

Autodesk Alias : Create innovative and compelling designs faster

With Autodesk Alias, you get industry-leading surfacing capabilities featuring best-in-class sketching, modelling, computational design, virtual reality and visualization tools for industrial designers and technical surfacing experts in automotive and industrial design.

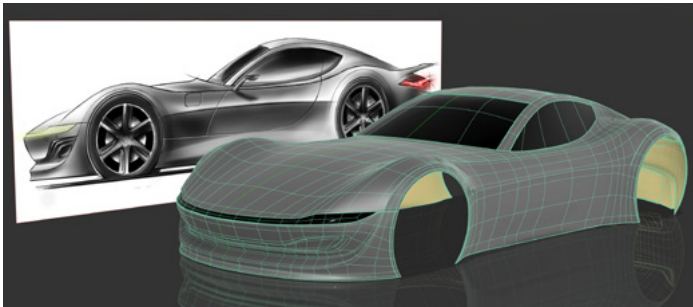
Benefits

- Surfacing Excellence
- Computational Design
- Virtual Reality Design Review
- Cloud Collaboration
- Photoshop Live Link
- Design and Theme Collaboration
- Conceptual Design
- Surface Refinement
- Reverse Engineering
- Realtime Visualisation



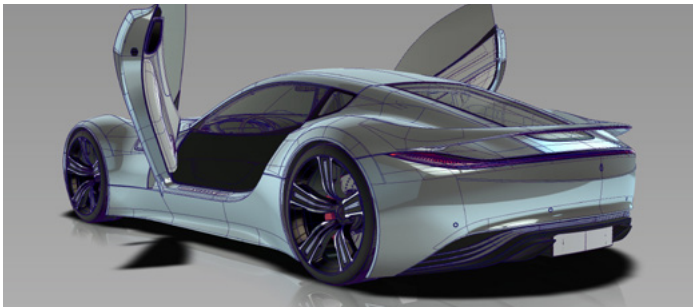
Industrial, product and automotive design software

Autodesk® Alias® software is a premium solution targeted specifically for industrial design, digital modelling and technical surfacing. Alias accelerates your creative design process by providing a continuous workflow from concept to production quality surfaces.



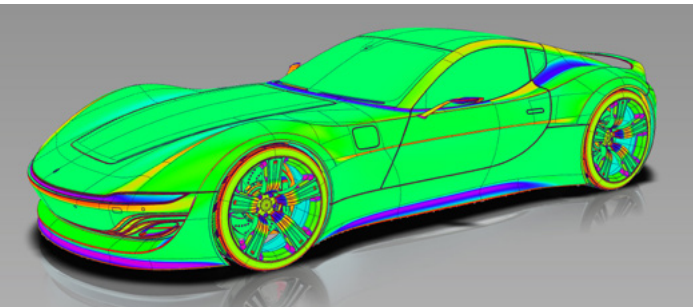
Effortless Conceptual Design

Autodesk Alias software helps you explore innovative design concepts in a digital environment. Create sketches and concept models with a cohesive 2D/3D workflow, with the flexibility to create a variety of compelling designs that resonate with your customers. Use new computational design tools to rapidly explore and iterate designs faster than ever before. Realise impossible shapes faster with computational design inside Alias.



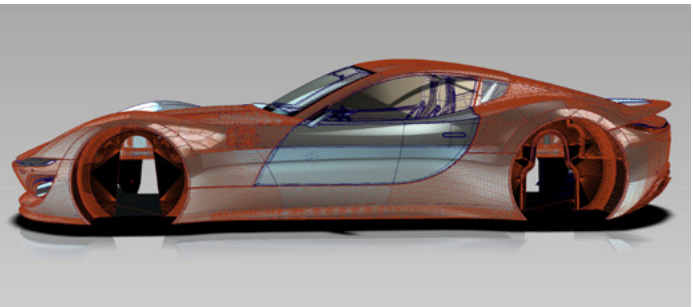
3D Design Modeling

Develop your ideas into 3D forms through a creative, iterative modeling process that helps quickly evolve designs from concept to reality. Alias gives you the ability to model with NURBS data with a comprehensive set of curve-based modeling tools, as well manipulate 3D forms without rebuilding geometries.



