KPT SkyEffects Tutorial

Welcome to the KPT® SkyEffects tutorial. This tutorial is designed to introduce you to major features and functionality in KPT SkyEffects.

Lesson 1: Getting Started

KPT SkyEffects lets you create photorealistic skies by manipulating such elements as cloud layers, fog, haze, and the sun.

To launch KPT SkyEffects:

1. Create a new 400 by 300 RGB document with a white background.
2. Select **Filter menu> KPT6> KPT SkyEffects**.

   The KPT SkyEffects window appears.

The KPT SkyEffects workspace.

Sun Position and Color

The first thing you'll do in this lesson is use the Sun Editor to reposition the sun. The Sun Editor has a virtual trackball. You can click anywhere on the trackball and drag in the direction you want to move the sun.

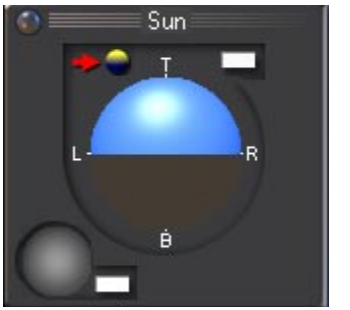
Note

The top half of the Sun Editor represents day—the bottom half night.

Once you're repositioned the sun you'll get a more dramatic effect by changing the sun's color to warm yellow.

To move the sun:

1. Click and drag the sun in the Sun Editor.



The KPT SkyEffects Sun Editor.

   Watch the LCD display at the bottom of the KPT SkyEffects window as you drag. Drag up or down until the time is 6:22. Now slowly drag left or right until the sun's position is about –10.

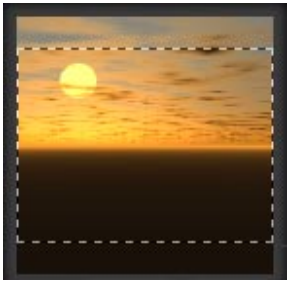
2. When the sun is in the desired position, release the mouse button. The sun's position and sky color are updated automatically.

To set the sun's color:

1. Click and hold on the sun color swatch in the upper right corner of the Sun Editor.

2. Drag the pointer over the desired color (choose a nice warm yellow) and release the mouse button.

You should see the following image in the KPT SkyEffects Preview window:



Adjusting the Atmosphere

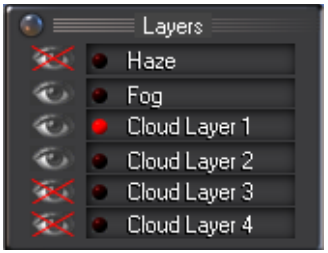
Controlling the weather is easy with KPT SkyEffects. In this lesson, you'll:

- Use the Layer Manager to turn off the haze.
- Use the Cloud Layer Editor to change cloud appearance.

Using the Layer Manager

To turn off the haze:

- Click the eye in front of the Haze layer to turn it off.



When the layer is hidden, a red cross appears over the eye.

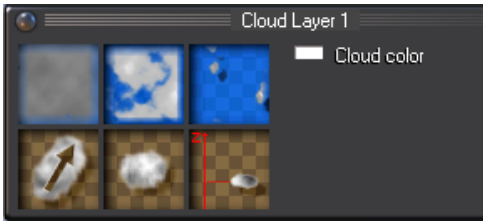
Using the Layer Editor

The cloud layer looks a little flat. You'll improve the appearance of the clouds next.

To select a layer for editing:

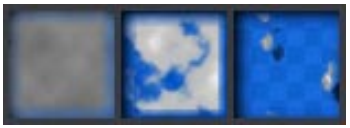
1 Click the button next to Cloud Layer1.

The button turns red when the layer is selected. The settings for the layer are displayed in the Layer Editor to the right.



The Layer Editor displays settings for the selected layer.

The controls in the first row are used to set contrast, thickness, and coverage of the clouds. Together, these settings determine the quality of the weather.



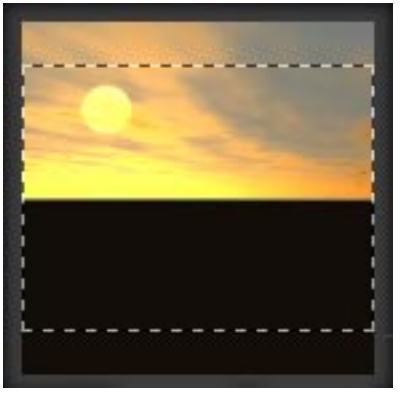
The Weather Controls—Contrast, Thickness, and Coverage.

The next row of controls affect the geometry of the cloud layer.

The Geometry Controls—Rotation, Size, and Altitude.

