# RenderSoft VRML Editor Help Index

**Commands** 

<u>File menu</u>

# File menu commands

The File menu offers the following commands:

New Open Creates a new document.
Open Opens an existing document.

Save Saves an opened document using the same file name.
Save As Saves an opened document to a specified file name.

<u>Exit</u> Exits RenderSoft VRML Editor .

# **New command (File menu)**

Use this command to create a new document in RenderSoft VRML Editor .

You can open an existing document with the **Open command**.

# Shortcuts

Keys: CTRL+N

# **Open command (File menu)**

Use this command to open an existing document in a new window.

You can create new documents with the  $\underline{\text{New command}}$ .

# Shortcuts

Keys: CTRL+O

# File Open dialog box

The following options allow you to specify which file to open:

# **File Name**

Type or select the filename you want to open. This box lists files with the extension you select in the List Files of Type box.

# **List Files of Type**

Select the type of file you want to open:

#### **Drives**

Select the drive in which RenderSoft VRML Editor stores the file that you want to open.

#### **Directories**

Select the directory in which RenderSoft VRML Editor stores the file that you want to open.

# **Save command (File menu)**

Use this command to save the active document to its current name and directory. When you save a document for the first time, RenderSoft VRML Editor displays the <u>Save As</u> <u>dialog box</u> so you can name your document. If you want to change the name and directory of an existing document before you save it, choose the <u>Save As command</u>.

# Shortcuts

Keys: CTRL+S

# **Save As command (File menu)**

Use this command to save and name the active document. RenderSoft VRML Editor displays the <u>Save As dialog box</u> so you can name your document.

To save a document with its existing name and directory, use the <u>Save command</u>.

# File Save As dialog box

The following options allow you to specify the name and location of the file you're about to save:

#### **File Name**

Type a new filename to save a document with a different name. A filename can contain up to eight characters and an extension of up to three characters. RenderSoft VRML Editor adds the extension you specify in the Save File As Type box.

#### **Drives**

Select the drive in which you want to store the document.

#### **Directories**

Select the directory in which you want to store the document.

# Exit command (File menu)

Use this command to end your RenderSoft VRML Editor session. RenderSoft VRML Editor prompts you to save documents with unsaved changes.

# Shortcuts

Keys: ALT+F4

# **New command (Window menu)**

Use this command to start with a blank window.

# RenderSoft VRML Editor Help Index

To Create an object: To Edit an Object: Move Object: Scale Object: Rotate Object: **Change Object Scale Orientation:** Change Object Material: Change Object Texture: Delete Object **Duplicate Object** Attach a WWWAnchor to an Object Texture Transform an Object To Browse the scene **Undoing an Operation** Insert Simple Shapes Insert AsciiText Exporting to VRML 2 files **Exporting to JPEG files** High Quality Rendering View WireFrame or Shaded Viewing LightsSpeed Texture Environment: Decal or Modulate Top View, Side View and Front View Field of View **Move Object Options** Scale Object Options Resetting Scale and Scale Orientation Center Object **Eye Move Options Background Color Anti Aliasing Enable Cullling Enable Transparency Extrusion Object Editor** 

# To Create an object:

KeyFrame Animation

VRML banner Capability: Specifications:

<u>Grid</u>

1)Click on any of the following buttons:

```
"Cone"
```

<sup>&</sup>quot;Cube"

<sup>&</sup>quot;Sphere"

<sup>&</sup>quot;Cylinder"

<sup>&</sup>quot;Disc"

<sup>&</sup>quot;PointLight"

The created object is placed on the center of the screen, regardless of the current camera/eye position or orientation. If there is object in front, the new object might be covered.

Please note that creating an object automatically selects it. Also, creating a pointlight automatically enables the View:Lights option, causing other existing point lights in the scene to be shown.

# To Edit an Object:

1)Pick/Select an object by

a)clicking the "Pick Object" button.

b)click once on an existing object (e.g a cube, a sphere or cone etc) in the scene.

2)After the object is picked, you can do the following to the object: Move, Scale, Rotate, Change Scale Orientation, Change Material, Change Texture, Attach anchor.

# Move Object:

0)Before you can use this function, you must select an existing object.

1)Click on the "Move Object" button.

2) With the mouse pointer in the window, click and drag the mouse.

a)if the Left Mouse Button is clicked, the object moves Sideways and Towards/Away from you.

b)if the Right Mouse Button is clicked, the object moves Sideways and Up/Down.

3)You can also make the object moves in the mouse direction using Move Object Options.

Sometimes, if you can't find the objects that you edited earlier, you can use <u>View:Eye</u> menu to reset the view.

# Scale Object:

0)Before you can use this function, you must select an existing object.

1)Click on the "Scale Object" button.

2) With the mouse pointer in the window, click and drag the mouse.

a)if the Left Mouse Button is clicked, the object scale in its XY direction.

b)if the Right Mouse Button is clicked, the object scale in its XZ direction.

The object is scaled about its center.

Note: How the object will scale depends on the current <u>scale orientation</u> of the object. Also, if the object is not at the center of the screen, the scaling might not look uniform due to the perspective view of the eye/camera.

You can also make the object scales in all XYZ directions using Scale Object Options.

# **Rotate Object:**

0)Before you can use this function, you must select an existing object.

