

# 3D InterOp

Integrate and reuse 2D and 3D data in engineering workflows.

Adopted by major industry players, 3D InterOp enables your application to work with an extensive breadth of CAD formats in a seamless, unified way.

## HIGHEST QUALITY FOR APPLICATIONS

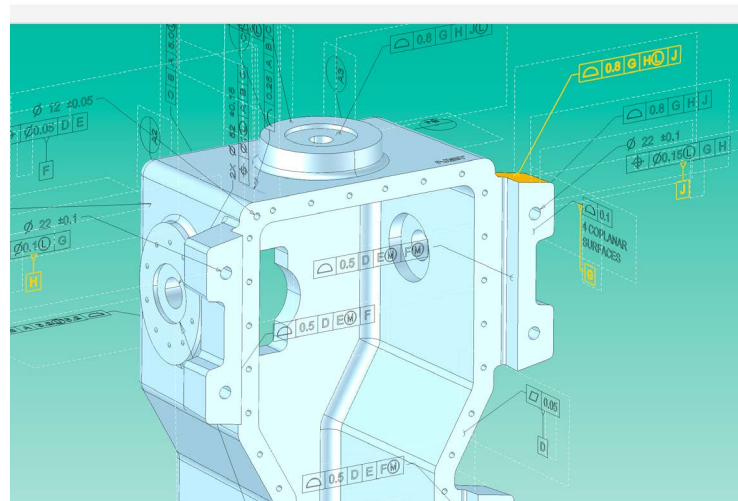
3D InterOp generates native geometry for ACIS, CGM, and Parasolid, providing high quality data ensuring the success of downstream operations.

## REUSE METADATA FROM DIFFERENT SOURCES

Beyond geometry, 3D InterOp imports associated metadata, such as manufacturing information, enabling you to automate your application workflow.

## FLEXIBLE AND PERFORMANT

Load data as needed, by importing containers of your choice to deliver optimal user experiences.



# 3D INTEROP FEATURES

## Native Data Translation

3D InterOp leverages CGM kernel and native APIs to read/write CATPart and CATProduct from CATIA and SolidWorks metadata. Native APIs give your application a strong edge in terms of quality without requiring a CAD license. Similar behavior is available for Parasolid based formats such as NX, Solid Edge and SOLIDWORKS, if your application embeds the Parasolid kernel.

## Selective Import API

Incrementally import CAD data as individual containers, including product structure, tessellated geometry, exact geometry, and manufacturing information, as needed by your application workflows.

## Geometry Repair

Automated healing and advanced operators like stitching and re-surfacing produce topologically valid solid models, robust for downstream workflows.

## CAD Associativity (PNames)

Import stable CAD topological identifiers allowing your application to capture and track design changes for regeneration of downstream features.

## Product Manufacturing Information (PMI)

3D InterOp supports product manufacturing information in graphical and semantic form with full geometrical associativity, enabling engineering reviews and process automation for manufacturing and measurement.

## Concurrent Import

3D InterOp leverages modern hardware by using multiple threads, or multiple processes, to provide imported data more quickly than ever before.

## A Unified Implementation

With an abstract interface, 3D InterOp enables applications to add new formats with consistent behavior across metadata at no development cost.

## Getting Started Quickly

In addition to expert guidance of our support and services staff, 3D InterOp provides complete documentation of C++/C# interfaces, sample implementation to get started, and a JavaScript based application (3DScript) for quick prototyping and debugging.

 [View the up-to-date list of supported file formats](#)

## Our 3DEXPERIENCE® 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 information, visit [www.3ds.com](http://www.3ds.com).



3DEXPERIENCE®