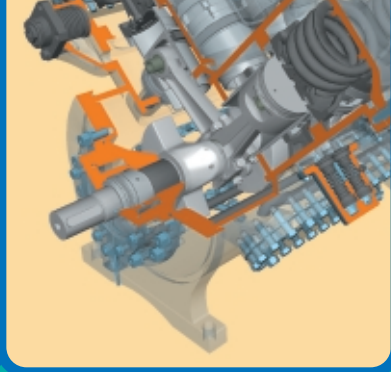# The ultimate VR tool

VR4MAX

>> about Tree C

About Tree C

Tree C is a privately held company, established in 1994 and is headquartered in Bunnik, near Utrecht, The Netherlands. Coming from a background in 3D CAD and visualization software we now develop our own real time 3D graphics software and productivity tools for a wide range of visualization and simulation industries, including the entertainment industry. Our drive is to provide affordable, yet highest quality visualization tools that fit in a streamlined production process and thus adding value to the creativity of our customers. We have customers on all continents.

VR4MAX® product family.

Our flagship product is VR4MAX®, the high performance real-time interactive virtual reality environment for the 3D industry leading applications 3ds max, VIZ and Maya. In the 3D modeling community the VR4MAX® application has built a great reputation based on its stability, reliability and scalability. In addition it's vast functionality and, most important, its unparalleled performance in combination with high visual quality sets a standard in the industry. And without any programming involved.

In most industries communication is becoming the key factor for success. VR4MAX® is a invaluable tool that helps our customers during the design and modeling process and in communication, presenting designs and products to their customers. VR4MAX® is distributed through a growing network of specialized resellers and via our website http://www.vr4max.com.

VR- and Graphics Application Development.

Tree C develops graphics software and virtual reality specials based on the VR4MAX® technology. From real-time 3D visualisation of external databases to providing real-time 3D graphics viewports for for instance ROV simulations. As an innovative company Tree C is closely looking at all sorts of technological developments for possible application in the 3D graphics world. We are therefore the right partners for realisation of your non-standard ideas and requests.

"Using PC's with today's VR applications is an inevitable necessity. We use VR4MAX® in most of our projects, because it is fast; easy to use and studded with functionality. VR4MAX® has been an invaluable tool during the decision-making process for the House of Music in Aalborg, Denmark".

Erik Kjems, Ph.D., Director,
VR Media Lab, Aalborg University,
Denmark

"We have successfully used VR4MAX on a number of projects to help clients visualise complex remote handling concepts and plant layouts. Within these environments we can demonstrate our solutions to the technical challenges posed by the clients using animations and behaviours exported from 3ds max. The ability to interact with the virtual environment and have it respond to those actions makes the whole experience feel very real."

Stephen Sanders
Oxford Technologies Ltd
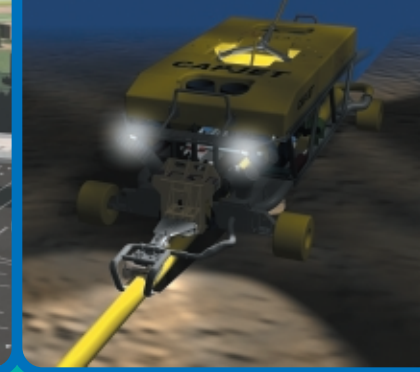
VR4MAX® (pronounced as 'VR for MAX') is the high performance real-time interactive virtual reality environment to view, check and distribute 3ds max, Autodesk VIZ and Maya designs with only mouse clicks from within the MAX/VIZ/Maya environment and without any programming involved. It has standalone VR-viewers on virtually any platform

The VR4MAX® product line exists of the products described below and are available for the Windows and UNIX platforms. The VR4MAX® product line is powered by the high performance VR4MAX® Render Engine that will run on any modern 3D graphics accelerator card. And what is more, they all use the same .VMX file format, making VR4MAX® a very flexible and scalable application, from single note book to clustered PC based multi-pipe systems and UNIX super computers.

VR4MAX® Translator

VR4MAX® Translator for Windows implements the interface between the modelling applications and VR4MAX®. This gives the creators the freedom to share their MAX/VIZ/MAYA designs with anyone anywhere. VR4MAX® Translator is compatible with the latest 3ds max, Autodesk VIZ and Maya release as well as recent releases of these world's most popular 3D modeling, animation and rendering packages.

VR4MAX® Navigator Pro

VR4MAX® Navigator Pro is the top-level virtual reality environment on the Windows platform, and provides support for features like stereo rendering, screen dumps, 3D redlining for project reviews, 3D sound, individual animation, event/action driven behavior, system calls, mesh reduction, levels of detail creation tools, and much more.

VR4MAX® Generator

VR4MAX® Generator bundles the Translator and Navigator. The publishing functionality allows you to pack your VR4MAX® model, the VR4MAX® Render Engine and a very user friendly graphical user interface into one single VR4MAX® Exhibitor executable that plays all VR4MAX® behavior. VR4MAX® Exhibitor is the ultimate customizable userfriendly member of the VR4MAX® product family, and can contain practically all functionalities of VR4MAX®. It just opens with a double mouse click!

