

GLView 2.09 the ultimate 3D Viewer and Internet VRML Browser



"Experience your world in a whole new way"

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GLView is a 3D Object Viewer and WWW VRML Browser for Windows NT 3.51 and Windows 95 based on OpenGL

You use this software product at your own risk.

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GLView is available for Bundling- Agreements (OEM- Version) too.

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Support

File menu commands

The File menu offers the following commands:

- Read** Read a 3D object or image from a file.
- Save As** Save the current 3D scene or object.
- Render to file** Render current scene to DIB/BMP file in arbitrary resolution.
- New** Creates a new 3d object using the New Object Dialog
- New Font Logo** Creates a new 3d object from a text string using the New Font Logo Dialog
- Exit** Exits GLView.

Next:
View Menu

New object dialog

With this dialog predefined 3D objects can be created.
The New object dialog offers the following options:

Type	type of object to be created. Predefined objects :ronny, icosahedron ,cylinder (stepsx,r,h).. Surface objects: sphere surface, plane recursive subdivision objects:sphere(r,stepsx), „height field from image“ creates a GLView VRML image height field node.
Steps x	The number of subdivision in the horizontal (x) direction or the u direction of surfaces. (or the number of recursive subdivision steps for sphere)
Steps y	The number of subdivision in the horizontal (y) direction or the v direction of surfaces.
Umin - umax, vmin - vmax	the parameter range in the u and v direction, valid for surface types like sphere surface, plane.
Radius	the radius for the object, like a cylinder, sphere.
Height	the height for objects like a cylinder

Next:

[New Font Logo Dialog](#)

New font logo dialog

With this dialog a 3d logo out of a arbitrary string of text and a Windows installed TrueType font can be created .

The New font logo dialog offers the following options:

- Text** a string, multiple lines are supported.
- Font** pop ups a font selection dialog, to specify the type of True Type font used for creating 3D Data.
- Extrude** if checked the 2D text outline will be extruded in the z direction, otherwise the text will be created as a set of flat polygons.
- Extrusion factor** the amount of extrusion in the z-direction.
- Top** if checked, the top set of faces of the extruded solids are generated.
- Bottom** if checked, the bottom set of faces of the extruded solids are generated.
- Invert** if checked the text outline will be subtracted from an enclosing / rectangle, to create an "inverted" like effect. (For some letters like i or fonts with self intersecting outlines this may no work correctly)
- invert size** a scale factor relative to the bounding box of the cube for the enclosing rectangle (> 1.0)
- Texture Parameters** normally a xy parameter generation function will work for texture mapping of font objects. If checked for better results for the side facets of extruded objects, the text will properly wrapped along the outlines.
- Align** Changes Text Alignment

Next:
[View Menu](#)

File menu commands

The File menu offers the following commands:

<u>New</u>	Creates a new document.
<u>Open</u>	Opens an existing document.
<u>Close</u>	Closes an opened document.
<u>Save</u>	Saves an opened document using the same file name.
<u>Save As</u>	Saves an opened document to a specified file name.
<u>Print</u>	Prints a document.
<u>Print</u>	Displays the document on the screen as it would appear printed.
<u>Preview</u>	
<u>Print Setup</u>	Selects a printer and printer connection.
<u>Exit</u>	Exits GLView.

Next:

View Menu

Edit menu commands

The Edit menu offers the following commands:

<u>Undo</u>	Reverse previous editing operation.
<u>Cut</u>	Deletes data from the document and moves it to the clipboard.
<u>Copy</u>	Copies data from the document to the clipboard.
<u>Paste</u>	Pastes data from the clipboard into the document.
<u>Paste Link</u>	Pastes from the clipboard a link to data in another application.
<u>Insert New Object</u>	Inserts and embeds an object, such as a chart or an equation in a document.
<u>Links</u>	List and edit links to embedded documents.

