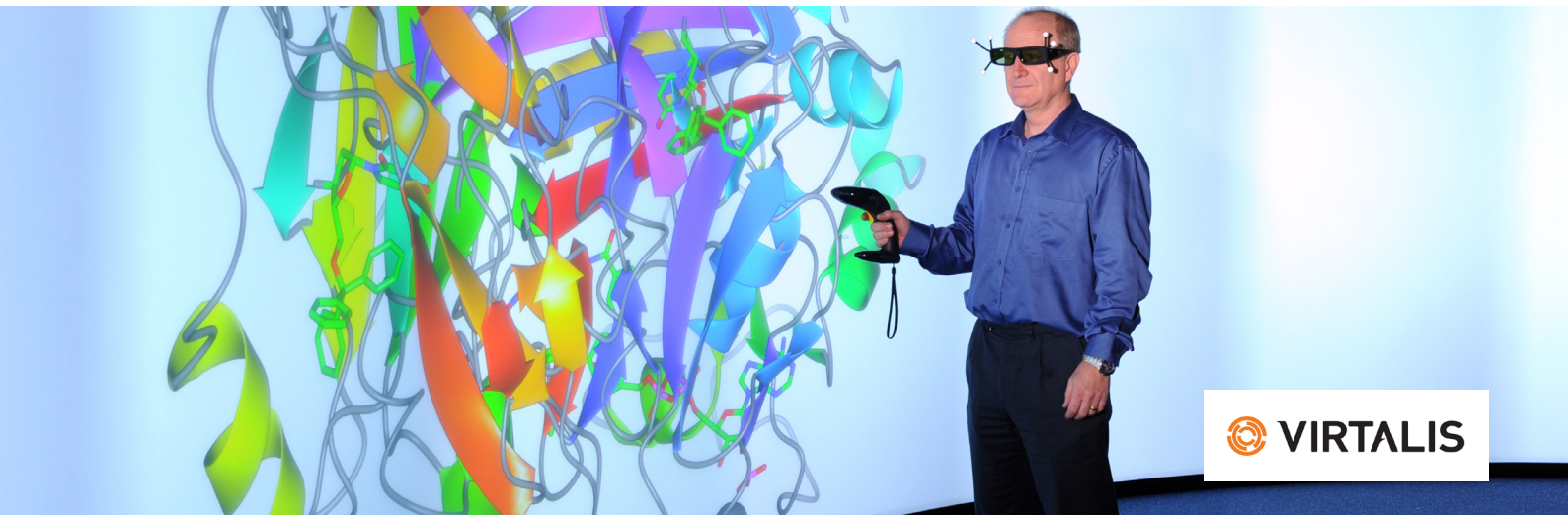# Inspiring new visualisation technology development

Hartree Centre
Science & Technology Facilities Council

VIRTALIS

Visualisation and Virtual Reality (VR) company, Virtalis, has expanded its product range with a specialist software developed for and demonstrated at the STFC Hartree Centre.

Challenge

In the field of computational science, large-scale visualisation and VR systems are valued because they provide the ability to extract insights in much finer detail from the output of a modelling, simulation or data analysis carried out on a supercomputer. Visualisations can make complex information, such as a molecular structure, or the design of a car, easier to illustrate - with or without domain-specific technical knowledge.

This means users have a more insightful and engaging medium through which to present potential projects to industry customers or to demonstrate scientific impact to stakeholders and the general public. Visualisation systems like the one at the Hartree Centre, however, often require a significant investment of both time and money, so it is important to ensure its commercial clients are gaining the maximum benefit from the technology.

Solution

Guided by the Hartree Centre's specification, Virtalis created ActiveView, a custom-built image management tool that allows users to overlay a secondary input simultaneously when a visualisation is running. This means that users of the visualisation screen can simultaneously display presentation slides, demonstrate a user interface or even show a second visualisation if the device used as secondary input is 3D enabled. The software even enables the integration of video conferencing without disrupting the visualisation environment or installing additional software. ActiveView simplifies the operation of rendering additional analogue and digital computer sources concurrently within advanced visualisation systems.

Benefits

ActiveView has now become a staple inclusion within Virtalis' VR offering for its new customers, and was considered so useful that the company also offered retrofitting to existing clients.

For the Hartree Centre, the tailor-made software makes its facilities more attractive and versatile to its clients and partners, owing to the increased possibilities for presentation, experimentation and demonstration using dual image layers. This enables businesses to convey complex information in a concise and engaging way, driving results and improving their own performance.

"ActiveView is a powerful tool because it makes expensive visualisation systems more functional and usable in an everyday business environment. It's become a staple of our product range, and we were able to develop and demonstrate it at the Hartree Centre."

– Julian Ford, Business Development Manager, Virtalis

Work with us

We collaborate with industrial clients and research partners on projects that create insights and value using high performance computing, big data analytics, simulation and modelling.

By combining our world-class facilities with access to our specialists and computational scientists, we can enable your organisation to produce better outcomes, products and services more quickly and cost-effectively than through conventional R&D workflows.

With our partners we are developing the next generation of supercomputing architectures and software, combining existing best practice with innovation to deliver faster, cooler and more sustainable solutions capable of meeting the challenges of data intensive computing.

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