coreform Cubit Associate

Introducing Coreform Cubit Associate: free, premier meshing software for non commercial use

A comprehensive toolset, easy-to-learn interface, and smart, interactive user guidance make the free Coreform Cubit Associate program a great fit for universities, open-source simulation projects, and other qualifying groups.

Coreform Cubit has been meeting the world's most challenging industrial and academic engineering problems for more than two decades. It features powerful, multi-purpose capabilities for geometry preparation and finite element mesh generation.

The free Coreform Cubit Learn program has evolved into the Associate license program. This free, non-commercial license (with a 50,000-element export limit) is perfect for universities, open-source simulation projects, and other qualifying groups.

Interested? Email us to apply for access codes or fill out the form here.

For more information about features and capabilities, visit coreform.com/cubit.

Comprehensive toolset
Everything you need for fast geometry cleanup, meshing, quality assurance, and export.

Powerful geometry tools
Automated, user-guided tools for fast and satisfying geometry cleanup and simplification.

Robust mesh generation
Complete feature-set for surface and solid meshing with a wide variety of element types and methods for automating and streamlining mesh creation.

Industry-leading quality controls
Unrivaled capabilities for specifying mesh properties, analyzing mesh quality, and performing precise mesh modifications.

Smart workflow wizard
Step-by-step guidance through geometry preparation and mesh generation, with interactive diagnostics and smart suggestions.

GEOMETRY

Build solid geometry directly or import CAD
Create solid geometry directly in Cubit, or import geometry from leading CAD platforms. Modify with transform or Boolean operations.

Auto-heal dirty CAD
Geometry analysis and repair tools diagnose and fix geometric and topological errors from imported CAD by trimming, stitching, and rebuilding.

Clean up and defeature with smart tools
User-guided, automated routines detect and remove undesirable features such as fillets, chamfers, and sliver curves and surfaces.

REQUIREMENTS Operating System Windows 7 or newer, 64-bit; Red Hat 7, 64-bit (or similar, with at least glibc 2.5 and libstdc++ 4.4); SUSE 12; Debian 6; Ubuntu 10.4 or newer; Mac 10.11+, 64 bit only. Hardware 4GB RAM (8GB recommended), 1GB disk space. OpenGL 3.2-capable graphics card & driver.

www.coreform.com

MESHING

Battle-tested algorithms
Deep stock of mesh generation algorithms including paving, mapping, sub-mapping, sweeping and multi-sweeping.

Smart controls
User-guided adaptive or fully automatic interval sizing and scheme selection.

Unrivaled hexahedral meshing
State-of-the-art structured and unstructured quad- and hex-dominant meshing with powerful, smart automation options.

Multi-scheme tetrahedral meshing
Multi-scheme automatic tri/tet meshing schemes with Distene MeshGems, Delaunay, and advancing front algorithms.

AUTOMATION

Smart suggestion
Automatic recognition of nearly sweepable topologies and identification of potential source-target pairs.

Smart decomposition
Smart detection and suggestion of decomposition operations needed to enable mapping, sub-mapping or sweeping schemes.

Autoscheme hex meshing
Automatic meshing scheme selection based on user-adjustable topological and geometric criteria.

Forced sweep
Detection and automatic surface-compositing to force a sweep topology.

CONTROL

Mesh quality analysis and visualization
Quality analysis with general and element type-specific metrics for quad, tri, tet, hex, and wedge elements.

Mesh property controls
Adaptivity and sizing function options for controlling mesh density in response to geometric or user-defined properties.

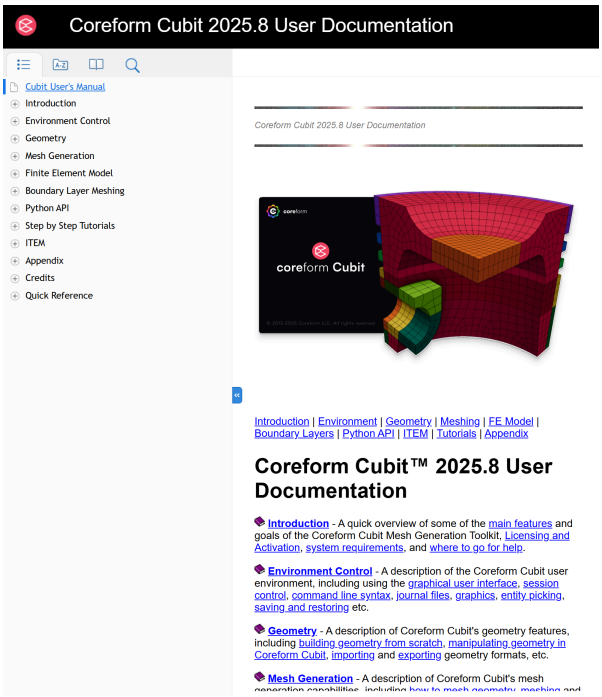
Mesh refinement and scaling
Multiple methods for global or local conformal refinement with automatically generated transition elements per user specification.