1)Click on the "Rotate Object" button.

2) With the mouse pointer in the window, click and drag the mouse.

a)if the Left Mouse Button is clicked, the object rotates Sideways and Up/Down.

b)if the Right Mouse Button is clicked, the object rotates Clockwise/anti-Clockwise and Up/Down

The object is rotated about its center.

# Change Object Scale Orientation: (Available only in registered version)

0)Before you can use this function, you must select an existing object.

1)This function will work only if the scale of the object is not uniform.

To make the scale of the object not-uniform, use "Scale Object"

2)Click on the "Change the Scale Orientation of Object" button.

3) With the mouse pointer in the window, click and drag the mouse.

4) Notice that the object is sheared.

# Change Object Material:

The Material of an object describe how the different components(Red, Greeen and Blue) of light reflect from an object surface.

0)Before you can use this function, you must select an existing object.

1)Click on the "Change Object Material" button.

2)A dialog box pops up. Adjust the sliders to change the material properties of the object.

AmbientColor: the color of ambient light the object reflect. The light reflected does not depend on the position of different light sources. (Note: VRML 2.0 specifications do not contain **ambientColors** as a property of the material node, it is instead replaced by a single-valued **ambientIntensity**. Therefore, if you alter ambient colors in RenderSoft, you might not get the same effect in VRML 2.0 browsers. It is recommended that you leave the original values of ambient colors unchanged.)

DiffuseColor: the color of light that reflects from the object. The light reflected is dependent on the position of different light sources.

SpecularColor: the color of light that reflects back to the eye from a very reflective object.

EmissiveColor: the color of light from the object if it glows.

Shininess: Control the size of Specular highlights that reflect back to the eye.

Please note that pointlight does not have ambient, diffuse, specular, emiisive or shininess properties. However, you can change the color of the light it emits.

## Change Object Texture:

Applying texture to an object is to map an image to the surface of the object. This add greater realism to the rendered scene.

0)Before you can use this function, you must select an existing object.

1)Click on the "Change Object Texture" button.

2)A file dialog pops up. You select/enter a image file to be used as the texture for the object. The format of image files supported are Jpeg (.jpg) and Bitmap(.bmp). Please note that this program DOES NOT save the path of the image, it only saves the filename. You must put the texture files into the same directory with your VRML files the next time you reload your VRML files. If you want to delete an existing texture, type in none.jpg for the filename. The textures of duplicated objects cannot be deleted.

3)Click "OK" to accept and see the results.

Please note: not all VRML browsers support the Bitmap format. For maximum compatibility, use the Jpeg format.

# Delete Object

0)Before you can use this function, you must select an existing object.

1)Click on the "Delete Object" button to delete the object.

Please note that pointlight cannot be deleted.

# **Duplicate Object**

0)Before you can use this function, you must select an existing object.

1)Click on the "Duplicate Object" button to duplicate the object.

Please note that pointlight cannot be duplicated.

#### Attach a WWWAnchor to an Object

This function allows a WWW Anchor to be attached to the object. This program does not automatically load the file pointed by the anchor. However, it saves the anchor so that next time when you use your saved VRML file in a Web Browser, you can click on the object and reach the URL specified in the anchor.

0)Before you can use this function, you must select an existing object.

1)Click on the "Attach a WWWAnchor" button.

2)A dialog box pops up. You specify the name/URL of the anchor in the Text Edit Box. The 'description' field (optional) is a string that describe the anchor.

3)Click "OK" to accept.

# Texture Transform an Object

This function allows you to move, rotate and scale your texture on the surface of your objects.

0)Before you can use this function, you must select an existing object.

- 1) Texture the object first by clicking on the "Change Object Texture" button.
- 2)Click on the "Texture Transform" button. A dialog appears, offering the choice of either moving, scaling or rotating your texture.
- 3) With the mouse pointer in the window, click and drag the mouse.
- 4) Note: For rotation of textures, the program will respond only to the horizontal motion of the mouse.

=

#### To Browse the scene

1)Click on the "Eye Move" or "Eye Rotate" button.

2) With the mouse pointer in the window, click and drag the mouse.

a)if the Left Mouse Button is clicked, the scene moves Sideways and Towards/Away from you.

b)if the Right Mouse Button is clicked, the scene moves Sideways and Up/Down. 3)You can also make the scene moves in the mouse direction using <u>Eye Move Options.</u>

Sometimes, if you can't find the objects that you edited earlier, you can use <u>View:Eye</u> menu to reset the view.

# **Undoing an Operation**

1)Click on Edit:Undo

This program allows you to undo the following operations once: Move Object, Scale Object, Rotate Object, Change Scale Orientation, Eye Move, Eye Rotate, Change Object Material.

# **Insert Simple Shapes**

1)Click on Edit: Insert Simple Shapes to insert Pyramids, Prisms or Planes.

#### Insert Ascii Text

1)Click on Edit: Insert AsciiText. A dialog box appears. Simply type in your text into the text box. Your typing should reflect instantaneously on the screen.

2)You can select different font styles using the combo boxes. Supported font families are SANS, SERIF and TYPEWRITER. Supported font styles are NONE, BOLD and ITALIC.