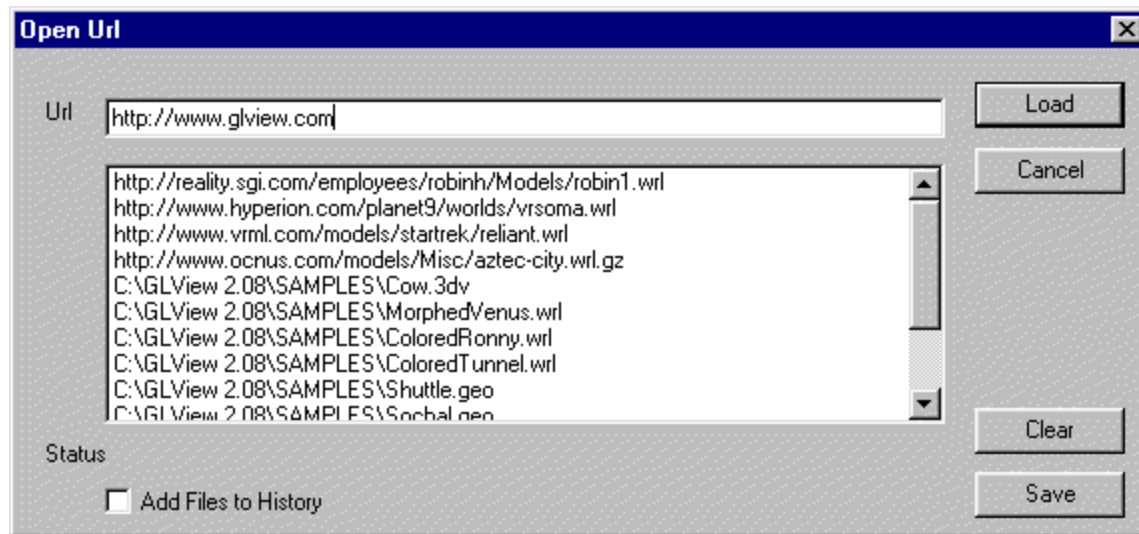
WWW menu commands

The WWW menu offers the following commands:

- Open Url** Opens a WWW VRML url using the Open URL Dialog
- Load all inlines** If the scene contains unread references to other files (local or remote), these files will be loaded. (Usefull if LOD Nodes are combined with WWWInline.)
- Abort Load** The current Network operation will be canceld. This is the same as the stop button in the toolbar. The button is gray if there is currently no background operation.
- Reload** Reload current scene, if scene has a URL it will be reloaded from host. Inlines, textures and anchors, will not be reloaded from host. Disable WWW->Options->use files from cache instead if you want to completely refresh a cached copy of the scene.
- Options** Changes WWW / VRML Options using the WWW Options Dialog

Next:
[View Menu](#)

Open URL dialog



With this dialog access to World-Wide-Web 3D Vrml scens is managed
The Open URL dialog offers the following options:

URL Enter a URL here, as soon <Enter> is pressed GLView tries to connect to the specified host and to retrieve the file. Also a local filename can be entered. You can copy and paste a VRML url from your Web-Browser into this edit field using CTRL-V. For Netscape you can use the right mouse button menu and select "Copy this link location". GLView currently supports the http: and ftp protocol.

History Displays the list of recently opened documents. A single click on a entry copies the entry to the URL edit field, a double-click directly loads the document.

Add Files to History If checked local files are added to the history, otherwise only WWW URL's.

Save History the whole history is saved to disk. Normaly done automatically.

Clear History The history list is cleared.

OK The specified URL is loaded

Next:
[View Menu](#)

WWW / VRML options dialog

The WWW Options dialog offers the following options:

