

Scan It, Mesh It, Surface It. In minutes.







Geomagic Wrap[®] delivers the industry's most powerful toolbox to transform 3D scan data and imported files into 3D models for immediate use downstream. From engineering to entertainment, art to archaeology and manufacturing to museums, people from every walk of life are effortlessly reverse engineering perfect 3D models from scan data and 3D files using Geomagic Wrap.

Revolutionize Your 3D Workflows

Geomagic Wrap delivers the most easy-to-use, affordable, fast, accurate path from point clouds to 3D polygonal and surface models that can be used instantly in downstream engineering, manufacturing, engineering, art, industrial design and more. As part of your 3D digital thread, Geomagic Wrap provides the digital bridge to allow you to create perfect data to use directly in 3D printing, milling, archiving and multiple other 3D uses.

With Geomagic's advanced Exact Surfacing tools included Geomagic Wrap delivers power yet ease-of-use in cutting-edge modeling functions for that flawless 3D model. Scripting and macros available also automate functions for repetitive tasks during the reverse engineering process.

Accurately and Effortlessly Build Usable 3D Data

Geomagic Wrap enables users to transform point cloud data, probe data and intermingle imported 3D formats (STL, OBJ, etc.) into 3D polygon meshes and surface models for immediate use. Unique automated tools for rapid point cloud cleanup and surfacing allow you to perform complex tasks quickly and with confidence. Color data from 3D scans can be edited and managed, edited and saved as texture maps for your color 3D prints.





Introducing Geomagic Wrap[®] 2017

Scan It. Mesh It. Surface It. In minutes.

W Geomagic Wrap[®]

Geomagic Wrap 2017 delivers a seamless 3D scan-to-model workflow that continues to evolve, and lead the market as the originator of modern 3D scan processing. From expanded file format support to manipulating texture maps to bring your printed parts to life, the 3D scan data toolbox of Geomagic Wrap has never been more powerful!

Improved Workflow Productivity

Upgraded file I/O introduces support for common color 3D printing formats, high quality texture layer preservation, faster downstream print workflows, and ease of use for almost any kind of 3D data. Major updates to Python scripting make process automation and customization more powerful than ever. Mesh editing and feature creation workflows can be significantly faster with new Smart Selection.

Upgraded Geometry Tools

Brand new geometry creation and analysis functions expand the applications for Wrap[®] into totally new areas. Measuring tools accurately evaluate model dimensions and the new trapped engraving feature lets you engrave from the inside out for better clarity. Working with your model is made even easier with the unroll tool providing a more efficient work process and streamlined model analysis.

Enhanced Realism of 3D Color Data

Robust new tools enhance color data from 3D scans that other scanning applications lack, giving you the freedom to create incredibly realistic texture images for AR/VR, 3D printing, special effects and more.

From Surfacing to 3D Printing, Geomagic Wrap is the Most Affordable and Powerful Solution for Your Needs.

Image courtesy Private Collection Babylonian Cuniform Tablet SMARTTECH 3D scanner - Archeo 10Mpix SMARTTECH_Cuneiform Tablet.WRP

(D5) R 7.1220

(D15) 80.8504°

(D14) D 3.7323

(D4) R 5.5104

(D13) 15.5266

(D6) Fracture 221

New Features:

Unroll Geometry

- Complex cylindrically-wrapped geometry can now be flattened for better analysis
- Unroll Points and Polygons for better visibility and easier work process in planar space
- Extract design intent from rotating equipment, unroll products of cylindrical cross section



Trapped Volume Engraving

- The new "Entrapped" feature of engrave can add alphanumeric and DFX-based labels underneath the surface of a part.
- The Trapped engraving can be filled with support material or a secondary part material during printing providing high contrast for greater visibility



UV Map Creation

- Enhanced UV Texture Map creation gives users full control over how the UV layout is defined.
- Improvements have been made to patch count control, mapping, color control, and editing to enable photo realistic UV texture mapping

Dimension Tools

- Inspired by our Geomagic Control X 3D inspection software we have added fundamental measuring tools to improve fast analysis of scanned parts
- Cut cross sections through your parts, extract and annotate angular, linear and radial dimensions

Scripting 3.0

- Powerful new functions and methods have been exposed to the scripting environment
- Now you can extend the scripting environment by importing 3rd party libraries
- Create custom ribbon workflows using icons to launch scripts