Please note that every time you select a new style, there is a slight delay as the program has to create the fonts. After the style (i.e font family + font style) has been created, the next time when you select the same font again, there will be no delay.

The same is true for High Quality Render. The program needs to take a while to render the new fonts in higher resolution, which give a better quality when closed up.

3)When the cursor is inside the text box, you can press CTRL-V to paste text copied from other documents.

4)To copy text, highlight some text and press CTRL-C. To cut text, press CTRL-X.

5)The extrusion property is used for making the text becomes 3D. This option is used only for the purpose of saving to JPEG files. Currently, text nodes in VRML 1.0 or 2.0 specifications do not have an extrusion field, so you cannot save extrusion information to these files.

6)When editing the text or changing extrusion property of a duplicated Ascii node, all its clones change as well. If you do not want this behavior, you can save your scene into a file and then reload it.

7)The center of rotation and scaling for the AsciiText is at the bottom-left corner of the top-left character. Currently, the width field and justification field of the AsciiText node is not supported.

8)If you use duplicated AsciiText and introduce changes of font style/font family to some of its clones, it is recommended that you export your output file as VRML 2.0 file type. This is because the VRML 1.0 file type may not be compatible with some VRML 2.0 browsers when the above condition is true.

9)RenderSoft VRML Editor Version 1.4 introduces two additional fonts: DECORATIVE and SCRIPT. These fonts are non VRML, so you can only use them for export to JPEG files. When you attempt to save them to VRML files, they will be written as SERIF.

# Exporting to VRML 2 files

1)Click on File:Export to export VRML 2.0 files.

# Exporting to JPEG files

1)Click on File:Export. A file dialog appears. In the "Save as Type", select "Jpeg files(\*.jpg)". 2)Another dialog appears, asking for options in saving the jpeg file. If the "Enable High Quality Rendering" check box is enabled, RenderSoft attempts to redraw the scene at a higher quality before saving.

3)Note: The size of the image saved is equal to the size of your working window. Therefore, to obtain a smaller image, simply resize your window.

#### High Quality Rendering

1)Click on View: High Quality Render. Selecting this cause the current scene to be redrawn at a higher quality . The most marked improvement can be observed in small textures that have pixelated as they come close to you. RenderSoft employs linear filtering techniques to smoothen the rectangular blocks. Round objects like spheres and cylinders will look better with their increase in rendering complexity .

Note: for best results, you should use 24-bit color mode when running the program.

#### View WireFrame or Shaded

- 1)Click on View:WireFrame to view the rendered scene in wireframe.
- 2)Click on View:Shaded to view the rendered scene in shaded mode.

# **Viewing Lights**

1)Click on View:Lights to view all point lights in the scene. The pointlights are rendered as bright wireframed spheres. However, directional and spotlights are not shown. Please note that whenever a pointlight is created using the "PointLight" button, this option is automatically selected.

In Editing, a PointLight can only be moved and Colored ("Change Object Material").

# Speed

You can use this option to set the travel, rotation and scaling speed of your objects.

1)Click on Preference :Speed : Travel Speed and notice a dialog appears. You can adjust the slider to make the movements in "Move Object" or "Eye Move" faster or slower.

2)Click on Preference : Speed : Scaling Speed and notice a dialog appears. You can adjust the slider to make the scaling in "Scale Object" faster or more precise.

3)Click on Preference: Speed: Rotation Speed and notice a dialog appears. You can adjust the slider to make the rotation angle in "Rotate Object" bigger or more precise.

# Texture Environment: Decal or Modulate ("Modulate" option is available only in registered version)

1)Clicking on View:Texture:Decal. Whenever a texture exist for an object, its material properties will not be rendered. The object will also NOT be affected by the lighting from different light sources.

2)Clicking on View: Texture: Modulate. The texture of an object will be modulated with its material properties. The textured-object will be affected by the lighting from different light sources. The rendering for this option is slightly slower than the Decal Option.

Please note that these data are only used as settings in this program and are not saved in the VRML output file.

# Top View, Side View and Front View

1)Click on View:Eye and select one of the views. The View:Eye:Reset Eye option resets the viewpoint to the original when the file is just loaded or when File:New is selected.

- 1)Click on View: Field of View. A dialog pops up.
- 2)Move the slider to select Tele-Photo or Wide-Angle lens for your camera/eye. Notice that your scene is changed.
- 3)Clicking on the reset button in the dialog will set the camera to 45 degrees.

This function will only have an effect on perspective camera. If you load a file with an orthographic camera, the scene will not be affected.

=

# **Move Object Options**

1)Clicking on Preference :Move Object Options: Move Object in Mouse Direction will make the object move in the direction of your mouse cursor.

2)Clicking on Preference :Move Object Options: Move Object opposite Mouse Direction will make the object move opposite to your mouse cursor. This is the default setting.

# Scale Object Options

1)Clicking on Preference :Scale Object Options: Default will make the object scale will the following behavior:

With this option, dragging the mouse

- a)if the Left Mouse Button is clicked, the object scale in its XY direction.
- b)if the Right Mouse Button is clicked, the object scale in its XZ direction.

2)Clicking on Preference :Scale Object Options: Scale in all XYZ Direction will make the object scale in all directions, making the object bigger or smaller.

