

COMPANY

Virtalis Limited

LOCATION

World HQ: Manchester, United Kingdom

SOFTWARE

Visionary Render

SOFTWARE DEVELOPMENT KIT

HOOPS Exchange, the leading CAD data translation toolkit

Company Website

www.Virtalis.com

Tech Soft 3D Case Study: Virtalis

HOOPS Exchange Helps Immersive Visualization Provider Stay Ahead of the Game

"The main thing is that HOOPS does what it says on the tin. When we import CAD data with HOOPS Exchange, we get the data that we expect. Our customers expect to see reliable data when they're making important decisions based on visualizations. Having reliable and dependable data is one of the most important things for them."

— Barry King, Virtalis



The Challenge

As a pioneer in the industry, established over 25 years ago, Virtalis provides immersive visualization solutions across the enterprise. These solutions cover the full lifecycle of the product, from conceptual design to distribution.

Visionary Render is Virtalis' flagship platform for importing and visualizing large datasets from a range of sources, while maintaining all the geometry, naming hierarchies, metadata, and product & manufacturing information (PMI).

Virtalis is focused on supporting industrial applications and manufacturers creating large complex products for aerospace/defense and automotive, but also construction, geoscience, consumer goods, and more. Accurately supporting the formats used in this wide range of industries is critical.

"A lot of the companies promoting VR/AR are providing very specific solutions that are focused in a particular department or on a specific activity like training," explained Gavin England, Product Marketing Manager at Virtalis. "We see ourselves as providing a visualization backbone across the enterprise. HOOPS plays a big part in creating an enterprise data model that supports that visualization by providing a rich set of data."

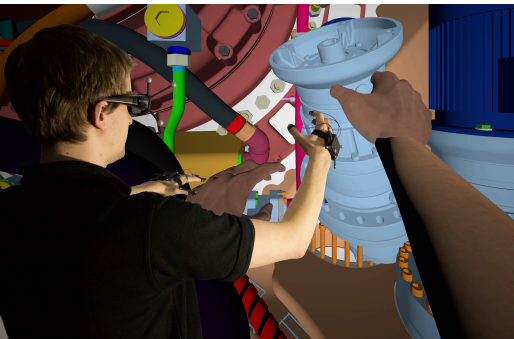


HOOPS Exchange Provides Unmatched Data Access, Accuracy, and Speed

"The commonality is companies have large amounts of data that they need to visualize from diverse sources," explained Barry King, Product Owner at Virtualis. "The attraction is to review the data in an immersive environment on a one-to-one scale, rather than seeing a 2D view of a 3D object. That's really good for communicating to people who aren't skilled in CAD."

"The main thing for us is that HOOPS does what it says on the tin," said King. "When we import CAD data with HOOPS Exchange, we get the data that we expect. It's reliable data that our customers expect to see for making important decisions based on visualizations – The fact that it's dependable and reliable is one of the most important things."

"What's nice about HOOPS is that it supports almost all the formats, including VRML," said King. "Our customers have legacy data, and we rely on the fact that HOOPS Exchange supports those formats. Often our customers will challenge us with data and we can say, 'no problem. We can support this wide variety of formats because we have HOOPS behind us.'"



Virtualis goes beyond visualizing CAD data from an external view by immersing users in the environment where the model may live, allowing them to experience the product.

"We're looking at products in the context of where they sit," said England. "We could be looking at a product installed inside a factory, or a building structure coming from building information modeling (BIM) data. In addition to the core formats, being able to bring in data like Revit is pretty key as well."

HOOPS Exchange provides access to a broad range of data including B-Rep geometry, metadata, PMI, model tree, views, persistent IDs, styles, construction geometry, visualization and more – all without depending on any CAD system. This wide-ranging access proved to be an important element in Virtualis' decision-making process.

"When we initially were getting to grips and integrating it, Tech Soft 3D was really responsive and collaborated with us to get the results that we needed," said King. "When we communicate an issue, we always get it fixed in the next release, and the releases come out steadily and reliably." That's very important and a real benefit for us."

"Whether they're working with engineering or science data, a lot of customers are learning how much time and money they can save by leveraging immersive visualization and not having to build physical prototypes. This helps them make better business decisions – and Tech Soft 3D plays a critical role in supporting those workflows."

Industry:

- Virtual Reality

Challenge:

- Provide support for broad range of formats
- Ensure fast and Accurate loading of data to visualization hardware
- Evolve product to support new industries in VR/AR

Solutions:

- HOOPS Exchange, the leading CAD data translation toolkit

Results:

- Viewing products in an immersive environment allowing for better business decisions
- Speed production by not having to build physical prototypes
- Enable rapid visualization of massive, complex models in VR/AR environment
- Give customers new ways to streamline their processes by providing support for work-flows around AR/VR