadow` in the **Open** dialog.
- Click **Create** in the **Shadow** section of the shelf.





You see the cast shadow created by a ShapeLayer. Press **Ctrl+H** to hide the ShapeLayer boundaries to get a better view of the effect. The shadow ShapeLayer is always positioned behind the source ShapeLayer.

- Edit the shadow to get a sense of how this tool works.
- The square in the **Light source** rollout of the **Shadow Caster** shelf indicates the position of the light source (white point); click and drag the point as desired.
- Clicking on the **ColorLink** button brings up the **Shadow Color Editor**; use the **ColorPicker** to sample a color from the image.

- Use **Scale** to adjust the size of the shadow, and select **Transparency** to adjust its opacity. **Zoom** defines the height of the light source. The higher the value specified here, the lower the position of the light source, i. e. the longer the cast shadow. **Soften Edge** allows you to additionally tweak the shadow, as does **Blend Edge**. The **Soften Mode Contour** fades the shadow edge from the outside inwards, following the ShapeLayer's outlines. You can edit **Vertical** blending by pressing **A** and using the **Hand**.

NOTE

You can anchor the shadow to the source ShapeLayer, thus “grounding” the two. To do this, right-click on one or more of the side or corner handles. You can release the shadow from the source ShapeLayer by rightclicking it again.

- Select **Save** to save your settings under a name of your choice. Eclipse automatically appends the extension `.shadow`.
- To remove the shadow again, you can either press **Ctrl+Z** or select **Detach** from the shelf's **Shadow** section to undo the link to the source ShapeLayer. This makes the shadow an independent ShapeLayer, which you can select and then edit or delete.
- If you want to use the prepared setting, load the `text.shadow` file again and click **Create** if you previously deleted the shadow.

- Click the **Close** button in the title bar of the **Shadow Caster** shelf to close it.
- Select **ShapeLayer** → **Select All** and save the ShapeLayers as `Headline.shp` or under a name of your choice.

Rendering the ShapeLayers

If you are satisfied with the design of your compositing, you can now render all ShapeLayers together onto the image.

- Since you have turned **Render Mode** → **All ShapeLayers** ON in the **ShapeLayer** menu, simply click the **Render** button in the **ShapeLayer Toolbox** and confirm the command. You do not need to select all of the ShapeLayers.
- Now press **Ctrl+A** to select all, then press **Delete** to delete them, and save the image as `Title`.

You can apply the ShapeLayers, or grouped/combined ShapeLayers to the image sequentially or individually.

- In the **ShapeLayer** menu, select **Render Mode** → **Selected ShapeLayers**.
- Now you see only the ShapeLayer fills of the selected ShapeLayers. If you choose the **Render** command now, only the visible, i. e. the selected ShapeLayers are rendered.
- Before proceeding, delete any ShapeLayers that have already been rendered.

NOTE

*If you have activated the option **ShapeLayer** → **Render Mode** → **All ShapeLayers**, visible ShapeLayer fills are always rendered, even if they are not selected. To render ShapeLayers separately, you must set the **Render Mode** to **Selected ShapeLayers**.*

You may want to put a finishing touch on by placing the bottom line of text and caduceus on a gradient. To do this, create a new ShapeLayer with the desired appearance and place it behind the other ShapeLayers using the commands in the **Organize** menu.

Group the text and image, or all ShapeLayers that should be on the same layer. You can then more easily assign and select them together.

Congratulations!

You have completed the tour of Eclipse.