With this option, dragging the mouse horizontally to the right with either mouse buttons clicked will make the object **bigger**. Dragging the mouse horizontally to the left will make the object **smaller**. Dragging the mouse vertically has no scaling effect on the object.

# Resetting Scale and Scale Orientation

Every time you click on the Scale Object Button, a dialog on the right appears. Clicking on the button inside the dialog will set the scale of your object to (0.3, 0.3, 0.3), the default for objects created using RenderSoft VRML Editor. If your objects is loaded from a file not created by RenderSoft, clicking on this button may scale it too small or too large.

Every time you click on the Change Object Scale Orientation Button, a dialog on the right appears. Clicking on the button inside the dialog allows you to reset your object scale orientation to (0,0,1,0). Doing this can eliminate undesirable shearing. If your objects is loaded from a file not created by RenderSoft, clicking on this button might not work.

Please note: Resetting of scale orientation is available only for registered users.

# **Center Object**

A dialog appears every time the "Move Object" Button is in the down position. Clicking on the button inside the dialog will set the position of the current object to the center of the screen.

# **EYE Move Options**

1)Clicking on Preference :Eye Move Options: Move in Mouse Direction will make the scene move in the direction of your mouse cursor.

2)Clicking on Preference :Eye Move Options: Move opposite Mouse Direction will make the scene move opposite to your mouse cursor. This is the default setting.

# **Background Color**

1)Click on Edit: Background. A dialog box appears. Adjust the sliders to change the background colors.

2)Please note that background information is NOT saved into VRML 1.0 files, it is used for export purposes (saving to JPEG and VRML 2.0 files) only.

# Transparency (registered users only)

1)Click on View: Enable Transparency.

2)Adjust the transparency of objects by selecting the object and clicking on the "Change Object Material" button. The dialog that appear include a slider called 'Transparency'. Adjust the slider to make the object opaque, translucent or transparent.

Please note: RenderSoft's implementation of transparency does not work on all objects. In general, objects that are created later will appear transparent/translucent to objects created previously. If a newly created object is placed behind one that is created earlier, the new object will be completely covered and not be seen even if the previously created object is transparent. In other words, you should create your transparent objects last.

Transparency is a slow operation. It is recommended that you adjust the transparency values first before enabling transparency; or make the working window small so that the frame rate can increase.

Some primitives like cones, spheres and cylinders is not drawn correctly when transparency is enabled. You can click on Preference: Enable Culling to rectify the problem.

# **Enable Culling**

1)Click on Preference: Enable Culling. Doing this will allow your scene to be rendered slightly faster. However, some objects may not display properly.

This option does not affect your VRML output file.

## Anti-aliasing

Anti-aliasing allows you to 'smoothen' the image, especially the jagged edges of objects, to produce a higher quality output.

1)Click on View: Anti-Aliasing and select an option. The choices available are No Anti-Aliasing, 2 pass, 4 pass, 8 pass and 15 pass. Selecting 2 pass means RenderSoft will render the image 2 times and average the result; therefore the time needed will be approximately 2 times more ( than no anti-aliasing ). Because of the long time required for 8 and 15 pass anti-aliasing, it is recommended that you use only small images for them.

The effects of anti-aliasing can only be observed when you perform 'High Quality Render' or 'Export to JPEG files'.

# Extrusion object editor

- 1)Click on Edit: Insert Object . A new window appears.
- 2)By default, the 'Add Polygon Point' button is in the down position. You can starting drawing a polygon by clicking the left mouse button to add points.
- 3)After you have finished, close the polygon by clicking the right mouse button.
- 4) Notice the 'Make Object' button is now enabled. You can click it and create the object straight away.
- 5)The red crosshair in the middle of the screen represents the center of rotation and scaling. You can move it by clicking on the 'Modify Point' button. As your mouse cursor moves near the crosshair, the cursor shape changes to a four-pointed arrow. Click and drag the mouse to move the crosshair.

Apart from moving the crosshair, the 'Modify Point' function also allows you to move any polygon point that has been created previously.

6)Clicking the 'New Object' button will clear the window and allow you to draw a new object. 7)Clicking the 'Remove Last Point' button will remove a point from the polygon.

Note: Extrusion objects created by the editor do not render correctly when ' $\underline{\text{Enable Culling}}$ ' is turned on.

#### Grid

1)Click on Preference: Grid: Show Grid to display the grid.

2)In grid mode, objects move in the direction of grid lines when the mouse is dragged horizontally or vertically.

## **Keyframe Animation**

RenderSoft supports keyframe animation. In this system, you specifies the position, rotation etc. of the object at certain frames (called the key frames) and the system will evaluates the in-between frames automatically.