- load inlines** A VRML file can contain references to other VRML or Texture files. For a complex scene with many references this may take time. If "never" is selected references are not expanded, GLView displays unloaded Inlines with a wireframe box, if this box has been specified by the author. "if needed" means the rendering engine decides when to load a inline, "always" will load all inlines. Loading of texture files is still delayed, until Texture Mapping is enabled with Rendering->textured.
- load textures** A VRML file can contain references to texture image files. These files tend to be large, much larger than the VRML file itself. Texture display loading and rendering can be requested using the Render->Textured command or the corresponding toolbar button. This flag specifies the initial texture load mode. "Don't load" loads Textures only after a request, "ask" will ask after the scene loading, and always will directly load the textures. Default : Always
- max inline level** Inlines can be deeply nested, or might containing a loop of references. This parameters specifies a maximum inline loading level.
- use ***** A VRML file can contain ShapeHints nodes controlling backface culling, light sources, cameras or materials. Unchecking one of these check boxes disables the corresponding VRML nodes, GLView global settings will then be used. Disabling of VRML lights is recommended, if the scene contains many lights, affecting rendering performance.
- Keep Host Connection** If checked the socket connection to the WWW host is maintained. Usally a scene contains ininline objects refering the same host, so Network performance is improved.
- Incremental updates** During inline loading / texture loading a incremental display update is done. If multithreading is enabled (default) this option is not necessary, because new elements are added to the scene .
- use files from cache** If checked, GLView tries to load a URL file from the cache directory, instead of retrieving it from the Internet. Example usage : a complex WRL scene has been partly retrieved from the Internet. Load the scene using the "scene.wrl.url" url file. Already transfered inlines + textures will be read from the cache, missing ones from the Internet. Checked by default

Cache Directory Specify a unique directory here, where GLView can store Internet files. You can manually delete files from this directory, if you need more disc-space. The vrl files are containing the original URL location of a file, they can be copied to create a personal hot list directory

Email Your email address (for future networking enhancements.)

BROWSER The full pathame to your WorldWideWeb Browser, GLView will spawn this program for viewing HTML files or URL ´s. If Netscape is running, GLView will use DDE to force the WWW-Browser to display unhandled urls ´s.

Light Scale a global scale factor affecting the intensity of VRML scene lights. If you enable VRML scene lights, the scene might look to bright, because the scene author has used too many or too bright ligts, use the scale factor to dim down these lights. (Default 1.0)

OK, Apply The changes are applied

Next:
[View Menu](#)

View menu commands

The View menu offers the following commands:

Tool Bar Shows or hides the toolbar.

Status Bar Shows or hides the status bar.

Url Bar Shows or hides the Url bar.

Next:

[Camera Menu](#)

Pixelformat menu commands

The Pixelformat menu offers the following commands:

- Set** Shows the Set Pixelformat dialog. Once a Pixelformat has been chosen, it can not be changed, restart GLView with the /x option.
- Info** Shows short information about the number of available pixelformats
- Enumerate** Shows the Set Pixelformat dialog, to allow a browse through all available pixelformats

Next:
[Camera Menu](#)

Camera menu commands

The Camera menu changes the camera action associated with a mouse drag operation in the drawing area.

The Camera menu offers the following commands:

- Reset** Reset the camera to view the whole object in the xy plane from the +z direction. This function is also recommended after loading of a VRML scene with a strange camera or with a camera viewing empty space. Reset will also compute proper values for the camera target distance, near and far clipping planes. After reset you can always use the Orbit camera mode, because the camera target point is in the center of the model.
- Viewpoint
s** The camera viewing parameters can be manually changed. For VRML scenes containing multiple cameras, a predefined camera can be chosen. The Z distance parameter is related to the walking speed, change it if the walk speed is too small or large. For inside of a room type scenes it is useful to enter high view angles e.g. like 90 or higher. This dialog can be activated by pressing the space bar.
- Move** Move the camera with the mouse horizontal / vertical
- Rotate** Rotate the camera with the mouse horizontal / vertical around the center,
Shift: zoom horizontal,
Control: Move horizontal/vertical
- Turn** Turn the camera with the mouse left-right / up-down around the position
- Zoom** Change the zoom scale with the mouse horizontal
- Roll** Rotate the camera orientation (up direction) with the mouse horizontal
- Walk** Turn the camera with the mouse left-right horizontal,
Move in-out vertical
Shift : move horizontal/vertical:
Control : pan up/down /left right
- Fly** Similar to walk, but a two-click walk. The first click turns on walking, move the mouse to change direction, second click stops moving.
- Relative
Move** If enabled camera movements Walk/Fly/Pan are relative to the current viewing direction.
If disabled movement is relative to a global world up direction. This World-Up direction is derived from the selected VRML camera (Y by default). Note Vrml Scene use normally Y as up, instead of Z. The world-up direction can

be edited using the Camera->Viewpoint dialog.
This mode is more convenient to walk around in in room
type scenes or scenes with some ground plane.
Spin If checked automatically rotate the camera until a mouse
button is pressed

Auto Spin If checked GLView automatically enters Spin mode after a
while. Can be disabled at start up using the Options-
>Config dialog.

