

HOOPS VISUALIZE

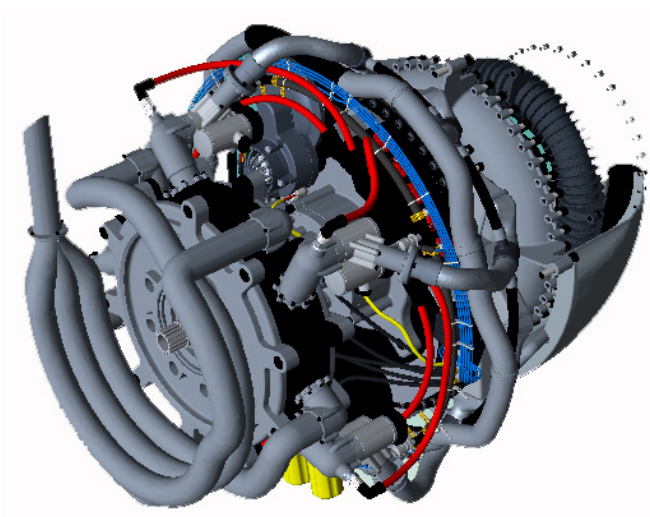
VISUALIZATION, ESSENTIAL FOR 3D MODELING, PRESENTS CHALLENGES TO APPLICATION DEVELOPERS

- Graphics development requires unique capabilities, different from 3D modeling
- Some platform specific solutions or internally developed solutions limit 3D application success
- Quality or performance significantly affects users experience

HOOPS VISUALIZE ENABLES 3D APPLICATION DEVELOPERS TO FOCUS ON INNOVATION

- Proven, high-quality graphic capabilities allow developers to focus on core-competencies and add competitive differentiation to their product
- Robust support for both OpenGL and Direct3D, as well as leading graphics cards, removes limitations for most 32- and 64-bit platforms
- Industry leading technology to create a competitive advantage for your application

HOOPS Visualize is the industry's most powerful, portable and complete graphics development component for creating or enhancing 3D applications. HOOPS Visualize helps developers accelerate the development of high-performance 3D applications for desktop, cloud or mobile applications using the high-level graphics APIs that power applications in CAD/CAM/CAE, Electronic Design Automation (EDA), manufacturing, and many other markets.



HOOPS VISUALIZE SIMPLIFIES 3D GRAPHICS APPLICATIONS DEVELOPMENT

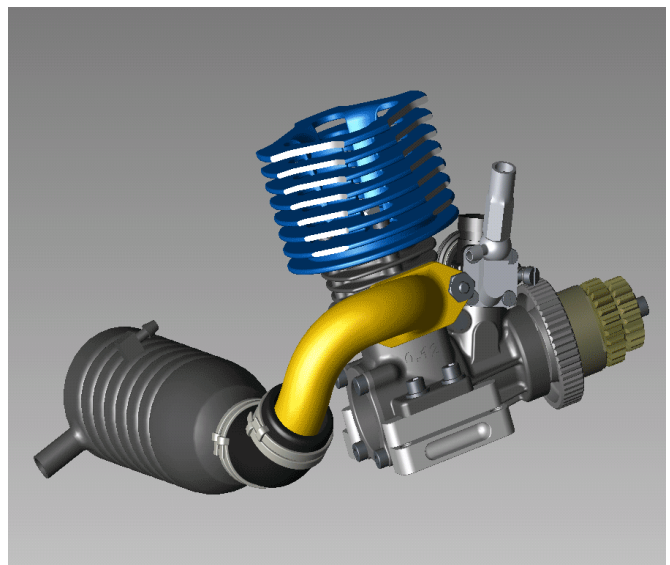
Internal development of a graphics engine often occurs in tandem with the application itself - over time becoming so intertwined that it is difficult and costly, if not impossible, to maintain and enhance. In contrast, HOOPS Visualize provides developers with a clear, well documented API, making a HOOPS-based application much easier to develop, maintain and enhance.

HOOPS VISUALIZE EXPANDS HARDWARE AND PLATFORM COVERAGE

In order to maximize market reach, applications must perform well on a wide array of hardware platforms. HOOPS provides this coverage by optimally driving both OpenGL and Direct3D. This dual driver support is vital to broad hardware coverage since OpenGL remains the optimal graphics acceleration approach on some Windows hardware and all non-Windows platforms, while DirectX is significantly better on more recent Windows hardware. In addition to this OpenGL/DirectX coverage, HOOPS also provides platform flexibility, running Windows, Linux and several UNIX platforms.

HOOPS VISUALIZE DELIVERS THE GRAPHICS QUALITY USERS EXPECT

With most 3D applications focusing heavily on visual realism as a competitive differentiator, the end-users' graphics expectations have increased dramatically. HOOPS gives developers the tools to effectively compete by easily adding advanced visual capabilities such as shadowing, textures, transparency, gooch rendering and other shader-based effects.



KEY FEATURE IN HOOPS VISUALIZE

Tight integration with ACIS 3D Modeler, CGM, and other popular solid modeling libraries

Rich 2D and 3D integrated scene-graph creation, optimization and management

Fast on-screen viewing, manipulation and interaction

Full support for optimal rendering on both OpenGL and Direct3D

Source-code level sample applications for desktop, Web, Java and .NET

High-quality text rendering and management

Large Model Visualization for real-time viewing of large datasets

Advanced point-cloud visualization

Animation engine including record, playback and serialization

Fast clash-detection for both static and dynamic scenes

Advanced sectioning on multiple planes for creating cutaway views

Professional annotation options including 3D bill-boarding and occlusion

Advanced shader-based material rendering with a customizable material library

Walk-through operators including gravity and collision avoidance

Advanced multi-layer transparency for displaying hidden objects

Our 3DEXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 190,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.spatial.com.