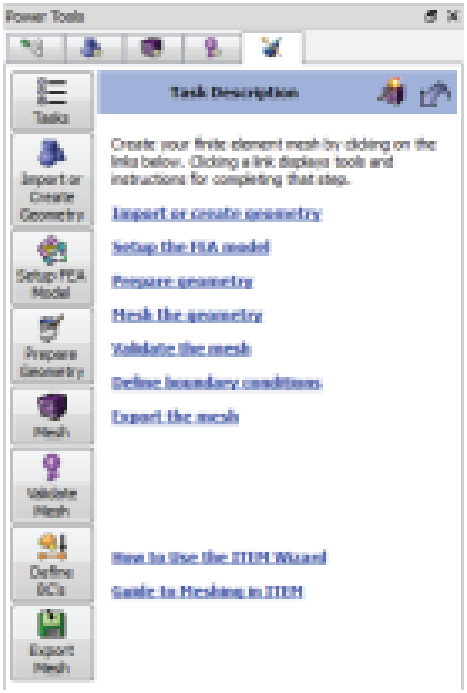
LEARNING RESOURCES

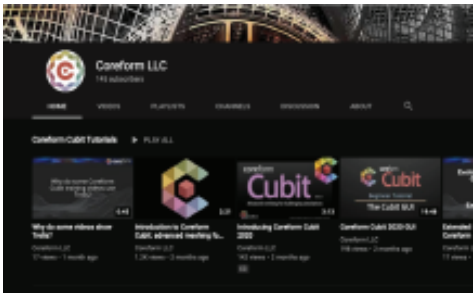
Comprehensive online help
Searchable, indexed online documentation of features and functionality.

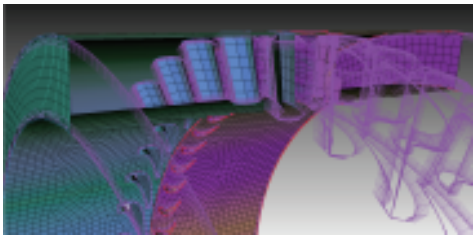
Smart workflow wizard
Interactive smart help can automatically run diagnostics and determine potential solutions for user consideration.

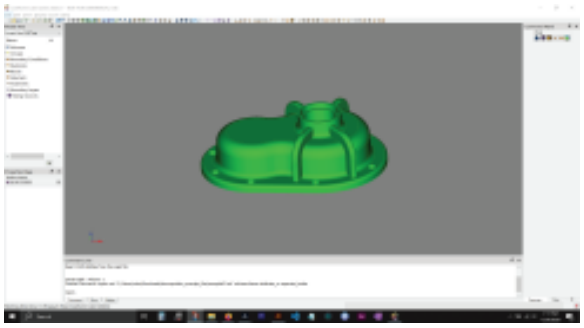
Tutorials and training
Extensive support materials include instructional videos and PDF tutorials with included example files.

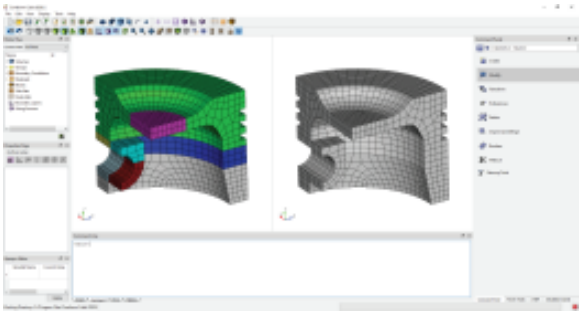












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