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## SGI<sup>™</sup> Immersive Solutions Review Based on V5 Architecture

#### Features

- Full CATIA V5 integration with the latest virtual reality technology
- Integrated data path—no data conversion required between CAD database and virtual reality application
- High-end real-time visualization techniques such as ClearCoat, ClearCoat 360, and OpenGL Shader
- Works in both single and multipipe environments
- Intuitive 3D interaction functions via the 3D menu: annotations, free or locked clipping plane, easy 3D selection, easy object manipulation and navigation, and simple access to CATIA functions in immersive environments
- Support for most common 3D input devices
- Support for a wide range of immersive environments, including SGI Reality Center rooms, desks, and walls

#### **Benefits**

- · Saves time and money due to direct process integration
- Realistic visualization of models minimizes the necessity to use physical prototypes
- Provides ability to recognize unsatisfactory styles and/or defects almost from the beginning of the design cycle
- Less time-consuming—single environment makes data exchange and conversion superfluous
- Offers immediate evaluation of design studies within the process chain
- Provides ability to do show-and-tell presentations involving multidisciplinary workgroups
- $\cdot$  Gives opportunity to explore prototypes on a 1:1 scale or any other scale
- · Unsatisfactory styles and/or defects can be recognized

#### CAD and SGI™ Reality Center™ Integration Software and Services

SGI Immersive Solutions Review Based on V5 Architecture consists of value-added software and services that work with CATIA® V5. For the first time, users can benefit from working within an immersive environment without leaving their familiar CATIA systems—no advance preparation for virtual reality sessions is needed, since the CATIA V5 data can be used as is. With a single click, the user can quickly enter the immersive environment. 3D input devices are then used to navigate through the scene. Users can easily perform advanced interactions such as cutting through the model or measuring distances. Other key features include selecting parts, annotating problems with specific 3D markers, and documenting the entire session.

Because there are no data exchange problems, seamless integration of virtual reality technology into existing process flows is now possible. Workgroups can now examine different aspects of their virtual models in a completely intuitive way and in real time. The virtual reality user interface technology is based on easy-to-use, state-of-the-art 3D interaction metaphors.

#### Profits for the Manufacturing Industry

SGI Immersive Solutions Review Based on V5 Architecture is a revolution for the engineering user, especially in the automotive, aeronautics, and shipbuilding industries.

Digital mock-up review (geometry-oriented) can be easily accomplished while avoiding physical prototypes. SGI Immersive Solutions Review Based on V5 Architecture delivers real-time data, and checking the kinematics relationship can be accomplished with a single entry.

For the aeronautics industry, data can be easily evaluated without a large physical prototype. Another benefit is that distributed data can be reviewed earlier in the development process.

The shipbuilding industry can create customer presentations on native CAD data without producing inflexible hardware show modules.



Consulting Services | Professional Services



SGI Global Services offers a comprehensive range of service solutions in the following categories:

• Professional Services Consulting Services

• Productivity Services Managed Services Remanufactured Products

• Support Services Mission-Critical

Education Services

For additional information, please visit www.sgi.com.

### SGI Immersive Solutions Review Based on V5 Architecture Technical Specifications

Computer System • Memory: ≥1GB • Available disk space: ≥5MB • Operating system: IRIX\* 6.5.x • Recommended hardware: Silicon Graphics\* Onyx2\* or the SGI\* Onyx\* 3000 series • Minimum hardware: Silicon Graphics\* Octane2\* with two processors and V12 graphics [for single-channel display]

Input Devices • ICIDO MIKE • Ascension 6 DOF mouse

•Others available through customization

Output Devices • Powerwall • Workbench • Any immersive projection device

Note: The number of graphics pipelines supported depends upon the type and configuration of the host computer.

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Tracking Systems

Ascension MotionStar
Origin DynaSight<sup>™</sup>

Polhemus FASTRAK®

·Ascension Flock of Birds®

Software Prerequisites

Support and Warranty

· Contact your local SGI office

·Other systems require customization

• ENOVIA DMU Navigator 3 Version 5.7

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