Next:
[Rendering Menu](#)

Rendering menu commands

With the Rendering menu, the type of rendering is chosen. The Rendering menu offers the following commands:

- Options** Shows the Rendering Options sub-enu
.
- Style** Shows the Rendering Style Dialog.
The rendering settings for vertices, edges, faces and normals can be specified in detail.
- Time** Shows the Time Dialog
Change of animation time parameters, useful if the currently loaded VRML scene contains GLView animation nodes.
- Wireframe** Changes the rendering style to wireframe, only the edges of the model are displayed.
- Vertices** Changes the rendering style to vertices, only the vertices of the model are displayed.
- Boxes** Changes the rendering style to bounding boxes, only the bounding box of each object in the scene tree is displayed.
- Solid** Changes the rendering style to solid. Edges and faces of the model are displayed, lights are turned off.
- Non Lighted** Changes the rendering style to non lighted. The faces of the model are displayed but not lighted. In order to have a visible contrast between faces, the scene should have enabled textures or color settings per face or vertex. This mode is faster than the lighted modes and also faster as solid.
- Flat** Changes the rendering style to flat. The faces of the model are displayed and are flat lighted.
- Gouraud** Changes the rendering style to gouraud. The faces of the model are displayed and are smooth lighted. GLView automatically calculates the required vertex normals.
- Lighted** If checked, edges or vertices are lighted for rendering modes wireframe and vertices.
- Colored** If checked, the model will be rendered with local vertex colors, if available in the dataset. If there are no local vertex colors but local face colors, faces will be individually colored.
- Textured** If checked, the model will be textured, if a texture has been read in with Material->LoadTexture or texture nodes are present in a VRML scene.

Normals If checked, vertex normals will be displayed as lines at the model vertices.

Related:
[Rendering Style Dialog](#)

Next:
[Rendering Options Menu](#)

Rendering Options menu commands

With the Rendering Options menu, rendering attributes can be changed. The Rendering Options menu offers the following commands:

- Backface Cull** Toggles automatic removal of backfacing facets, enabled by default. (If the model looks wrong after input, disable or flip backface culling)
- Reverse. Culling** Reverse the type of facets removed by backface culling, has a effect only if Backface Cull is enabled.
- Flip Object Normals** Flip the direction of the objects normals. Useful if the object appears very dark after import from GEO or RAW files.
- 2 Sided Lighting** If checked, 2 sided lighting is enabled.
- Local Viewer** If checked, the model will be rendered with local viewer lighting applied.
- Antialiased Lines** Wireframe Rendering will be rendered anti-aliased. This takes more time to render.
- Transparency** Work in progress: For VRML files containing materials with transparency, this will enable transparency using a "delayed blend" approach.

Next:

[Material Menu](#)

Rendering Style dialog

With the Rendering Style dialog detailed rendering settings can be independently changed for vertices edges face and normals.

The Rendering Style dialog offers the following options:

- visible** check if item should be visible
- lighted** check if item should be lighted if lightsources are enabled
- smooth** check if item should be smooth shaded, i.e. color of face is smoothly interpolated depending on light-effect at corners. For edges lighted and smooth should usually be checked together.
- textured** check if item should be textured. In this context the effect is that object vertex texture parameters are used if available.
- colored** check if item should be rendered using local object per vertex or face color information, otherwise or local information is not present global settings are used.
- color** if checked color from the color edit field is used, otherwise the global material setting applies. This can be used to render faces and edges together with different diffuse colors.
- Color** Color edit field (R G B number). Can be edited with the color dialog using the Color ... pushbutton.
- Draw Style** Pops up the Drawstyle dialog. Currently fully implemented only for vertex items. A symbol like a sphere or cube can be rendered at each vertex, which for many vertices in the model need much more time to render.