The following are a few simple tutorials for you to get started:

#### **Tutorial 1**: Creating a simple animation

- 1)Create a cone and a cube
- 2)Click on Animation: Show Animation Panel
- 3)Set the frame number to 25 (details)
- 4) Move the cone and cube to different positions
- 5)Click on the 'Play' button to see the animation
- 6)Click on the 'Stop' button to stop the animation
- 7)Click on the 'Reset All' button to delete all animation

#### **Tutorial 2**: Cycling an animation smoothly

- 1)Create a cone and a cube
- 2)Click on Animation: Show Animation Panel
- 3)Set the frame number to 30
- 4) Move the cone and cube to different positions
- 5)Set the frame number to 50
- 6)Move the cone and cube to different positions
- 7)Set the frame number to 70
- 8)Click on the 'Set to frame 0' button to make the current frame inherit the position of frame
- 0. Now frame 70 look exactly like frame 0.
- 9)Set the animation property to 'Loop'
- 10)Click on the 'Play' button to see the animation

#### **Tutorial 3**: Extending the duration of animation

- 1)Create a cone
- 2)Click on Animation: Show Animation Panel
- 3)Set the frame number to 30
- 4) Move the cone to a different position
- 5)Click on the 'Play' button. Notice that frame number goes from 0 to 30

You would like to play the same animation, but now from frame 0 to 50. To do so

- 6)Stop the animation
- 7)Set the frame number to 30
- 8)Click on the 'Delete KeyFrame' button. This causes key frame 30 to be deleted.
- 9)Set the frame number to 50
- 10)Click on the 'Record KeyFrame' button
- 11)Click on the 'Play' button to see the animation

#### **Tutorial 4**: Start animating an object at frame 30

- 1)Click on Animation: Show Animation Panel
- 2)Create a cone and move it a little at frame 0
- 3)Set the frame number to 30
- 4)Click on the 'Record Keyframe' button to record the current frame
- 5)Set the frame number to 50
- 6)Move the cone to a different position
- 7)Click on the 'Play' button to see the animation

# The properties that can be animated are

- 1)object position, rotation and scaling
- 2)object scale orientation (registered users only)
- 3)diffuseColor, specularColor, emissiveColor, shininess and transparency of object
- 4) texture translation, scaling and rotation.
- 5)eye/camera position and orientation
- 6) light position and color

Background color and ambientColor cannot be animated.

#### **Notes about animation:**

All animation created can only be exported to VRML 2.0 files.

Once you select the option Animation: Show Animation Panel, you will not be able to duplicate, delete and attach a WWW anchor to your objects in the scene. The only way to enable back these options is by clicking on File: New or by opening a new file.

When you are exporting animation to a VRML 2.0 file, RenderSoft will display a dialog and prompt you for the frame rate. The default setting is 15 frames per second. The bigger this value is, the faster your animation will be played in your web browser.

It is recommended that you stop the animation first before editing the scene.

#### Technical details of the interface:

Recording a frame for animation is a two step process:

- 1)Set the frame number
- 2)Edit the scene

If you change your scene after clicking on 'Set to frame 0' button, the animation may no longer cycle smoothly. To remedy this problem, you need to go to the maximum frame and click this button again.

Clicking on the 'Record KeyFrame' button does not exactly take a snap shot of the scene at the current frame number.

# How can I put a VRML banner into my HTML web page?

You can do so by using the <embed> tag inside your HTML file.

<EMBED SRC="your\_vrml\_file.wrl" WIDTH="400" HEIGHT="150">

For an example, look at the 'example.html' file that is shipped together with the RenderSoft VRML Editor.

# Capability:

This program read and saves VRML 1.0 ascii files. It also export VRML 2.0 and Jpeg files.

## **Specifications:**

- 1)Material Binding is not supported.
- 2)For IndexedFaceSet nodes, the texCoordIndex and normalIndex fields, if they exist, must be per-vertex.
- 3) For IndexedLineSet nodes, the materialIndex, normalIndex and textureCoordIndex are ignored.
- 4)When editing an existing VRML 1.0 file that is not created by this program, the presence of Scale nodes/Transform nodes with non-uniform scale values (i.e x not equal y not equal z) high in the hierarchy and not covered with Separator nodes may cause problems when the user tries to use the "Move Object"/"Scale Object"/"Rotate Object"/"Change Object Orientation" command.

The movement orientation might change.

- 5)Texturing/Material of IndexedLineSets and PointSets is not supported.
- 6)When you start a new document using File:New, the program automatically adds a perspective camera and directional light to the scene graph. You can always change the direction of the light by using a text editor on the created VRML file.
- 7)When editing a file not created by this program that contains the DEF and USE keywords; if you pick an object defined inside DEF and edit (move, scale etc.) it, other nodes that make use of the USE keywords may also be affected. For example, picking a lamp and moving it may cause other similar lamps in your scene to move as well. If you don't want this to happen, you can save your file to another name and load the new file. This should solve the problem.
- 8) Note that when saving, the DEF and USE keywords in an existing VRML file will be removed, and replaced by the actual nodes and fields.
- 9) For LOD nodes, the program will only render the first child. The rest are all ignored.
- 10)Loading a file with more than one camera gives unpredictable results.

# Setting the Frame Number

You can change the frame number by either 1)clicking on the spin buttons '<' '>' or 2)typing into the textbox directly

The '>>max' button will set the frame number to the last frame of the current animation.

The 'min<<' button will set the frame number to the first frame (usually zero) of the current animation.

# Credits

The author of this program would like to thank the following individual:

Chris Losinger for his wonderful Jpeg/Bitmap class.

# License Agreement

RenderSoft VRML Editor Copyright © 1997, RenderSoft Software and Web Publishing. All Rights Reserved.

#### License Agreement

You should carefully read the following terms and conditions before using this software.

