



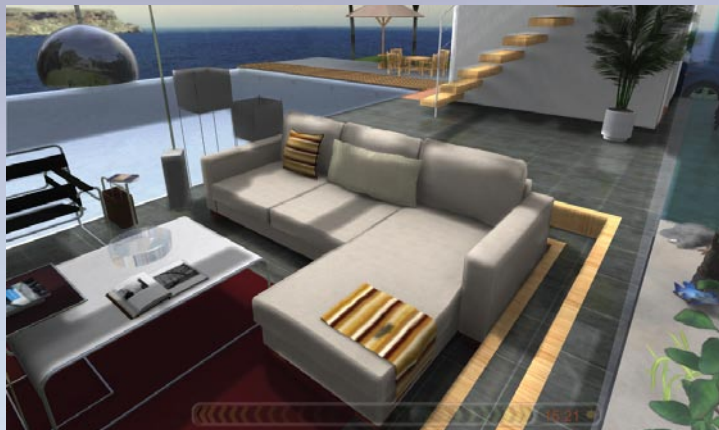
Quest|3D[®]

Quest3D® Engine 4

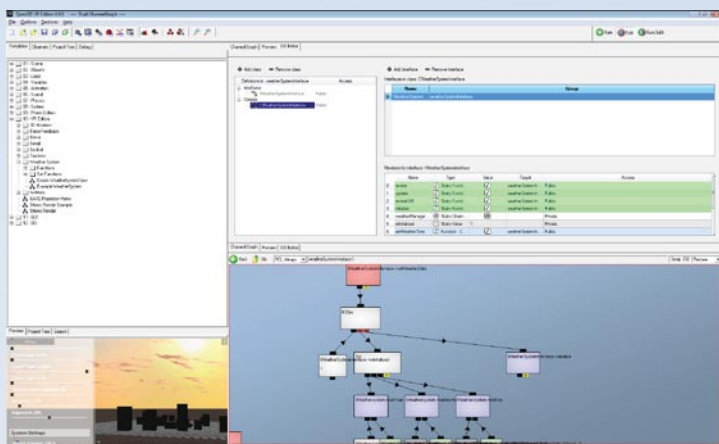
The world's most powerful 3D software is now more powerful than ever

Use Quest3D to create software, web and simulators. Quest3D is the perfect solution for architecture visualization, product visualization, digital entertainment, computer aided training and high-end VR applications.

The unique visual method for software development allows you to create rapid iterations of your project and have instant feedback of what is going on. There are many benefits of working with Quest3D and one of the most important ones is definitely the channel system. You don't have to worry about syntax errors but instead you can focus 100% on the end result.



Architecture presentation. The user can change the time of day and select options like furniture and flooring types. Depending on the light direction the shadows inside the loft change in real-time.



Quest3D has proven to be an invaluable asset and a key element in professional real-time 3D application development. The new object orientation functionality of Quest3D makes it the perfect choice for larger projects. Object oriented design adds better abstraction, standardization and reusability to the already impressive Quest3D platform.

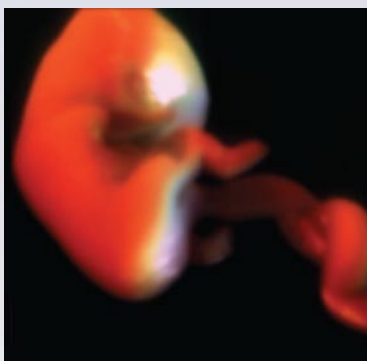
With Quest3D you can build almost any 3D application you want and at the click of a button you have an executable or web site ready and finished for your customers.

Even companies that already have their own 3D technology can benefit from Quest3D. Game companies use Quest3D for rapid prototypes for example and other companies use Quest3D because they prefer a standardized solution over developing and maintaining their own.

Quest3D is a platform that is now over 8 years in development and is already used by thousands of developers in a broad spectrum of projects. It has been successfully used in almost any type of 3D application you can imagine. Once you get a sense of how it is like to truly develop applications in real-time you never want to leave Quest3D.

“Quest3D was a key element to the success of this project, and we look forward to working with them on our next endeavor.”

