



Geomagic Design X

Why upgrade to Geomagic Design X 2025?

New features comparison by major release

New Features Comparison by Major Release	V25	V24	V23	V22	V20	V19	V16
Shrink Wrap (25.1)	•						
Fast, Adaptive, Robust Decimate Mesh (25.1)	•						
Performance Improvements (Global Remesh, Normal Information Wizard) (25.1)	•						
Pattern Faces (Linear, Circular, Curve, Mirror) (25.1)	•						
Retain Tools and Target Bodies in Boolean (25.1)	•						
Select Target Bodies for Merge and Cut when Creating a Modeling Feature (25.1)	•						
UI/UX and Data Transfer Improvements for 3D Polyline (25.1)	•						
More Robust and Accurate Results from the Pipe Wizard (25.1)	•						
Output the Sweep Path as a 3D Polyline in the Sweep Wizard (25.1)	•						
Correct Surface Fitting for the Desired Patch Network (25.1)	•						
Plugin for ZG Handheld Devices, i.e. Atlascan, MarvelScan and HyperScan (25.1)	•						
Live Transfer to SolidWorks 2025, Creo 12 and Inventor 2026 (25.1)	•						
UI/UX Improvements (Robust, Reliable Experience with 3D Mouse, Toolbar Visibility and Reset Layout, Change Region Color, Better Point Cloud Selection Display) (25.1)	•						
Import Files from latest Faro Scene and CAD Packages (25.1)	•						
Export Reference Geometry to Standard Formats (25.1)	•						
Support for Russian Localization (25.1)	•						
Import/Export DXF in Design X Go and Design X Plus (24.3)		•					
Improved results in Auto-Sketch (New "Equal Constraints and Improved Precision) (24.3)		•					
Improved Results and Robustness for Fill Holes (24.3)		•					
Fitting Deviation and Tolerance Color Display when Previewing Reference Geometry (24.3)		•					
Retain Properties after Cut and Merge Operations (24.3)		•					
Performance Improvements for Average Mesh and Application Launch (24.3)		•					
LiDAR file import (24.3)		•					
Live Transfer to Creo 10, Creo 11 and Inventor 2025 (24.3)		•					
Create Solid and Surface Primitives using Poly-Vertices and Poly-Faces (24.3)		•					
Improved results in Auto-Sketch and Revolution Wizard (24.2)		•					
Expanded toolset in Design X Essentials (24.2)		•					
Updated Native CAD Imports (24.1)		•					
Live Transfer to SolidWorks 2024 (24.1)		•					
Sketch Constraints and More Reliable Results in Modeling Wizards (24.1)		•					
Boolean Operator and Accuracy Analyzer in the Primitives Wizard (24.1)		•					
Plugin for PMT Alpha ARM Series Update (24.1)		•					
UI/UX Improvements (Wizards, Auto-Sketch, Construction Sketch Entities, Dimensions) (24.1)		•					
Selective Extraction of Specific Sketch Entities in Auto Sketch (23.3)		•	•				
Select Poly-Faces by Angle (23.3)		•	•				
UI/UX Improvements (Customized font for Color Bar, Clipping plane selection from Feature/Model Tree, Easy access to constraints via context menu in Sketch mode) (23.3)		•	•				
Improved Sketching Precision with Adjustable Property Values (23.3)		•	•				

Creating Construction Sketch Entities (23.3)		•	•				
Plugin for Hexagon Absolute AS1-XL scanner (23.3)		•	•				
Merge scans from all existing scan groups into a single mesh when scanning using Hexagon Structure Light Scanner (23.3)		•	•				
Retain Preference settings from the current version when upgrading to a newer version (23.3)		•	•				
Live Transfer to SolidWorks 2023, Inventor 2010-2024, Creo 8.0-9.0, NX 1899, 1926, 1953 series (23.2)		•	•				
Plugin for Scantech KSCAN-Magic Series, AXE-B Series 3D and SIMSCAN Handheld 3D Laser Scanners (23.2)		•	•				
Plugin for Scantech TrackScan-Sharp and TrackScan-P Optical 3D Measurement System (23.2)		•	•				
Plugin for Scantech K-Probe and T-Probe probing devices (23.2)		•	•				
Plugin for PMT Alpha ARM Series (23.2)		•	•				
UI/UX Improvements (Customized font for Measurements) (23.2)		•	•				
Additional alignment methods for the Hexagon SLS plugin (23.1)		•	•				
More effective Pipe and Sweep Wizards based on the new 3D Polyline Curve (23.1)		•	•				
Updated Native CAD Imports (23.1)		•	•				
Live Transfer to SolidWorks 2023, Inventor 2010-2023, Creo 8.0-9.0, NX 1899, 1926, 1953 series (23.1)		•	•				
Subscription Licensing (23.1)		•	•				
Support for Chinese (Traditional) (23.1)		•	•				
UI/UX Improvements (Customized font in Color Bar, Updated ribbons, Additional selection tools in 2D Sketch) (23.1)		•	•				
Updates to Lofts & Exact Surfacing Tools		•	•	•			
Live Transfer to SolidWorks 2022, Inventor 2021-2023, Creo 8.0-9.0, NX 1899, 1926, 1953 series		•	•	•			
New Sketch Tools (Centered Rectangle, Mid-Point Constraint, Radial/Circular Dimension Display)		•	•	•			
Improved CAD Tessellated Mesh Segmentation		•	•	•			
New Hexagon Structured Light Scanner Interface		•	•	•			
Hardware Interface Updates (Einscan, AT960 tracker + AS1 scanner, Faro Quantum Max/S + LLP XR/HD)		•	•	•			
Updated Native CAD Imports		•	•	•			
New Selective Autosurfacing by Boundary Curves		•	•	•	•		
New Selective Autosurfacing by Mesh Selection		•	•	•	•		
New Unroll/Reroll Mesh and Point Clouds		•	•	•	•		
New Unroll/Reroll 2D and 3D Curves		•	•	•	•		
New Flatten and Curl Scans and Curves		•	•	•	•		
Product Preview Program for valid Maintenance Subscribers		•	•	•	•		
New Separate Mesh Command		•	•	•	•		
New 3D Systems Licensing System		•	•	•	•		
LiveTransfer to SOLIDWORKS 2020, Inventor 2020, Siemens NX 1872, Creo 6.0		•	•	•	•		
Save As Support for SolidEdge 2020 and CATIA V5-6 2019		•	•	•	•		
Updated Ribbon Layout with LiveCapture Tab		•	•	•	•	•	
Improved Mesh Rendering		•	•	•	•	•	
Mesh is Always Active		•	•	•	•	•	
Group Scans in Model Tree		•	•	•	•	•	
Updated Native CAD Imports		•	•	•	•	•	
Import Wrap and Control X Files		•	•	•	•	•	
Improved Scanning Performance		•	•	•	•	•	
New Move Device Command		•	•	•	•	•	
New Probe Location Feature		•	•	•	•	•	
Overhauled Mesh Engine		•	•	•	•	•	
Improved Healing Wizard		•	•	•	•	•	
New Scan Process Method		•	•	•	•	•	
Dynamically Controlled Smart Select		•	•	•	•	•	
Improved Fill Hole Algorithm		•	•	•	•	•	
Improved Point Normal Generation		•	•	•	•	•	
New Constraints with Manager in 2D Sketching		•	•	•	•	•	
Improved Auto-Sketch Constraints		•	•	•	•	•	