#### **DEFINITION OF SHAREWARE**

Shareware distribution gives users a chance to try software before buying it. If you try a Shareware program and continue using it, you are expected to register. Individual programs differ on details -- some request registration while others require it, some specify a maximum trial period. With registration, you get anything from the simple right to continue using the software to an updated program with printed manual.

Copyright laws apply to both Shareware and commercial software, and the copyright holder retains all rights, with a few specific exceptions as stated below. Shareware authors are accomplished programmers, just like commercial authors, and the programs are of comparable quality. (In both cases, there are good programs and bad ones!) The main difference is in the method of distribution. The author specifically grants the right to copy and distribute the software, either to all and sundry or to a specific group. For example, some authors require written permission before a commercial disk vendor may copy their Shareware.

Shareware is a distribution method, not a type of software. You should find software that suits your needs and pocketbook, whether it's commercial or Shareware. The Shareware system makes fitting your needs easier, because you can try before you buy. And because the overhead is low, prices are low also. Shareware has the ultimate money-back guarantee -- if you don't use the product, you don't pay for it.

#### **DISCLAIMER - AGREEMENT**

Users of RenderSoft VRML Editor must accept this disclaimer of warranty: "RenderSoft VRML Editor is supplied as is. The author disclaims all warranties, expressed or implied, including, without limitation, the warranties of merchantability and of fitness for any purpose. The author assumes no liability for damages, direct or consequential, which may result from the use of RenderSoft VRML Editor."

RenderSoft VRML Editor is a "shareware program" and is provided at no charge to the user for evaluation. Feel free to share it with your friends, but please do not give it away altered or as part of another system. The essence of "user-supported" software is to provide personal computer users with quality software without high prices, and yet to provide incentive for programmers to continue to develop new products. If you find this program useful and find that you are using RenderSoft VRML Editor and continue to use RenderSoft VRML Editor after 30 days, you must make a registration payment of US\$15 to RenderSoft Software and Web Publishing. The US\$15 registration fee will license one copy for use on any one computer at any one time. You must treat this software just like a book. An example is that this software may be used by any number of people and may be freely moved from one computer location to another, so long as there is no possibility of it being used at one location while it's being used at another. Just as a book cannot be read by two different persons at the same time.

Commercial users of RenderSoft VRML Editor must register and pay for their copies of RenderSoft VRML Editor within 30 days of first use or their license is withdrawn. Site-License arrangements may be made by contacting RenderSoft Software and Web Publishing.

Anyone distributing RenderSoft VRML Editor for any kind of remuneration must first contact RenderSoft Software and Web Publishing for authorization. This authorization will be automatically granted to distributors recognized by the (Association of Shareware Professionals) as adhering to its guidelines for shareware distributors, and such distributors may begin offering RenderSoft VRML Editor immediately.

You are encouraged to pass a copy of RenderSoft VRML Editor along to your friends for evaluation. Please encourage them to register their copy if they find that they can use it. All registered users will receive a registration number through e-mail.

# **Pricing And Ordering Information**

Product Price Price RenderSoft VRML Editor US\$15

#### Ordering RenderSoft VRML Editor

There are a number of ways to order RenderSoft VRML Editor from us. When we receive your payment, we will e-mail you the registration number to register RenderSoft VRML Editor. Please remember to state your email address when making your payment so that we can send you the registration number as soon as possible.

#### Credit Card.

You can place secure credit card orders via the World Wide Web using the Order link on the RenderSoft home page: http://home.pacific.net.sg/~jupboo, or, you can place MasterCard, Visa, American Express, and Discover orders through PsL.

To oder using credit card:

Online: Go to our Web site at http://home.pacific.net.sg/~jupboo and click on "Order Online".

Or go to http://www.pslweb.com/cgi-win/psl ord.exe/ITEM30152

Or for **Secure** server: https://www.pslweb.com/cgi-win/psl ord.exe/ITEM30152

FAX: To 713-524-6398 . Please ask for product #30152 and type or block print very clearly.

Email: To PsL at "30152@pslweb.com"

Credit card orders can be mailed to PsL at P.O. Box 35705, Houston, TX 77235 USA.

PsL requires the following information:

Credit Card [ ] MasterCard [ ] VISA [ ] AMEX [ ] Discover

Credit Card Number: Expiration Date:

Name On Card:

Signature:

Billing Address:

Email: (please print clearly)

Product : RenderSoft VRML Editor

Product Number: #30152

Please note: RenderSoft Software and Web Publishing cannot be reached at the numbers above. These numbers are for PsL, a credit card order taking service only.

Any questions about the status of the shipment of an order, refunds, registration options, product details, technical support, volume discounts, dealer pricing, site licenses, etc., must be directed to RenderSoft Software and Web Publishing by email to jupboo@pacific.net.sg on Internet.

#### ShareIt!

Alternatively, if you are in Europe, you might want to pay using credit card through this company : <u>Sharelt!</u> . You can reach this company by going to http://www.shareit.com/programs/100403.htm

#### <u>Cash</u>

We will accept cash in US(US\$15) or Singapore dollars(S\$20). However, we will take no responsibility for the cash while it's in transit. For you own protection if you want to pay in cash, we strongly recommend sending it to us by registered mail. Please include the order form when you are paying by cash.

Where Do I Send The Cash Payment?