Next:
[Material Menu](#)

Time dialog

Using this dialog the current animation time parameters can be controlled.

Start/Stop	This button toggles animation on/off. Available also in Toolbar.
t	the current time.
Pause	Pauses animation at current time, the time slider below can be used to drag through time.
t0 t1	Animation start and ending time.
dt	animation time step, For high speed machines this value should be lowered e.g. from 0.1 to 0.05 or 0.01.
play realtime	instead of dt the last frames rendering time is used as time step.
wrap	automatically cycles the animation

Related:

Next:
[Options Menu](#)

Material menu commands

The Material menu offers the following commands:

- Edit** Shows the Material Edit dialogbox.
Individual material colors can be edited by entering a Red Green Blue Tripple, or by using the Edit Button. For more information about the parameters read about the OpenGL function glMaterial. To change the "basic" color use the diffuse entry, to change the highlight color, use the specular entry.
- Load** Loads a Material Setting from a file. The file format is compatible with Silicon Graphics Inventor Material files.
- Background** Changes the background color using the color dialog.
Can be overridden by specifying a DEF Background Info { string "r g b"} in VRML file.
- Background Image** Sets or changes a background image.
- Clear Background Fog** Clears the current background image.
Changes Fog Options
- Load Texture** Loads a Texture image from a file. Currently DIB,BMP, GIF, TGA, JPEG and RGB image files are supported. If the model has no texture vertex parameters, a default xy projection is used. Use [Rendering->Textured command](#)to enable/disable texture mapping.
- Texture Options** Changes Texture Mapping Options, including GL mapping function, repeat options and texture transformation matrix.
[Texture Options Dialog](#)
- Parameter** Opens the [Parameter Dialog](#) to apply custom texture vertex parameters computation to the current object.

Related:

[Rendering Menu](#)

[Texture Options Dialog](#)

Next:

[Options Menu](#)

Texture Options (Material Menu)

Use this dialogbox to change OpenGL texture mapping options. For VRML scenes containing Textures and Texturecoordinates entry Type should be set to <none> and the transformation values to the default ones.

- Type** Choose a GL texture parameter function.
- Min-Filter** Changes the pixel interpolation function for texture minification. nearest or mipmap_nearest_nearest is the fastest mode.
- Mag-Filter** Changes the pixel interpolation function for texture magnification, e.g. if you zoom in near a object. nearest is the fastest mode, bilinear gives a better quality image, but is slower.
- Repeat** Choose, if texture should be repeated in x and y parameter direction
- Scale** Sets the texture matrix, using scale the texture repetition can be changed
- Rotate**
- Translate**
- max texture size** specifies an upper limit on texture size. If texture image files takes up too much memory because there are many different or large images, in memory textures are scaled down to this numer. Should be a power of two.
- Perspective correction** Choose, if texture looks distorted or seems to randomly jump on camera movements. No perspective correction is faster.

Related:

[Rendering Menu](#)

[Material Menu](#)

Parameter dialog

With the parameter dialog texture mapping parameters are assigned to each vertex of the current object. Parameters are associated with a GLView object and can be stored to or retrieved from a GLView data-file. GL texture generation function must be **disabled**, in order to use the objects parameters or texture mapping. Parameter generations is currently only supported for a single object scene, resulting from the loading of a 3DV / OBJ /GEO/RAW file or after Tools->Combine has been applied for DXF/VRML scenes.

The parameter dialog offers the following options:

- surface** The type of 2D surface the object is mapped on
xyz: the xyplane
xzy the xzplane
sphere a surrounding sphere
cylinder a surrounding cylinder

- source** object input data for computing parameters,
native: objects xyz coordinate or uv rectangle for quad
mesh surfaces (Default)
vertex color: the current per vertex colors (if any)
vertex normals: the current per vertex normals
vertex parameters: the current per vertex parameters (if
any)

- function** type of mapping from input data to parameter space e.g.
plane, sphere
normally project, meaning map each vertex to the nearest
point on the surrounding surface.