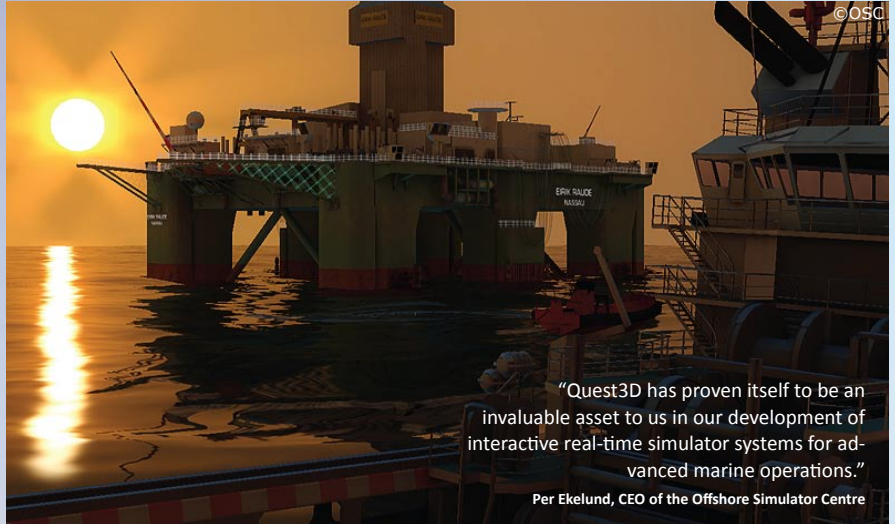
Rudy Poat, Interactive Cinema



Rudy Poat worked on Trapped Ashes, a movie that used HD resolution real-time graphics for special effects. Previously he created effects for Oscar winning special effect movies such as “The Matrix” and “What dreams may come”.



Inside a simulator. The Offshore Simulation Center is a joint venture that includes Rolls Royce and it uses Quest3D to build the world's best offshore simulators.



"Quest3D has proven itself to be an invaluable asset to us in our development of interactive real-time simulator systems for advanced marine operations."

Per Ekelund, CEO of the Offshore Simulator Centre

Outside view of simulator. High dynamic range lighting, skylight simulation and ocean shading are used to render a realistic environment at fast frame rates.

"Arup has successfully used Quest3D to facilitate the adoption of radical design innovation that this design powerhouse is known for, however we feel we are barely scratching the surface of the opportunities offered by Quest3D as a creative platform."

Alvise Simondetti, Global Leader, Arup's Virtual Design Network

"The new object-orientation of Q3D 4.0 provides us with a much better mapping of real-world objects to their simulated equivalents. The result is better manageable projects, that can more easily scale up to a higher level of complexity."

Pjotr van Schothorst, CEO, VSTEP



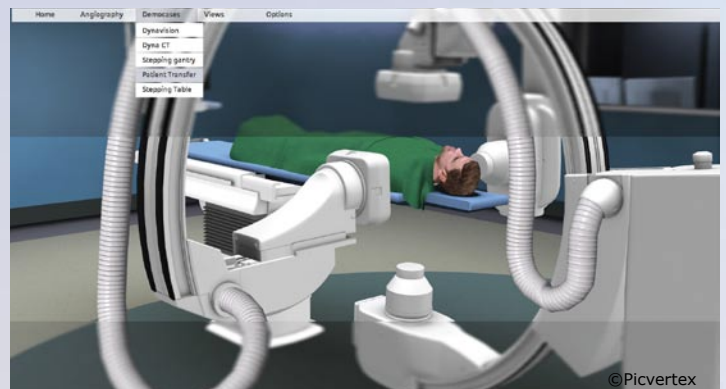
What's new?

- NEW: COLLADA support
- NEW: Easily build user interfaces
- NEW: Sky and weather system
- NEW: Newton physics engine
- NEW: Object oriented programming

The main change in Quest3D 4 is its ability to use object oriented design. OO is a sophisticated programming technique that is absolutely essential for serious projects.

It allows projects to evolve overtime, have multiple developers working on it and allows creation of reusable work across multiple projects.

Quest3D is the only system in the world that allows creation of classes, objects and any other aspect of the software while the software is running.



"We use Quest3D for all our projects. We were surprised by the flexibility and robustness of this Software. Using Quest3D in multiple other projects ranging from Architectural Visualization, Training-Software and Fair Systems. The new OO-System gives us the trust to do your projects in a modern, reusable and structured way."

Micha Kobald, founder and Managing Director of Pixvertex



Screen shot of Audio Surf. This innovative game is an independent game festival winner receiving good reviews (1UP: 95%, Atomic Gamer:92%, IGN: 86%) and high ROI (Top selling game on Steam in February 2008)

"Quest3D erases the line between building games and playing games. You're always both playing it and building it! Doing both together allowed the extremely rapid iteration that was an essential part of developing Audiosurf."

Dylan Fitterer, CEO of Audiosurf, LLC

Quest3D[®] Engine 4 specifications

Publishing

Create executables, web (ActiveX) or installer from your project
Automatic efficient compression
Pay only development licenses, no royalties

Programming capabilities

Very flexible visual programming
Fully customizable program flow, interaction and rendering
No typing, no syntax errors, no compiling
Use LUA component if you need text based scripting
Use the SDK to create custom components for Quest3D
Fully object oriented development (interfaces, classes, polymorphism)
Profiler for measuring execution time and cycle percentage of your functions

Lighting

Fixed function lighting, up to eight lights
Use HLSL(.fx) for customized lighting
Normal maps
Per pixel shading
Import Light maps
Dynamic shadow maps and stencil shadows
Use dynamic HDR lighting and tone mapping for realistic results (**Power and VR Edition only**)
Calculate lighting in real-time with 32 bit precision

