



# **CGM Modeler**

The ultimate modeling technology for next generation 3D applications

CGM Modeler is at the core of a suite of technology including solutions for CAD Interoperability, Polyhedral Modeling, Feature Recognition, Constraint Solving and more. CGM Modeler enables applications to create, modify, query and visualize 3D data for addressing the most complex challenges in your industry.

### **WORKFLOW AUTOMATION**

Automate data preparation, model simplification and more by leveraging high level operators such as feature recognition and de-featuring for manufacturing and analysis applications.

### **SUITE OF TECHNOLOGY**

Address complex requirements and deliver more value with the combination of powerful technologies. Adding CGM Polyhedra to CGM Modeler expands the reach of B-rep modeling by providing extensive polyhedral modeling capabilities to accommodate hybrid modeling workflows in various industries such as Additive Manufacturing, Medical or Geospatial.

## **SOLUTION ADVISOR**

Spatial experts ensure the success of next generation applications. Leading edge solutions require continuous improvements and differentiations. With mutual collaboration, CGM Modeler will evolve and enable future needs.





# **CGM MODELER FEATURES**

#### **Geometry Creation**

CGM Modeler provides the best in class geometric operators for solid, surface modeling and direct editing. Applications can leverage operators for creating the most complex 3D parts and assemblies commonly used in automotive, aerospace industries and more.

#### **Geometry Modification**

CGM Modeler supports modification of both imported and natively designed models. Developers can implement their downstream workflows by leveraging a wide range of operators such as Boolean, offset, fillet and more for efficiently preparing models.

#### **Geometry Analysis**

CGM Modeler enables fast and accurate geometry query and analysis of complex models. Next generation applications can leverage a wide range of operators such as wall thickness, clash detection, point body distance for additive/subtractive manufacturing, robotics and metrology workflows.

#### **Geometry Visualization**

CGM Modeler provides visualization of models for both 2D and 3D industry workflows. Applications can leverage operators for controlling tessellation parameters to generate multiple levels of details and precise hidden line views for planar projections of models.

#### **Geometry Feature Recognition**

CGM Modeler embeds advanced feature recognition on any imported model even without accessing the feature tree. Applications can leverage operators to identify features such as holes, pads, fillets and more along with their defining parameters for manufacturing automation and simplification of models for analysis.

#### **Getting Started**

In addition to expert guidance from our customer success team, CGM Modeler package includes comprehensive documentation of C++ / C# interfaces, sample projects, and a Java Script based application for quick prototyping, concept validation and fast debugging.

# Our **3D**EXPERIENCE® platform powers our brand applications, serving 11 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3DEXPERIENCE** Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating 'virtual experience twins' of the real world with our **3DEXPERIENCE** platform and applications, our customers push the boundaries of innovation, learning and production.

Dassault Systèmes' 20,000 employees are bringing value to more than 270,000 customers of all sizes, in all industries, in more than 140 countries. For more an information, visit **www.3ds.com**.





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