

3D PRODUCT VISUALIZATION WITH REAL-TIME INTERACTION

Supporting the Value Chain with High-End
3D Product Visualization Software



Mastery in
Software
Engineering



Key Facts

 Industry: Automotive

 Team Size: 11 People

 Duration: 10 Years

 Technologies:

C++,

Qt,

Teamcenter

 Services:

Software Architecture

Software Development

Software Testing

 Trends: 3D Visualisation

Highlights

- A high-end solution that enables 3D product simulation with real-time interaction.
- The software empowers global manufacturers to create virtual products in lifelike quality, from design to marketing and sales.
- Improves collaboration between engineers and designers.
- Fortech has been the technology partner in product development for more than 10 years.



Solution

Desktop application based on real-time 3D visualization technology that enables the digital simulation of a product, such as a car or an aircraft.

It features an advanced product presentation module that can simulate various design alternatives, based on an exhaustive set of product features. It can also simulate the actual human experience with the product by checking ergonomic characteristics of the design through motion tests and human proportion visualization within the digital prototype.

Used by automotive leaders, the software is a high-end tool that optimizes their value chain, from the design phase all the way through to the market.

It offers designers and engineers an exhaustive product experience, facilitating the decision-making process and reducing prototyping costs.

It also enables the production of compelling marketing and sales assets, helping companies reach diverse markets fast and increase sales volumes across channels and territories.

Collaboration

Our client is a producer of innovative software solutions for professional 3D visualization in real-time. Their unique suite of applications enables global manufacturers to leverage a comprehensive digital product experience throughout the complete product lifecycle, from conception and development to marketing and sales.

As a nearshore software development partner, we implemented several modules and plugins for the application, including:

- a module for conferencing that enables the real-time visualization of a product worldwide and the reproduction of tasks from a machine to all connected systems;
- a module for the taxonomy of vehicle parts, so that these can be automatically accessed from the database when simulating a car configuration;
- a module that scans the end user's system to check compatibility with future upgrades of the application;
- one direction in our collaboration was the development of a plugin which integrates the core product workflow with Teamcenter.

The integration with Teamcenter transformed the solution into an enterprise-ready, high-end visualization product, which overcomes the barriers between engineering and virtual reality.

Client Benefits



QUALITY:

Cutting edge rendering options for high-fidelity, real time product visualization.



PERFORMANCE:

Accelerated data processing through batch automation.



INTEGRATION:

With Teamcenter and other industry relevant software.





ABOUT FORTECH

Fortech is a top Romanian software development company headquartered in Cluj-Napoca. With a workforce of 1000 people, Fortech has been repeatedly recognized by Deloitte, IAOP®, EY, and Forbes for its fast-growing, entrepreneurial journey.

With expertise and a strategic focus across healthcare, financial services, automotive sectors, and more, we cover the end-to-end software lifecycle development to deliver the innovation, scalability, quality and speed our clients need.

Our approach to software engineering combines strong technology and process know-how, Agile delivery methods, and a blend of code quality practices and metrics refined in almost two decades. Since 2003, over two hundred clients chose Fortech as their tech partner.

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