- mapping** additional mapping function (experimental)

- normalize
to object
bounds** if checked vertex input data will be first normalized from
the objects bounding box to a -1 1 unit cube. Should
normally be enabled.

- scale
rotate
translate
enable** additional parameter transformation.

Check this to enable the parameter computation, make
sure that the GL-Texture Options „function“ is switched to
<None>

- Apply** apply current settings, but leave dialog open.

Next:
[Material Menu](#)

Tools menu commands

The Tools menu offers the following commands:

- Tree Editor** Opens the [Tree Editor Dialog](#)
- Morph** Opens the [Morph Dialog](#)
If a VRML scene containing a GLView Morph node has been loaded the first morph node will be edited. (E.g Morphed.*.wrl)
For single object scenes (3DV Files) a VRML scene with a Morph Node will be constructed.
- Defom** Opens the [Deform Menu](#)
- Combine** If the current model is stored in a tree-database (i.e. after DXF or VRML-Input), this tree database is combined into one single object. This usually results in faster rendering performance, but some scene attributes like textures, inlines and animation nodes are lost.
- Triangulate** All facets of the current object are converted to triangular facets. Usefull after a object with convex facets or facets with attached holes has been imported.
- Info** Display information about the current object like number of vertices and facets / triangles, window size, render time...

Related:

[Deform Menu](#)

Next:

[Options Menu](#)

Deform menu commands

The Deform menu offers the following commands:

Sphere Opens the [Deform Sphere Dialog](#) .

Related:

Next:
[Options Menu](#)

Tree Editor dialog

The Tree Editor windows allows the inspection of the VRML scene tree. Double-Clicking on a item displays further sub-items:

<u>Item</u>	<u>Subitem</u>
Group-Node	child nodes
Node	fields
MF-Fields	MF-Field field elements

Nodes contained in Group-Nodes can be arbitray dragged and dropped. Cut & Copy & Paste allows arbitrary structure modification. Please note that Paste doesn't include a copy of the copied / cut node but a reference. This is equivalent of writing "USE Node" in a VRML ascii file.

GLView will automatically name unnamed nodes, if you paste a node a second time into the tree.

File View

Use refresh, if after naming / renaming nodes, the display might be out of sync.

Node

Field Edit, edit the field value of a SField

Related:

Next:

[Morph Dialog](#)
[Options Menu](#)

Morph dialog

The Morph object modifies an object vertex coordinates, depending on time. Morphing looks best with highresolution objects, with "use normals" enabled.

type	Type of morphing: Sphere: the object is morphed into a sphere Cylinder: the objects is morphed into a cylinder Box: the object is morphed into a Box Melt: apply the Melt effect from, Glenn M. Lewis, Dr. Dobbs'Journal, 07 1994 P.g 86
use normals	if checked a hermite like interpolation function will be used, other wise a linear one.
normal scale	scale factors for the normals
radius	another scale factor for the destination

Related:

Next:

[Options Menu](#)

Deform sphere dialog

Works currently with single object scenes only. (3DV, Tools->comine).

A imaginary sphere will be installed in the scene, all object points inside the sphere will be attracted to the sphere center / or will be pushed away (depending on factor). Can give funny effects on objects like ronny or cow. Like parameter this effect only works on single object scenes.

The Deform sphere dialog offers the following commands:

- enable** if checked, the deform sphere will be enabled, uncheck it to disable sphere.
- drag** if checked, the deform sphere can be translated with the mouse, after the dialog has been closed. After a camera menu options this drag option has to be rechecked in order to translate the sphere.
- center / radius** parameters of sphere
- factor** amount of deforming <1 modest >1 large, <0 reverses direction

Related:

Next:

[Options Menu](#)

Options menu commands

The Options menu offers the following commands:

- Register Filetypes Config** Allows the optional association of GLView with different file extensions in the system Registry. Opens the .Configuration Dialog.
- Pixelformat at GL Info** Opens the Pixelformat Submenu Dialog submenu. Displays a dialog with information about the currently used OpenGL driver. E.g. to find out, if the OpenGL Graphics is accelerated or not.