Precision Surface Modeling

Alias software provides the tools you need to build high-quality Class-A surfaces, refine innovative design details, and create productions-ready technical surfaces. Tools that ensure G3 continuity, surface alignment, surface evaluation and the choice of creating Bezier or NURBS geometry. All with speed, control, and accuracy.



Reverse-Engineering with Scan Data

Move easily between the analog and digital worlds. Alias software enables you to incorporate changes to a physical model into your digital model with its scan data workflows. You can import scan data from clay models, clean up and simplify the data and modify your current design in a hybrid NURBS and mesh environment, without having to resurface the entire model, saving time and effort.

10 reasons to choose Alias

- Best in class Surfacing for all sectors
- Decades of surfacing evolution
- Computational design as standard
- VR Design Review as standard
- Customisable Interface
- Manufactural surfaces
- Quick 3D Printing and RP
- Links seamlessly with MCAD tools
- Design Collaboration
- Fast model creation and surface release

Learn more at autodesk.com/alias

“We conceptualized the product in Alias, we were able to build rapid prototypes from the Alias generated files, we also used it for the packaging.”

– Kyle Swen
EVP & Partner
Astro Studios



2019 Feature Comparison

Applications	Alias Design	Alias Surface	Alias AutoStudio
VRed Design	-	-	✓
Speedform	-	-	✓
Sketchbook <i>Shipped with 2016 product.</i>	-	-	✓
Maya <i>Shipped with 2016 product.</i>	-	-	✓
Automotive Asset Library	-	-	✓

Concept Exploration	Alias Design	Alias Surface	Alias AutoStudio
Paint and Canvas Tools	✓	-	✓
Overlay Annotation	✓	✓	✓

Sketching/Manipulation	Alias Design	Alias Surface	Alias AutoStudio
Raster brushes	✓	-	✓
Annotation pencils	-	✓	-
Custom texture brush	✓	-	✓
Effect brushes	✓	-	✓
Vector/Raster Hybrid (editable shapes)	✓	-	✓
Symmetry	✓	-	✓
Gradient Fill	✓	-	✓
Raster Text	✓	✓	✓
Image warping (transforming)	✓	-	✓
Color Replace	✓	-	✓
Image Cropping	✓	-	✓
Sketch over 3D data (underlay)	✓	-	✓
Canvas Pivot Point	✓	✓	✓

Mark-up brushes over 3D	-	✓	-
Project sketch on 3D geometry	✓	-	✓
Import Image	✓	✓	✓
Save images <i>*screen and window export</i>	✓	*	✓

Modeling	Alias Design	Alias Surface	Alias AutoStudio
G2 Continuity	✓	✓	✓
G3 Continuity	-	✓	✓
Explicit Control	-	✓	✓
New Offset tools/new surface offset, new curve offset	✓	✓	✓
Extend	✓	✓	✓
Cut	✓	✓	✓
Align	✓	✓	✓
Symmetrical Align	✓	✓	✓
Smoothing	✓	✓	✓
Query Edit	✓	✓	✓
Attach	✓	✓	✓
Insert	✓	✓	✓
Vectors	✓	✓	✓
Dynamic Planes	✓	✓	✓
Transform Curve Operator	✓	✓	✓
Surface/Curve Orientation	✓	✓	✓
Workflows <i>*partial</i>	✓	*	✓
Preference Sets and Workspaces	✓	✓	✓

Dynamic Shape Modeling	Alias Design	Alias Surface	Alias AutoStudio
DSM: Transformer Rig	-	✓	✓
DSM: Conform Rig	✓	✓	✓
DSM: Lattice Rig	✓	✓	✓
DSM: Bend	✓	✓	✓
DSM: Twist	✓	✓	✓

Array	Alias Design	Alias Surface	Alias AutoStudio
Array	✓	✓	✓
Path Array (replaces Duplicate Place)	✓	✓	✓
Object Array	✓	✓	✓