Dimensional Rounding in Smart Dimension		•	•	•	•	•	
Spline Tangency Control		•	•	•	•	•	
Improved RMB Context Menus		•	•	•	•	•	
Undo and Cancel Actions within 2D Sketch Commands		•	•	•	•	•	
Added Spline Blend Tool in 3D Sketching		•	•	•	•	•	
Edit Splines with Control Polygons and Properties Dock		•	•	•	•	•	
Fill Face Creates G2 Continuous Surfaces		•	•	•	•	•	
Added Constant Curvature Continuity in Fillet Command		•	•	•	•	•	
Improved Exact Surfacing Logic		•	•	•	•	•	
LiveTransfer to SolidWorks 2019, Inventor 2019, SEIMENS NX 12, Creo 5.0		•	•	•	•	•	
Faster Accuracy Analyzer Performance		•	•	•	•	•	
New Zebra Stripes Options in Accuracy Analyzer		•	•	•	•	•	
New Curvature Comb Analysis Tool		•	•	•	•	•	
Updated Hardware Compatibility for AICON, FARO, Kreon, and Nikon		•	•	•	•	•	•
Improved Importing of CAD, PLY, ASCII, and e57 File Types		•	•	•	•	•	•
Smoothness Control in Fill Holes		•	•	•	•	•	•
Improved Healing Wizard		•	•	•	•	•	•
3D Spline Constraint Icon		•	•	•	•	•	•
Enhanced Fit Surface Patches		•	•	•	•	•	•
LiveTransfer to SolidWorks 2018, Inventor 2018, Creo 4		•	•	•	•	•	•
Remove Patch Curves in 3D Sketching and Surfacing		•	•	•	•	•	•
Repair Patches in 3D Sketches and Surfacing		•	•	•	•	•	•
Relax Patches and Contours in 3D Sketches and Surfacing		•	•	•	•	•	•
Specify Front View to Y-Up or Z-Up		•	•	•	•	•	•
LiveScan Clipping Plane		•	•	•	•	•	•
Anonymous Usage Statistics with Error Reports		•	•	•	•	•	•
Updated Hardware Device Compatibility		•	•	•	•	•	•
Polygon Topology Created During Scanning		•	•	•	•	•	•
LiveTransfer to SolidWorks 2016, SIEMENS NX 10, Creo 3.0		•	•	•	•	•	•
Import E57 and LSPROJ files		•	•	•	•	•	•
Temporary Folder for Scanning		•	•	•	•	•	•
Improved Modeling Performance		•	•	•	•	•	•
FARO Array Imager Support		•	•	•	•	•	•
Optional Collection of Anonymous Usage Statistics		•	•	•	•	•	•
Import/Export PLY Point Files with Normal Information		•	•	•	•	•	•
Upgraded Licensing Platform		•	•	•	•	•	•
Enhanced Scanning Performance		•	•	•	•	•	•
Import GPD Files		•	•	•	•	•	•
New Exact Surfacing Functions		•	•	•	•	•	•
High-Definition Mesh Construction		•	•	•	•	•	•
Enhanced Tooltip with Images		•	•	•	•	•	•
Right-Click Contextual Menu		•	•	•	•	•	•
New Upper-Side Toolbar		•	•	•	•	•	•
New Quick Access Toolbar		•	•	•	•	•	•
Customizable Ribbon Interface		•	•	•	•	•	•
11 Supported Languages		•	•	•	•	•	•
High DPI Support		•	•	•	•	•	•
Split Curves while Constructing Patch Network		•	•	•	•	•	•
Region Segmentation with a Tessellated Mesh		•	•	•	•	•	•
Real Time Scan Point Detection and Data Processing		•	•	•	•	•	•
Publish models as 3D PDF documents		•	•	•	•	•	•
Import Native CAD Files		•	•	•	•	•	•