Config dialog

The config options dialog offers the following options:

- Build triangles strips print time** build triangle strips for objects on file import. This could give better performance on some type of objects. if checked render time after each update will be displayed in the status bar.
- use gl cache** Internally a open gl -display list for object will be build after each change, and reused if only some settings like camera are changed. (non recommended for VRML scenes with "Logic")
- use gl extensions** A gl-implementation may support extensions like the VERTEX ARRAY extension, if checked GLView will use such extensions.
- draw directly to screen** normally rendering is done to an invisible background image buffer, which will be made visible by copying the pixel-content to the screen, at the end of the rendering cycle. If checked rendering occurs triangle by triangle directly on the screen. Usefull for compare speed e.g. Wireframe GDI versus OGL, or for big scenes like Vertex-Drawstyle Sphere enabled.
- update colors** if checked, on focus change to another Windows application with a colormap (e.g. Paint program), pixel values in the GLView window will be adapted to the new system color table.
- Zoom by 2** instead of rendering in fullsize, the rendering occurs in 1/4 the resolution, and the pixels are than copied to the screen. Unfortunately the OpenGL pixelcopy function is so slow, so that this function is currently useless.
- Degrade** If enabled GLView will switch during camera mouse movements to a different render mode, for faster feedback. Degrade mode BoundingBox is recommended

Win size
x/y

for complex VRML worlds.

An initial window size can be specified $x \geq 320$, $y \geq 200$. 0 means using Windows defaults, >2048 means maximized. Using a smaller size is recommended if GLView is called from an external WWW Browser and the systems rendering speed is limited.

enable
autospin

.
if checked, GLView starts with AutoSpin enabled.

Window menu commands

The Window menu offers the following commands, which enable you to arrange multiple views of multiple documents in the application window:

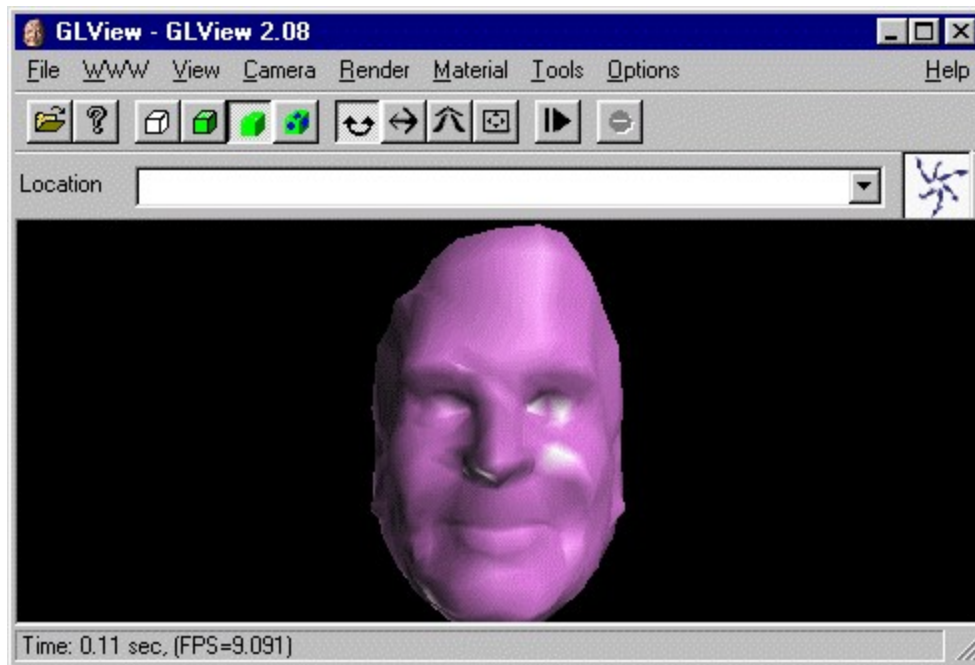
<u>New Window</u>	Creates a new window that views the same document.
<u>Cascade</u>	Arranges windows in an overlapped fashion.
<u>Tile</u>	Arranges windows in non-overlapped tiles.
<u>Arrange Icons</u>	Arranges icons of closed windows.
<u>Split</u>	Split the active window into panes.
<u>Window 1,</u> <u>2, ...</u>	Goes to specified window.

