Creating a Sea Scene

This tutorial is designed to show you how to create an ocean backdrop complete with sky and sun.

This tutorial will explain how to create the ocean in Modeler and use the Bump to give it texture, where to position the Camera and Light in Layout, and how to create the sky with SkyTracer.
Step 1: Create your Sea

• In Modeler, use the Disc tool to create a 10 mi. radius ocean on the X- and Z-axis.

• Make the surface of the Disc (Y-axis) 3 ft. thick.
**Step 2: Bring your Sea to Layout**

- In **Layout**, load your sea object (.lwo)

- Open the **Surface Editor** panel and set the following attributes:
  - **Color**: Black
  - **Diffuse**: 40%
  - **Specularity**: 80%
  - **Glossiness**: 50%
  - **Reflection**: 60%
  - **Bump**: 200%
Step 3.1: Modify the Bump texture

- In the **Surface Editor** panel, click on the **T by the Bump** attribute to open the **Texture Editor** panel. We will create 3 layers of Bump textures to give the sea a wave-like appearance.

- Set the **Layer Type** to **Procedural Texture** and adjust the following attributes:
  - Layer Opacity: 10%
  - Texture Value: 80%
  - Contrast: 7.5%

- Adjust the **Scale** so that it is 100 m, 1 m, and 100 m for the X-, Y-, and Z-axis respectively.
Step 3.2: Modify the Bump texture

- In the Texture Editor click on Add Layer: Procedural to add another layer.
- Set the following attributes:
  - Layer Opacity: 30\%
  - Texture Value: 80\%
- Leave all the rest to their default values.
Step 3.3: Modify the Bump texture

- In the Texture Editor click on Add Layer: Procedural to add a 3rd layer.

- Set the following attributes:
  - Layer Opacity: 20%
  - Texture Value: 80%

- Adjust the Scale so that it is 300 mm for all the axis.

- We now have our water surface.
Step 4.1: Setup the Camera

- In Layout, go to the Rendering menu and enable Ray Trace Reflection.
- Select Cameras at the bottom of the Layout window, and click on Item Properties. Set the following:
  - Zoom Factor: 1.5
  - Antialiasing: Medium
Step 4.2: Setup the Camera

- Position the camera wherever you’d like. In **Layout**, I left it at the center of the sea object looking out to the horizon, and raised it 3 m above the surface.
Step 5.1: Setup the Light

- The Light will act as the sun. Position it wherever you would like, as long as it’s above the horizon and near the edge of the ocean Disc. In this example, we will put it near the horizon.
**Step 5.2: Setup the Light**

- In Layout, click on Item Properties with Lights selected, and the Light Properties panel will open.

- Make the Light Type a Point Light.

- Enable Affect Diffuse, Affect Specular, Affect OpenGL, and Lens Flare.

- Click Global Illumination at the top.
  - In the following panel, change Ambient Intensity to 0%.
**Step 6.1: Setup SkyTracer**

- In **Layout**, click on the **Scene tab**, and click on the **Backdrop Effect**.
- Click on **Add Environment** and select **SkyTracer**.
- Double-click on the **SkyTracer** environment.
**Step 6.2: Setup SkyTracer**

- In the SkyTracer panel, configure however you would like. In this example, we turned on Cloud Edit and put Cirrus clouds in the scene.

- Your Light1 source should be your sun Light in the scene.
Step 7: Render Scene

- Everything should be setup now, and you can render your scene.
- Before you Render, create a Motion Key (hit Enter) for All Items in Layout.
- Click on the Rendering menu and select Render Current Frame (F9).
Conclusion

- We used Modeler to create our 10 m radius Disc for our sea model.
- We used the Surface Editor to modify the sea's wavy surface with 3 Bump textures.
- In Layout, we positioned the Camera right above the water and the sun Light on the horizon.
- We added a SkyTracer Backdrop to give the scene a realistic looking sky.