Surface Evaluation	Alias Design	Alias Surface	Alias AutoStudio
Diagnostic Panel Curvature Evaluation	-	✓	✓
Diagnostic Panel Cross Section Controls	✓	✓	✓
Dynamic Section	-	✓	✓
IsoAngle	-	✓	✓
VRed Nurbs Analysis	-	-	✓
Isophotes	✓	✓	✓
Light Tunnel	✓	✓	✓
Zebra	✓	✓	✓
Surface Evaluation Diagnostic	✓	✓	✓
Draft Analysis	✓	✓	✓

Surfacing Tools	Alias Design	Alias Surface	Alias AutoStudio
Barrel surface	-	✓	✓
Helix surface	-	✓	✓
Cross Section Manager	✓	✓	✓
Min/Max Curvature + Deviation Map	✓	✓	✓
Symmetric Modeling	✓	✓	✓
Stitch and Seam	✓	✓	✓
Freeform Blend	✓	✓	✓
Profile Blend	✓	✓	✓
Planar	✓	✓	✓
Revolve	✓	✓	✓
Skin	✓	✓	✓
Rail - mono, bi, multi	✓	✓	✓
Extrude	✓	✓	✓
Profile Tool	-	✓	✓
Square	✓	✓	✓
Multi-blend (replace n-sided)	✓	✓	✓
Surface Fillet	✓	✓	✓
Symmetrical Fillet	✓	✓	✓
Fillet Flange	✓	✓	✓
Tube Flange	✓	✓	✓
Tubular Offset Flange	✓	✓	✓
Multi Surface Draft	✓	✓	✓
Panel Gap	-	✓	✓
Ball Corner	-	✓	✓

Round	✓	✓	✓
MultiSurface Draft	✓	✓	✓
Curve Network	✓	✓	✓

Surface Manipulation Tools	Alias Design	Alias Surface	Alias AutoStudio
Combine Surfaces	✓	✓	✓
Trim / Untrim	✓	✓	✓
Trim Convert	✓	✓	✓
Stitch / Unstitch	✓	✓	✓
Shell Boolean Operations	✓	✓	✓
Smooth	-	✓	✓
Planarize Hull	✓	✓	✓
Rebuild Surface	✓	✓	✓

Curve Tools	Alias Design	Alias Surface	Alias AutoStudio
Keypoint Curves	✓	✓	✓
Blend Curves	✓	✓	✓
Fit Curve	✓	✓	✓
Sort Sections	✓	✓	✓

Visualization Preparedness Tools	Alias Design	Alias Surface	Alias AutoStudio
Stitch and Seam Tool	✓	✓	✓

Curve Edit Tools	Alias Design	Alias Surface	Alias AutoStudio
Curve Fillet	✓	✓	✓
Freeform Curve Blend	-	✓	✓

Organization Tools	Alias Design	Alias Surface	Alias AutoStudio
Layers	✓	✓	✓
Layer Folders	✓	✓	✓
Reference Manager	✓	✓	✓
Stages	✓	✓	✓
Stage Set	✓	✓	✓

Virtual Reality	Alias Design	Alias Surface	Alias AutoStudio
Alias VR for interior review	-	✓	✓

Viewing Tool	Alias Design	Alias Surface	Alias AutoStudio
Mouse Tumble/Pan/Zoom	✓	✓	✓
View Cube	✓	✓	✓
3D Mouse	✓	✓	✓
Orthographic	✓	✓	✓
Perspective	✓	✓	✓
Perspective with Ortho Faces	✓	✓	✓
Clipping	✓	✓	✓
Calibrated	✓	✓	✓
View Flip	-	-	✓
View Both	-	-	✓
Variant Lister	✓	✓	✓
Look Around Tool	✓	✓	✓

Automotive Simulation	Alias Design	Alias Surface	Alias AutoStudio
Contact Analysis	-	✓	✓
Pedestrian Protection	-	✓	✓