Interaction

GUI components for building user interfaces (**Power and VR Edition only**)
Use standard input devices such as mouse, keyboard and joystick
Use Wii-remote input (**VR Edition only**)
Flock of Birds support (**VR Edition only**)
Polhemus Patriot, FSTRAK, Minuteman (**VR Edition only**)
ARTtrack support (**VR Edition only**)
5DT and Immersion Cyberglove(**VR Edition only**)
Force feedback for joystick
3rd party DMX support
3rd party MIDI support
(For additional tracker support contact us at info@quest3d.com)

Sound

Playback MIDI, Mp3, Ogg and Wav
3D positioning
Volume and pitch control
File formats: WAV, MP3, OGG

Geometry and animation import

Import COLLADA or .X Natively. Exporters available for 3D Studio MAX[®], Maya[®], Softimage[®], Lightwave[®], Sketch-up[®], SoftimageXSI[®] and many other programs.
Polytrans[™] integration* allows direct importing of BDF, 3DS, ACIS SAT, Alias Triangle, Autodesk Inventor, Biovision/Acclaim MoCap, DWG, DXF, VDU, DirectX, Electric image .fact, IGES, Illustrator 2D vector file, Imagine .job, Inventor .iv, FBX, .LWO, .LWS, Minolta 3D Scanner, Openflight .fl t, PTC G-Plug Granite, Parasolid, Pro/Desktop, Pro/E native .asm/.prt, Pro/E .SLP, PDB Proteine databank/MDL MOL Molecule, Quickdraw 3D, Rhino/OpenNURBS, STEP, Softimage XSI, Softimage-3D, Solid Edge, SolidWorks, Stereo Lithography .STL, Strata StudioPro, TrueSpace .cob, USGS & GTopo30 .dem VDA-FS, VRML1, VRML2, Vistapro .dem, Wavefront .obj, XGL/ZGL (XML style transfer file format).

Data

XML parser for loading and saving custom XML data (**Power and VR Edition only**)

Database (Power and VR Edition Only)

Connect to MySQL or ODBC database sources

Network (Power and VR Edition Only)

Create Server/client software
Interpolated network synchronisation
Create network applications for LAN and Internet
Timing synchronisation for cluster applications (**VR Edition Only**)
Windowed or Full screen

Artificial intelligence

Path finding and Finite state machine

Animation

Envelopes, Rigid body physics, skinning, expressions, timers, interpolators, morphing, motion blending (**VR and Power Edition include advanced blending engine**)
Import rigid body animation and skinned animation

Special effects

Lens flares
Create 3D text geometry from text
Blur, pixelate, posterize, color correction and many other post processing filters
Particle systems (**Power and VR Edition include advanced version**)
Cloth simulation
Ocean water rendering (**Power and VR Edition only**)
Sky rendering, based on location coordinates and time of day including stars, sun and moon (**VR Edition Only**)
Weather simulation with rain, clouds, fog and thunder (**VR Edition Only**)
Optimized rendering of instanced geometry such as plants and trees and many skinned characters

Material capabilities

Shader model 1,2 and 3 support
Up to 8 textures per material
32,24,16 and 8 bit accuracy rendering (up to 128 bit pixels RGBA)
32,24,16 and 8 bit accuracy texture support (up to 128 bit pixels RGBA)
32,24,16 and 8 bit accuracy render buffer support (up to 128 bit pixels RGBA)
Alpha channel output
Cube map rendering and cube map support
Use HLSL or fixed function for materials
Use precompiled HLSL code to hide your code
Post processing, multi pass, deferred shading
Shadows, relief mapping, parallax mapping, fresnel factor, transparency and many other material effects
File formats: JPG, BMP, TGA, DDS, PNG, AVI, MPEG, WMV, FX

Physics capabilities

Use primitive shapes or geometry
Material system with collision callbacks
Add impulses and forces
Use joints to connect bodies: Ball and socket, hinge, slider, restrict axis
Use motors to position bodies
Rope simulation
Dynamic creation and removal of joints and bodies
Select between physically accurate physics or performance optimized physics

Numbers

Coordinates and values are stored as 32 bit floating point values (~7 digit accuracy)
Max. ~4.000.000.000 vertices per surface (theoretical limit, depends on hardware)
Max. 4096x4096 textures
Unicode support for strings and text rendering, filenames must be non-unicode
Max. 1200 Mb Runtime memory footprint
Max. Shader model 3.0

Output

Outputs all modes supported by hardware
Passive Stereo (**VR Edition Only**)
Philips WOWvx 3D Monitor (**VR Edition Only**)
Anti-aliasing
Support for multi monitor setups

Minimum system requirements

Some features depend on hardware capabilities.
Different Quest3D project have different requirements.

- Windows 2000, Windows XP, Vista or better (64 or 32 bit)
- 256 MB system memory
- 1Ghz Processor
- DirectX compatible graphics card
- 32 MB graphics memory
- 400MB free disk space

Where to get Quest3D?

For purchase options visit the Quest3d web site (<http://www.quest3d.com>) and find a purchase option near your location. There are many resellers that are more than happy to help you with any questions.