To change how the clouds look:

1. Click and drag on the first Cloud Control in the top row to adjust Contrast. Drag right or left until Contrast is set to 100%.
2. Click and drag on the second Cloud Control in the top row to adjust Thickness. Drag right or left until Thickness is set to 20%.
3. Click and drag on the third Cloud Control in the top row to adjust Coverage. Drag right or left until Coverage is set to 40%.
4. Click and drag on the first Cloud Control in the second row to adjust Rotation. Drag right or left until Rotation is set to 80.
5. Click and drag on the second Cloud Control in the second row to adjust Ratio. Drag right or left until Ratio is set to 74, 8.
6. Click and drag on the third Cloud Control in the second row to adjust Altitude. Drag up or down until Altitude is set to 25.



The image in the Preview Window.

Adding a Little Fog

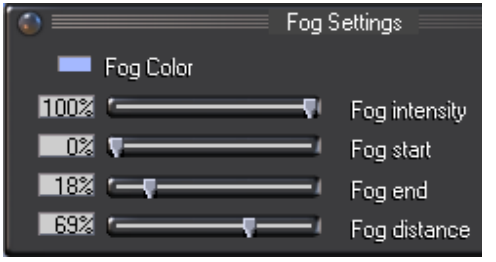
Adding a little fog is sometimes helpful. Next, you'll turn on the fog and adjust its qualities.

To turn on the fog Layer:

- Click on the eye to the left of the Fog layer in the Layer Editor to turn fog on.

To display fog controls:

- Click on the button next to the Fog layer to display the Fog controls. The button turns red when a layer is selected.



Controls for the Fog Layer.

To change fog color:

1. Click and hold on the color swatch in the Fog Settings.
2. Drag the pointer over the desired color (choose a light lavender) and release the mouse button.

To adjust fog intensity, altitude, and distance:

1. Click and drag the Fog intensity slider. Drag right or left until Fog intensity is set to 100%.

2 Click and drag the Fog start slider. Drag right or left until Fog start is set to 0% (ground level). This defines the altitude where the fog starts.

3 Click and drag the Fog end slider. Drag right or left until Fog end is set to 35%. This defines the altitude where the fog stops.

4 Click and drag the Fog distance slider. Drag right or left until Fog distance is set to 45%. This defines the point at which the fog becomes visible.

Intensifying the Image

To get a more intense image, you're going to add another cloud layer.

To turn on and adjust Cloud Layer 2:

1 Click on the eye to the left of Cloud Layer 2 in the Layers list to turn it on.

2 Click on the button next to Cloud Layer 2 to display Cloud Layer 2 controls.

3 Click and drag on the first Cloud Control in the top row to adjust Contrast. Drag right or left until Contrast is set to 0%.

4 Click and drag on the second Cloud Control in the top row to adjust Thickness. Drag right or left until Thickness is set to 0%.

5 Click and drag on the third Cloud Control in the top row to adjust Coverage. Drag right or left until Coverage is set to 50%.

6 Click and drag on the first Cloud Control in the second row to adjust Rotation. Drag right or left until Rotation is set to 0.

7 Click and drag on the second Cloud Control in the second row to adjust Ratio. Drag right or left until Ratio is set to 100,100.

8 Click and drag on the third Cloud Control in the second row to adjust Altitude. Drag up or down until Altitude is set to 50.

The image in the Preview Window.

Finishing the Effect

For a finishing touch, you can remove some of that dark ground. Do that by using the Camera Rotate tool to raise the view.

The Camera Rotate tool.

To raise the camera view:

- Click and drag the Camera Rotate tool to raise the view. A value of 9 or 10 degrees will do just fine.

To apply the KPT SkyEffects to the image:

- Click OK.

  Wait a few seconds as the KPT SkyEffects rendering engine traces the light rays coming from the sun.

Congratulations—you've created your first KPT SkyEffects rendering.

The final effect.

Lesson 2: Creating a Better Sky

KPT SkyEffects is a powerful tool for photography enhancement. In this lesson you'll learn how to replace the sky in an existing photograph.

Note

In this lesson, we use Adobe® Photoshop® as the host application. However, you can create the same effect in another host application.

Changing the Sky

To prepare for a sky replacement:

1. Open mtnlake.psd, located in the **Tutorials: KPT SkyEffects** folder on your KPT 6 CD-ROM.
2. Make sure the Background Layer is selected.
3. Use the Marquee tool to make a rectangular selection encompassing the sky and mountains.