<pre>import sys if sys.version_info[0] >= 3: from geomagic.api.v3 import * else: from geomagic.api.v2 import * from geomagic.api.v2 import * from geomagic.api.v2 import * from geomagic.api.v3 import * from geomagic.api.v3 import * if converter = CreateCADFromSurface() converter - createCADFromSurface() converterrun() model = converter.cadModel # Find closest point to a lower corner of model bounding box if finder = FindClosest pointtocADModel()</pre>	Setti	ings Curves	
<pre>2 if sys.version_info[0] >= 3: 3 from geomagic.api.v3 import * 4 else: 5 from geomagic.api.v2 import * 6 from geomagic.api.v3 import * 7 # Create CAD from Sphere feature 9 converter = CreateCADFromSurface() 10 converter.surface = Sphere() 11 converter.run() 12 model = converter.caMbdel 13 4 # Find closest point to a lower corner of model bounding box</pre>			_
9 converter = CreateCADFromSurface() 10 converter.surface = Sphere() 11 converter.run() 12 model = converter.cadModel 13 4 # Find closest point to a lower corner of model bounding box			
9 converter = CreateCADFromSurface() 10 converter.surface = Sphere() 11 converter.run() 12 model = converter.cadModel 13 14 # Find closest point to a lower corner of model bounding box	5		
9 converter = CreateCADFromSurface() 10 converter.surface = Sphere() 11 converter.run() 12 model = converter.cadModel 13 14 # Find closest point to a lower corner of model bounding box	3		
9 converter = CreateCADFromSurface() 10 converter.surface = Sphere() 11 converter.run() 12 model = converter.cadModel 13 14 # Find closest point to a lower corner of model bounding box	2		
9 converter = CreateCADFromSurface() 10 converter.surface = Sphere() 11 converter.run() 12 model = converter.cadModel 13 14 # Find closest point to a lower corner of model bounding box	2		
9 converter = CreateCADFromSurface() 10 converter.surface = Sphere() 11 converter.run() 12 model = converter.cadModel 13 4 # Find closest point to a lower corner of model bounding box	D	from geomagic.api.vs import	
9 converter = CreateCADFromSurface() 10 converter.surface = Sphere() 11 converter.run() 12 model = converter.cadModel 13 4 # Find closest point to a lower corner of model bounding box	1	A Country Call From Colores Country	
10 converter.surface = Sphere() 11 converter.run() 12 model = converter.cadModel 13 14 # Find closest point to a lower corner of model bounding box			
<pre>11 converter.run() 12 model = converter.cadModel 13 14 # Find closest point to a lower corner of model bounding box</pre>			
<pre>12 model = converter.cadModel 13 14 # Find closest point to a lower corner of model bounding box</pre>			
13 14 # Find closest point to a lower corner of model bounding box			
14 # Find closest point to a lower corner of model bounding box		model = converter.requipment	
		# find closest onlyt to a lower second of model boundles boy	
16 finder.cadModel = model 17 finder.pointFrom = model.boundingBoxMin			

Productivity Enhancements

- New support for CJP printing file formats
- Unique optimization technique for scan meshes and CAD meshes
- Improvements for STL import optimization (ZPD, ZPR)
- Dynamic selection of polygons with a simple click and drag
- Extract curves with greater accuracy from selections



Image courtesy of University of South Florida

Find out more at: www.3dsystems.com/software/geomagic-wrap

Specifications subject to change without notice. 3D Systems, Geomagic, Wrap and the 3D Systems Logo are trademarks of 3D Systems, Inc. All other trademarks are the property of their respective owners.

Copyright © 3D Systems, Inc. All rights reserved. www.3dsystems.com Geomagic Wrap What's New EN 06/2017

Geomagic Wrap supports all 3D digitizers, cameras, and scanners in XYZ/ASCII format, and it handles ordered and unordered surface and volume data.

- 3PI ShapeGrabber
- 3DS 3D Studio
- AC Steinbichler
- ASC generic ASCII
- BIN, SWL Perceptron
- BRE Breuckmann
- BTX Surphaser
- CDK, CDM, RGV, RVM, VVD Konica Minolta
- COP Pulsetech
- CWK Kreon
- DBT Digibotics
- FLS Faro LS
- G3D, SURF GOM
- GPD Geomagic
- Import/Export:

- GTI Genex
- HYM Hymarc
- ICV Solutionix
- IV OpenInventor
- IQMOD, iQWSP, iQSCAN IQvolution
- MET, MTN Metron
- MPC, TOC MantisVision
- NAS Nastran
- NET InSpeck
- OPD Optimet
- OPT Open Technologies
- PCN LDI
- PCT Vialux
- PIX Roland

- PTX Leica
- SAB2 Nikon
- SCN, MGP Laser Design
- SCN Next Engine
- SNX Solutionix
- SWL ScanWorks Light
- VDA VDA
- VVD Vivid
- XYZ Opton
- XYZN Cognitens
- ZFS Zoller & Frohlich

• 3DS• LWO• STEP• OBJ• VRML• Parasolid• DXF• WRP• Pro/ENGINEER• PLY• VTX, ASC• SAT• STL• IGES

Contact Information

AMERICAS

geomagic.sales.americas@3dsystems.com Cary, NC, USA : +1.800.691.1839 Brazil : +55.11.3318.5100 Mexico : +52.(644).114.6401

EMEA

geomagic.sales.emea@3dsystems.com Darmstadt, Germany : +49.6151.357.0

APAC

geomagic.sales.apac@3dsystems.com South East Asia : +60.12.398.8473 Australia & New Zealand : +61.450.593.739 India : +91.98404.78347

JAPAN

geomagic.sales.japan@3dsystems.com Tokyo : +81.3.5798.2510

CHINA

geomagic.sales.china@3dsystems.com Hotline : +86.400.890.7899

KOREA

geomagic.sales.korea@3dsystems.com Seoul : +82.2.6262.9900

3D SYSTEMS

3D Systems provides comprehensive 3D products and services, including 3D printers, print materials, on-demand parts services and digital design tools. Its ecosystem supports advanced applications from the product design shop to the factory floor to the operating room. As the originator of 3D printing and a shaper of future 3D solutions, 3D Systems has spent its 30 year history enabling professionals and companies to optimize their designs, transform their workflows, bring innovative products to market and drive new business models. Specifications subject to change without notice. 3D Systems, Geomagic and the 3D Systems Logo are trademarks of 3D Systems, Inc. All other trademarks are the property of their respective owners.