Help menu commands

The Help menu offers the following commands, which provide you assistance with this application:

<u>Index</u>	Offers you an index to topics on which you can get help.
<u>Using</u>	Provides general instructions on using help.
<u>Help</u>	
<u>About</u>	Displays the version and license information of GLView.

Basics



Quick Tour

Start the program
drag around with the mouse (this is camera->rotate mode)
try camera->zoom mode and camera->roll mode
camera->reset will bring back the default view

try render menu:
render->wireframe (or toolbar)
render->flat
render->gouraud
..
now once again
render>wireframe
& render->lighted you get a lighted wireframe display

try material menu
material->load choose a predefined material from the list box

material ->edit
click with the mouse in the diffuse entry field,
now press EDIT to edit the diffuse color using the Windows color dialog box
choose a color , Exit & Apply

material->Load texture
choose a texture e.g. brick.rgb

using material->Texture options you can change OpenGL texture mapping parameters
try to enter scale numbers like 3 3 3 in the scale edit field

Try the filtering options only if you have time or a hardware acellerator

Switch off texture mapping using Render->textured or the Toolbar button.

Say Tools->deform->sphere

enable the check boxes for enable and drag

drag around with the mouse, the model should deform to a imaginary sphere, (which is unfortunately currently invisible). If you do not see an effect, change the radius edit field to higher numbers (negative numbers are also working).

To create a spinning logo :
Restart GLView.

File->NewFontLogo

enter the logo text.

"ok"

a 3D logo should now come up and rotates.

If you want it textured check the "Texture Parameters" check box in the dialog, and load a texture like brick.rgb with Material->LoadTexture

It's possible to create some funny symbols by using additional TrueType fonts from CorelDraw or similar programs, and using symbol fonts like windings.

Basic navigation:

For a "one object" data file or any scene after Camera->Reset has been applied use Camera->Orbit mode

Mouse Movements orbits the viewer around the object

Control + horizontal movement zooms

Shift + horizontal movement rolls ,

Cursor keys are also orbiting around the object

For a "scene" data file like a room or house etc.

use Camera->Walk mode

vertical mouse movements are moving in and out the scene

horizontal mouse movements are turning the view direction to the left or right

Shift + vertical mouse movements are turning the view direction to up or down

Control + mouse movements are moving left/right up/down

All mouse movements are repeated after a while, movement is relative to the point, where the mouse movement was paused.

Better Performance

Performance tips

General :

use a small window size (a default (small) size can be specified in Options->Config)

use a small dataset

use a graphics card with fast pixel transfer.

make sure Rendering -> Options -> Backface culling is checked (might be disabled by GLVIEW)
(for VRML files a ShapeHints node in the file will have precedence)

For DXF-Files use the Tools->Combine command

Texture-mapping is quite fast in non-lighted mode : select Render->Non lighted

If acceptable disable Texture Options->perspective correction

Use wireframe, or lighted vertices modes for complex data set to adjust camera,
than switch to gouraud or enable Options->Config->degrade on move with style set to bounding box.

Enable Render->Style->Vertex->Drawstyle only for data sets with few vertices.

Try to check options->build_tristrips before loading a file.

Try to disable VRML scene lights using the www->options dialog and/or

try the Tools->Combine command, eventually with checking Options->Config->build triangle strips
before.

Textures image files could be prescaled to a power of two, and should not be too large.

eg. 128*128 might be enough (depends on a "normal" window size, and max visible texture size).

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the following License Agreement is valid:

Lizenzvertrag für GLView 2.09

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Technical support

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