ANSYS SpaceClaim

ANSYS SpaceClaim is the fastest platform for working with geometry, whether to design a part, prepare a model for downstream jobs, or reverse engineer an STL file. With the release of ANSYS SpaceClaim 2016, we deliver 10x faster 3D modeling than any other product on the market today.

ANSYS SpaceClaim customers will speed up their time to market with 10x performance improvements, more tools for faster geometry creation and editing, and expanded file import and editing capabilities. ANSYS SpaceClaim empowers customers to realize efficiency gains across their entire product workflow.

Multiple Performance Enhancements

- Including 60% reduction in startup time; 10-50x speed up time for large model save and load time; and 200x speed improvement to tools like Imprint
- Import Enhancements such as: ECAD (Cadence, GDSII, ODB++, etc) with variable fidelity import; Sketchup 2015; Solidworks 2015; Creo 3.0; ST 7; CATIA V6
- Graphical support for DirectX11 and OpenGL
- New language support: Russian, Dutch, Hungarian

Design Enhancements

- Live linking with Keyshot is now available to easily update edits to a model in Keyshot without redesigning the rendering scene
- Users will be especially excited about the new ability to flag groups for locking/monitoring dimensions and the new scripting option which will be out in Beta
- In addition, there will be enhancements such as: Patch blend preview; Interactive curve, drag, snap, and copy; Ability to wrap points
New Reverse Engineering tool
Our Skin Surfacing tool allows ANSYS SpaceClaim users to more easily reverse engineer complicated geometry quickly by surface fitting to faceted models. Users can direct edit the patch boundaries, connect neighboring patches, create 4-sided, 3-sided, domed, and periodic patches, and automate smoothing.

3D Printing Enhancements
• Another exciting new feature is our new Shrinkwrap Tool for 3D printing, which makes it easier and faster to repair STLs and create watertight faceted files from complicated geometry
• Import PLY files and Import/Export VRML files
• We improved the sensitivity in our Thickness Detection Tool and improved our Autofix Tool to correct over-connected angles
• Customers will see a 50-100% performance improvement for many of our 3D printing tools

Manufacturing Additions
• Turn profile MFG-centric improvements like protrusion handling; improved orientation setup, and feed rate input
• Other manufacturing enhancements such as: Curve table improvements; QIF inspection format import/export; and SAT PMI export
• New Sheet Metal Tools: Flange Tool; Create/Unfold watertight corners; Create/Unfold complex forms

Simulation Enhancements
• We created an Extract Geometry command for sub-modeling
• There are improvements to the Imprint tool such as: tolerant imprint added; support for beam/face/edge intersections; and a larger/no item limit
• We expanded the Power Selection Tool capability for beams, midsurfaces by profile type, and thickness
• Repair tools are improved to include surface split edges and surface short edges
• We’ve added a Library of standard beam x-sections
• There is a new Weld tool to ensure the mesh includes all welded connections
• New capability for continuous round chain splitting

SpaceClaim 2016: The fastest solution to create, edit, and repair 3D data.

• Enhanced 3D Printing Preparation
• Design
• Manufacturing, including Sheet Metal
• Reverse Engineering
• Simulation
• Import/Edit
• Performance