

## COMBINE, CONFIRM, COLLABORATE POWERFUL IMMERSIVE INTERACTIVE VR SOFTWARE

### Experience Real-Time 3D VR

**Visionary Render** is a truly accessible 3D visualisation software solution which delivers Virtual Reality (VR) capabilities to CAD users and benefits throughout the product lifecycle. Virtualis' experience allows us to demonstrate that being truly immersed in your CAD model is the most effective way to explore and review it. We have harnessed this experience to develop **Visionary Render**, which can be combined with Virtualis' advanced visualisation systems to allow you to interact with your data on a human scale.



### Maximise the Value of your CAD Assets

**Visionary Render** renders VR models in real-time stereoscopic 3D with high update rates and negligible latency. It allows users to create dynamic, interactive VR environments and simulations that can be deployed upon a multitude of immersive visualisation systems and distributed to third parties. It is a collaborative, sharable, sandbox bringing true 3D experimentation throughout the product lifecycle and within reach of all levels of your business.

The **Virtualis Exchange** toolkit helps to optimise your data, seamlessly translating it into **Visionary Render**, where you can view massive data sets from multiple CAD packages simultaneously in **one** place.

*"We've put all our Virtual Reality know-how into Visionary Render. It's a system that can cope with the most complex data and render it in 3D stereo, then adds tracking for human-in-the-loop immersion and networking for interactive, multi-disciplinary design reviews or training exercises."*

Andrew Connell, technical director, Virtualis



#### KEY FEATURES:

- Improves communication and decision-making
- Manage complex CAD data sources seamlessly
- Collaborate in a single VR environment - Globally
- View large models smoothly/ flicker-free in stereo
- Collision detection for the entire model
- Supports consumer HMDs, like Oculus Rift & HTC Vive
- Version Independence-data imported via drag and drop

# SOLUTIONS FOR THE PRODUCT LIFECYCLE...



## How it works

**Visionary Render** has been designed solely with the 3D environment in mind, transforming CAD models into an immersive 3D visualisation experience.

The 3D GUI allows users to access the full tree structure of the imported data along with associated meta data. Two views are provided: the Directory Tree shows all the properties of the model and the Developer View allows the manipulation of all the parts comprising the model.

To navigate, users can swap between a handheld VR controller, an ordinary mouse or a 3D Spacemouse, all supported natively. As the user moves the 3D cursor, it intelligently follows the surface vectors of the model. Any menus that pop up are 3D and transparent, maintaining the perception of depth within the model and maximising the visible area.

**“We see our VR systems being linked with other VR centres worldwide to allow us to carry out international design, manufacturing and assembly reviews, as well as complex training exercises. There has been an overwhelming consensus that our Virtualis visualisation systems are valuable, 21st century engineering tools.”**

**Rab Scott, head of VR and Simulation at Nuclear AMRC**

**“Visionary Render can create 3D worlds from just about any CAD format, meaning we can work with our supply chain. We have also been able to introduce not just engineers, but also operatives and customers. The result has been a different way of working. The development process has been quicker and our designs have been more creative, with fewer parts and they have cost less.”**

**Dan Gale, lead of Raytheon’s Immersive Design Center**

**Visionary Render is delivered through two modules:**

**Visionary Render DV - This Development Platform** allows users to import 3D data (using our suite of adapters) and build comprehensive environments and simulations for virtual prototyping, training, marketing and a host of other applications. It supports immersion, PC clusters and collaboration, acting as either the host or slave in a common virtual environment.

**Visionary Render RV - The Review Platform** is designed to run models published by DV and supports immersion, cluster architectures and networked collaboration on the full range of ActiveWorks solutions. You can import data but not save or create them.

## Value

**Visionary Render** actively breaks down professional barriers by allowing people from different disciplines to experience the model and communicate using a common tool. This means it will pay for itself many times over with a short payback period. Not only does it foster intangible benefits, such as inter-disciplinary communication, but it tackles tangible ones - speeding up the design lifecycle, reducing physical models and reducing risk.