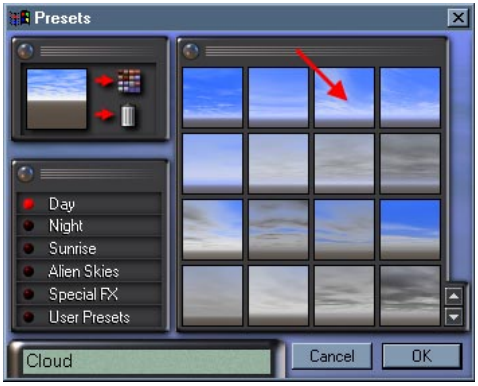
To create a sky:

1. Launch KPT SkyEffects.
2. Click the Preset button.

Preset button.

The Preset Dialog appears.

3. Click the third icon from the left on the top row.



4. Click OK to select the preset.

To raise the camera view:

1. Click and drag the Camera Rotate tool to raise the view. Set the angle to 4.

Camera Rotate tool.

2. Click OK to render the effect.

Creating a Reflection

To get a more realistic effect, you can create a reflection of the sky in the water.

To create the reflection:

1. Activate Layer 1.
2. Use the Magic Wand to select the top of the picture (the empty area).
3. Activate the Background Layer.
4. Copy.
5. Activate Layer 1.
6. Paste.

   By pasting, you create a new layer—Layer 2—containing a copy of the sky.You now need to flip and drag the sky to create the reflection.

To flip the new layer:

1. Activate Layer 2 and flip it using the **Layer> Transform> Flip Vertical** command.
2. Drag Layer 2 to the bottom of the image.
3. Adjust the opacity of Layer 2 to 60%. You're done!

Adding a reflection completes the picture.

Lesson 3: Creating a Rainbow

To prepare your image:

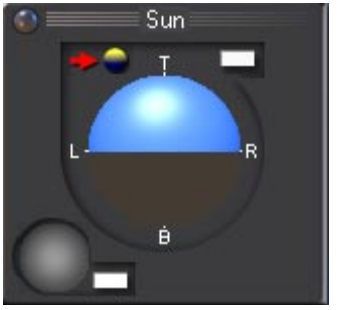
1. Create a new 400 pixel by 200 pixel RGB document.
2. Launch KPT SkyEffects.

To create the rainbow:

1. Use the Sky Editor to set Rainbow Intensity to 100%.

Sky Editor.

Although you adjusted the rainbow's intensity, it is still invisible. You must reposition the sun—using the Sun Editor—in order to make the rainbow visible.



Sun Editor.

2. Click on the Front/Back Toggle in the Sun Editor to move the sun behind you.

Front/Back Toggle.

3. Set the sun's position to 16:00, 0—as shown in the LCD display at the bottom of the KPT SkyEffects window.
4. Adjust the Cloud Layer 1 settings to make a dark, rainy sky.

   Refer to "Using the Layer Editor" on page 3 for more information about adjusting cloud layers.
5. Click OK to render the effect.

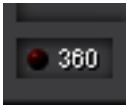
The finished rainbow.

Lesson 4: Creating a Sky for a 3D Scene

KPT SkyEffects can create realistic skies for your 3D scenes.

To create a sky for a 3D scene:

1. Create a new 400 pixel by 200 pixel RGB document.
2. Launch KPT SkyEffects.
3. Create a sunrise or select a preset sunrise.
4. Click the 360 button to switch to the spherical camera.



Spherical Camera Radio button.

5. Click OK to render an environment map.

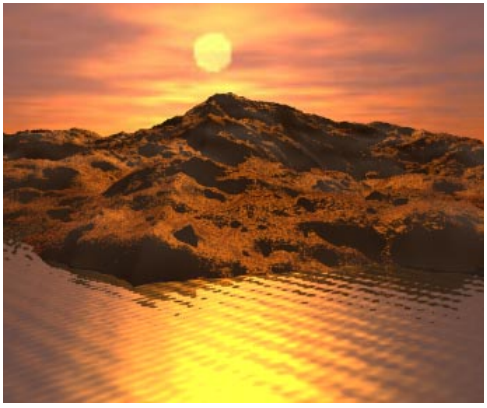
   KPT SkyEffects renders the sky as if you are viewing it from the center of a gigantic sphere. Then, it "unfolds" the sphere to get a rectangular image—like a planisphere.
6. Save your document.
7. Run your favorite 3D application. In this example, we use Ray Dream Studio® from MetaCreations™.
8. Open or create a 3D scene.
9. Import the previous picture as an environment map or a background. See the manual of your 3D application to learn how to do this.

In Ray Dream Studio, open the render settings and load the previous picture as a Background.

Load the picture you created as a Background.

When finished, your scene is surrounded by a seamless sky.

You can now render your picture or animation.



Your scene is surrounded by a seamless sky.