By Post: RenderSoft Software and Web Publishing

Block 1, #08-01/02 Alexandra Distripark,

Pasir Panjang Road

Singapore 118478

SINGAPORE

#### Cheque/Check

You can post us a check drawn on any bank in the world, in that country's currency. The amount should be equivalent to the price in US\$. For example, if you are in Great Britain, you could order RenderSoft VRML Editor by sending a check made out in Pounds Sterling, for an amount in pounds equivalent to US\$25. The check should be made out to 'RenderSoft Software and Web Publishing'. Note: there is extra charge for using checks (US\$25 instead of US\$15) because our bank charges us US\$10 for each foreign check we bank in. Please include the order form when you are paying by checks.

#### Purchase Order

We're happy to accept a purchase order(net 30 days) from your organization and send you an invoice. We prefer to fax invoices, but we can mail them if necessary. However, please note that purchase orders are accepted only from government and accredited educational institutions and major corporations. Please email to RenderSoft at jupboo@pacific.net.sg for more information.

#### What Happens When I Purchase RenderSoft VRML Editor?

When you order RenderSoft VRML Editor, we will e-mail you a registration number in 48 hours. You will type in this number in the Help: Register menu, this will (1)remove the nag screen, (2)allow you to use the Texture Environment: Modulate Option, (3)enable the Scale Orientation Button and (4)allow the Enable Transparency option.

# Contacting RenderSoft Software and Web Publishing

The preferred source of information about the RenderSoft VRML Editor is our Web site:

http://home.pacific.net.sg/~jupboo

Here you can download updates and bug fixes, and follow links to a large number of VRML resources on the Web.

Fax and Snail Mail

We can be contacted by fax: (65) 2749727

or by post: RenderSoft Software and Web Publishing

Block 1, #08-01/02 Alexandra Distripark,

Pasir Panjang Road, Singapore 118478 SINGAPORE

# Order Form

Please print this form out and send it to RenderSoft Software and Web Publishing.

This form should be used for checks/cash payment only. For credit cards payment, please read the section on Pricing and Order Information.

Our fax number is: (65) 2749727

Our postal address is: RenderSoft Software and Web Publishing

Block 1, #08-01/02 Alexandra Distripark,

Pasir Panjang Road Singapore 118478

**SINGAPORE** 

All payments should be made out to 'RenderSoft' Software and Web Publishing'. Please fill out this form and send it to us via one of the above methods. A registration number will be e-mailed to you in a few days.

RenderSoft VRML Editor Ord	
Single Copy: Site License:	
2 to 9 machines: 10 to 24 machines 25 to 49 machines 50 to 99 machines	machines at US\$12 each  machines at US\$10 each  machines at US\$8 each  machines at US\$7 each  please contact RenderSoft Software and Web Publishing
Total payment	
cash [ ] check[ ] (please add US:	for RenderSoft VRML Editor? (check one) \$10 to total payment for checks not drawn in Singapore)
Company(optional):	
E-mail address(please print	clearly)
Thank you for purchasing R	enderSoft VRML Editor, we hope you enjoy using it.
Where did you hear about F	RenderSoft VRML Editor?
Comments:	

# What other functions do I get if I register?

When you register RenderSoft VRML Editor, we will give you a registration number, which you can type into your current shareware/unregistered version. You do this by clicking on the 'Help' menu, and selecting the 'Register' option.

When the program verifies that the registration number is valid, it will automatically activate three functions that is not enabled in the shareware/unregistered version.

The first is the <u>Texture Environment :Modulate Option</u>. This make the rendering of your scene more realistic as the textures information is now combined with the material properties of your objects. For example, you can now see that your textured cube glows with greenish color set by its Material Properties. Note that this option does not affect your final VRML output file . However, if you are exporting a Jpeg file, then this option can make your rendering more realistic.

The second is the <u>Change Object Scale Orientation Button</u>. This allow your objects in the scene to be sheared when combined with non-uniform scaling.

The third is <u>Enabling Transparency</u>. This allow some objects to be transparent/ translucent to others. With transparency, you can create special effects such as 'mist' by putting a transparent shaded plane in front of other objects.

(Please note: RenderSoft's implementation of transparency does not work for all objects)

Also, registered versions of RenderSoft VRML Editor do not show the nag screen that appear every time you start the program.

# RenderSoft VRML Editor Product Information

<u>License Agreement</u>
What other functions do I get if I register?

Pricing and Order Information
Order Form
Contacting RenderSoft Software and Web Publishing
Credits

#### **Evaluation and Registration**

This is not free software. You are hereby licensed to use this software for evaluation purposes without charge for a period of 30 days. If you use this software after the 30 day evaluation period a registration fee of US\$15 is required. Payments must be in the form of checks or international money order/bank draft, and be sent to RenderSoft Software, Block 1, #08-01/02 Alexandra Distripark,, Pasir Panjang Road

Singapore 118478, SINGAPORE. When payment is received you will be sent a registered number which you will enter in the Help:Register menu.

#### Distribution

Provided that you verify that you are distributing the Shareware(Unregistered) Version you are hereby licensed to make as many copies of the Shareware version of this software and documentation as you wish; give exact copies of the original Shareware version to anyone; and distribute the Shareware version of the software and documentation in its unmodified form via electronic means. There is no charge for any of the above.