"The VR4MAX suite of tools has proved to be the most complete and easy to use VR solution for 3ds max. After having used very expensive systems in the past VR4MAX swept them aside in terms of 'right first time' exports, the models run exceptionally well on moderate machines. This is a great product and the support has been first class."

Graham Kimpton, Visual Supervisor,
Bechtel Ltd., United Kingdom

VR4MAX

VR4MAX® Exhibitor is the perfect tool to distribute your designs, giving you full control over what end-user can and can't do.

VR4MAX® Behavior implements an advanced event/action driven mechanism allowing you to make your VR4MAX® model as interactive as the real world.

VR4MAX® Extreme

VR4MAX® Extreme for Windows brings you high-end multi-pipe visualization technology. This allows you to link multiple PC's into a cluster providing output for your virtual reality cubic rooms, panoramic rooms, immersive tables/desks, high-resolution image walls, and of course multiple desktop monitors.

VR4MAX® Extreme implements advanced multi-threading technology allowing you to get the most out of your multi-processor machines.

VR Conferencing

VR4MAX® Extreme supports VR Conferencing (multiple users at different locations in the same model at the same time), making VR4MAX® a complete and scalable solution for a huge and ever-growing variety of users from many professional disciplines working on real-time virtual reality applications.

VR4MAX® Extreme for UNIX is the solution for high-end visualization systems and supercomputers with high-performance graphic pipes typically used as the engine in virtual reality centers and immersive VR theatres.
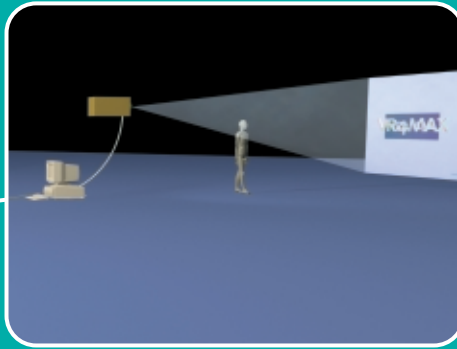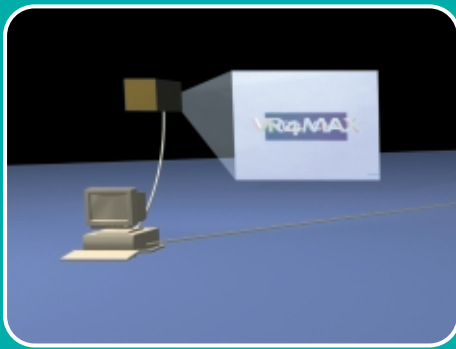
VR4MAX® General Technical Specifications

General features:
• Polygon-based meshes with materials
• Scene backdrop
• Object hierarchy
• Object animation
• Mesh animation (morphing)
• Object transparency
• Vertex colors
• Fog
• Cameras
• Camera export (.cam)
• Startup camera
• Dynamic RGB Lights
• Camera/Light targets
• Head light
• Find functionality
• Full Screen mode
• Individual animations
• Animation Control
• Dynamic clipping planes
• Scene protection (password based)
• Compressed VMX model file format
• OpenGL texture memory usage information
• User definable on-screen logo
• XRef models
• Event/action driven behavior

Texture Mapping:
• Perspective correct texture mapping
• Anisotropic filtering
• Diffuse mapping
• Alpha channel mapping
• Reflection mapping
• Environment mapping
• Mip mapping
• Multi -texturing

Multi-texturing Output:
• Model containing executables
• Screen dumps, AVI movies

Navigation:
• Navigation guides, e.g. hover and fixed height
• Link to object
• Terrain Following
• Collision Detection/Deflection

Performance:
• Highly optimized OpenGL render pipe line
• View frustum culling
• Clipping planes
• Object instancing
• LODs and LOD creation tools
• Mesh reduction tools
• Performance monitoring

Advance features:
• Active and Passive Stereo rendering
• Head tracking
• 3D Redlining
• Record sessions
• 3D Sound, incl. Doppler effects
• Individual animations
• Behavior (event/actions)
• System calls

Input Devices:
• Mouse and keyboard
• Joysticks
• Steering wheel
• SpaceBall, SpaceMouse, CadMan
  and PuckMan (3Dconnexion)

Supported Displays:
• Desktop monitors
• (Tracked) head mounted displays
• (Tracked) 3D Glasses, e.g.
  Stereographic's Crystal Eyes
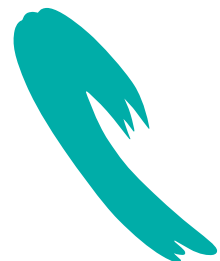
TREE C
TECHNOLOGY

Kosterijland 10-b
3981 AJ Bunnik
The Netherlands
Phone: +31 (0)30 656 96 00
Fax: +31 (0)30 657 20 93
e-mail: info@vr4max.com

WWW.VR4MAX.COM