Reverse Engineering	Alias Design	Alias Surface	Alias AutoStudio
Tessellation NURBS to Mesh	✓	✓	✓
Tessellation Cloud to Mesh	-	✓	✓
Displacement Map to Mesh	✓	✓	✓
Mesh Subset/Merge/Cut	✓	✓	✓
Mesh Position	✓	✓	✓
Mesh Patch	-	✓	✓
Mesh Intersect	-	✓	✓
Mesh Smooth	-	✓	✓
Mesh Reduce	-	✓	✓
Mesh Hole Fill	-	✓	✓
Mesh Bridge	-	✓	✓
Fit Mesh Collar	-	✓	✓
Mesh Offset	-	✓	✓
Mesh Stitch	-	✓	✓
Mesh Edge Reconstruct	-	✓	✓
Mesh Extract Theoretical Edges	-	✓	✓
Automated Repair of Meshes	✓	✓	✓
Fit Scan	-	✓	✓
Surface from Mesh	-	✓	✓
Refit Surfaces	-	-	✓

Evaluation and Locators	Alias Design	Alias Surface	Alias AutoStudio
Simple Evaluation Tools	✓	✓	✓
Complete Evaluation Tools	-	✓	✓
Simple Locators	✓	✓	✓
Complete Locators	-	✓	✓
Dynamic Measurement	-	✓	✓

Visualization	Alias Design	Alias Surface	Alias AutoStudio
Hardware Shade	✓	✓	✓
Image-Based Lighting	✓	✓	✓
Ambient Occlusion Calculation	✓	✓	✓
QuickTime VR	✓	✓	✓
Linear Reflection (Hardware Shade)	-	✓	✓
Keyframe Animation	✓	-	✓
Turntable Animation	✓	-	✓
PowerRender	✓	✓	✓
Hardware Ground Plane Reflection	✓	✓	✓
Hardware Self Shadows	✓	✓	✓
Hardware Shader Glow	✓	✓	✓
Dynamic Measurement Tool	✓	✓	✓
Layered Diagnostic Shaders	✓	✓	✓

Direct Launch with Data	Alias Design	Alias Surface	Alias AutoStudio
Maya Send to Maya.	✓	✓	✓
VRED Send to VRED.	-	-	✓

Data Exchange	Alias Design	Alias Surface	Alias AutoStudio
Autodesk Inventor .ipt import * <small>*not available for Mac OS</small>	✓	✓	✓
Autodesk Inventor .iam import * <small>*not available for Mac OS</small>	✓	✓	✓
Autodesk DXF/DWG	✓	✓	✓
Autodesk DWF*	✓	✓	✓
<small>*not available for Mac OS</small>			
IGES Translator	✓	✓	✓
STEP	✓	✓	✓
OBJ	✓	✓	✓
STL	✓	✓	✓

ZPR* <i>*not available for Mac OS</i>	✓	✓	✓
SolidWorks* ** <i>*not available for Mac OS</i> <i>**for translator to work, must have SolidWorks installed and licensed on same machine, or go through Fusion to DWG</i>	✓	✓	✓
ProE Granite* <i>*not available for Mac OS</i>	✓	✓	✓
CATIA V4 only write* <i>*not available for Mac OS</i>	Included	Included	Included
CATIA V5 read and write* <i>*not available for Mac OS</i>	Included	Included	Included
JT Import* <i>*not available for Mac OS</i>	Included	Included	Included
UGNX* <i>*not available for Mac OS</i>	Purchasable	Purchasable	Purchasable
EDF read and write	-	✓	✓
Autodesk Vault integration* <i>*not available for Mac OS</i>	✓	✓	✓
Adobe Illustrator export	✓	✓	✓
Import / Export SAT	✓	✓	✓
Import / Export FBX	✓	✓	✓
Cloud-based Model Share	✓	✓	✓
Connection with other Applications	Alias Design	Alias Surface	Alias AutoStudio
Photoshop Live Link	✓	✓	✓
User Interface Customization	Alias Design	Alias Surface	Alias AutoStudio
Marking Menu Editor	✓	✓	✓

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