You are specifically prohibited from charging, or requesting donations, for any such copies, however made; and from distributing the software and/or documentation with other products (commercial or otherwise) without prior written permission, with one exception: Disk Vendors approved by the Association of Shareware Professionals are permitted to redistribute RenderSoft VRML Editor, subject to the conditions in this license, without specific written permission.

# SHAREIT!

RenderSoft VRML Editor Registration

Registration fee: \$15

If you would like to register RenderSoft VRML Editor, you can do the registration online on the Internet at http://www.shareit.com/programs/100403.htm. Alternatively, you can go to http://www.shareit.com and enter the program number there: 100403.

If you do not have access to the Internet, you can register via phone, fax or postal mail. Please print out the following form, and fax or mail it to:

Reimold&Schumann Internet Services ShareIt! Jahnstrasse 24 50676 Koeln Germany

Phone: +49-221-2407279

+49-172-7229837

Fax: +49-221-2407278 E-Mail: register@shareit.com

Registration form for RenderSoft VRML Editor

Program No.: 100403	
Last name:	=
First name:	_
Company:	-
Street and #:	
City, State, postal code:	
Country:	_
Phone:	
Fax:	
E-Mail:	

How would like to receive the registration key/full version?

e-mail - fax - postal mail

How would you like to pay the registration fee of \$15:
credit card - wire transfer - EuroCheque - cash
Credit card information (if applicable)
Credit card: Visa - Eurocard/Mastercard - American Express - Diners Club
Card holder:
Card No.:
Date of Expiration :
Date / Signature

#### New Features in Version 1.1

RenderSoft VRML Editor version 1.1 is more robust than the previous version. It fixes the group leaking problem for files with group nodes.

Also, a few features are added:

Insert Simple Shapes
Field of View
Scale Object Options
Resetting Scale and Scale Orientation

## New Features in Version 1.2

## **Creates professional images**

RenderSoft VRML Editor version 1.2 now allows you to export your scene to a <u>Jpeg</u> file. You can choose <u>high quality output</u> which dramatically improves the rendering of textures, especially when the object is very close and the texture starts to pixelate.

#### **Texture Transform**

Furthermore, version 1.2 allows you to edit the <u>texture transform</u> of an object interactively. You can now move, scale or rotate your texture on the surface of your object as you move the mouse.

#### **Improved Interface**

Version 1.2 features a better interface that will highly benefit new users.

#### **Bug fixes**

This version also eliminates some bugs associated with the application of a WWW Anchor node to objects with non-uniform scale. Changing of material colors and field of view is now slightly faster with the removal of some redundant code. <BR>

# New Features in Version 1.3

### **Ascii Text and Font Style**

RenderSoft VRML Editor 1.3 supports <u>AsciiText</u>. You can now place text in front of one another, rotate them in 3D or select your preferred fontstyle.

RenderSoft Text Editor is a multi-line edit box in which you can insert whole paragraph of text. With it, you can even copy and paste text data from other documents.

# **Rotation Speed and Scaling Speed**

Previous versions of Rendersoft support only 'Travel Speed'. Now, you can scale and rotate your objects more precisely by setting the rotation and scaling speed.

## More simple shapes

More <u>simple shapes</u> are added: unshaded XY plane, shaded XY plane.

#### **Background**

Instead of the dull black background, you can now change to whatever color you like.

# **Bug fixes**

A few bugs are fixed in this version. This includes the High Quality Rendering of scenes with duplicated objects of different textures. Also, the material property of duplicated objects now display correctly when the material dialog box is invoked.

# New Features in Version 1.4

#### **Object Editor**

RenderSoft VRML Editor 1.4 includes an <u>object editor</u> which you can use to create extruded objects.

#### **Anti-Aliasing**

You can now <u>anti-alias</u> your image when you perform High Quality Render. This option makes the final image smoother, eliminating the jagged-edges that appear in some objects.

## **Textured Text**

Ascii Text in version 1.4 can now be textured. Texture transformations can be applied to the text just like other objects.

# **More Fonts**

Two <u>non VRML fonts</u>, DECORATIVE and SCRIPT have been added. You now have more font choices if you want to create 3D text logo for export to JPEG files.

#### **Enable Culling**

This option allows your scene to be rendered slightly faster. However, some objects may not be rendered properly. Some of their faces will be missing as they are <u>culled</u> away.

## **Enable Transparency (registered users only)**

RenderSoft's partial implementation of <u>transparency</u> allows you to see through some objects.

# **Bug fixes**

This version removes the bug associated with the creation of new objects when the Insert Ascii Text window is still opened. Previously, when the above operation is applied, changing fontstyle does not work.

#### New Features in Version 1.5

#### **Better Interaction**

- 1)This version allows you to drag the mouse outside your window when you are moving, scaling, or rotating your object.
- 2)An optional grid is provided to aid the placement of objects in the scene.
- 3) You can easily set the position of an object to the <u>center</u> of the screen by clicking a button.
- 4)The background dialog will now display the RGB value numerically. With this, you can match the background value of your HTML file with the background color of the Jpeg image you export.

# **Keyframe Animation**

You can now produce <u>animated</u> VRML <u>banners</u> easily. RenderSoft allows you to specify only the keyframes and it will draw all the rest for you.