3D SYSTEMS®

W Geomagic Wrap®

Release Notes

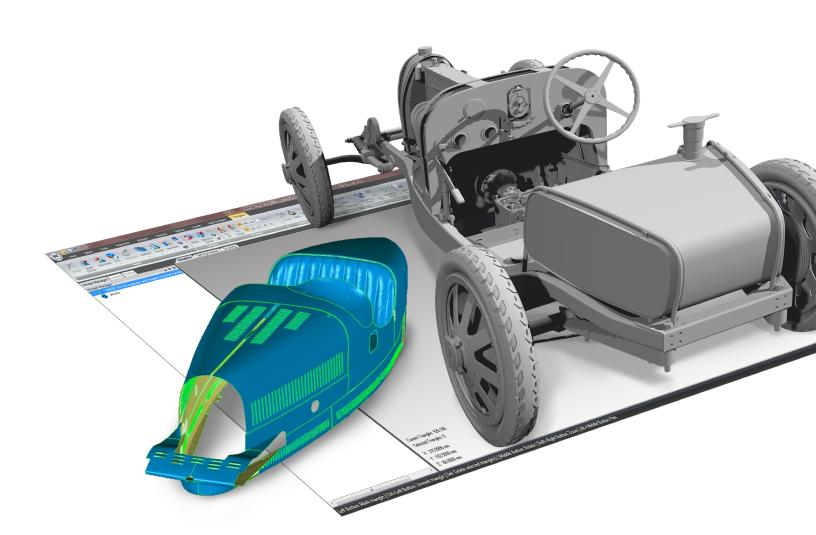**Release Date: January, 2022**

Software: **Geomagic Wrap**
Version 2021.2.1

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1 INTRODUCTION

We are pleased to announce the availability of the new version of Geomagic Wrap.

Geomagic Wrap is the ultimate 3D scan processing solution that enables users to transform point cloud data, probe data and imported 3D formats (STL, OBJ, etc) into 3D polygon meshes for use in manufacturing, analysis, engineering, design, entertainment, art, and archeology.

For more information, please visit www.3dsystems.com/support/software.

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SYSTEM REQUIREMENTS

For the latest system requirements information and to learn about specific qualified system configurations, go to the System Requirements page in the Customer Support Center. Some users have had success running system configurations that deviate from the supported list. In such cases, these configurations are not officially supported by 3D Systems, Inc.

Additionally, we test a variety of hardware platforms in combination with the graphics subsystems. While we make every attempt to be as thorough as possible, hardware manufacturers change their products frequently and may be shipping newer products or have discontinued active support for others. Check the support section of the Web site for the latest system requirement information and specific qualified systems.

DOWNLOAD AND INSTALL SOFTWARE

You can download and install the software from support.3dsystems.com/s/software-support-3dsystems, select the Geomagic Wrap product, then select to download Geomagic Wrap.

In addition, you can manually check for any updates using the **Check for Updates** command. If a valid maintenance code is activated, and your computer is connected to the Internet, the application will check if a newer version is available and will download it automatically for installation.

ACTIVATE LICENSE

> **Notice**
>
> If you are a trial user, you can run Geomagic Wrap 2021.2.1 in the viewer mode as long as the trial license is maintained on your PC. Older versions will continue to work as before.

Geomagic Wrap requires license activation to run the application on your PC. You can choose to use an evaluation license for a 15-day period or activate a permanent license by using an Online Activation license or a physical dongle.

After you start your application, the License Manager window opens. The License Manager allows you to activate and use the Geomagic Wrap software.

NOTE: When you launch the License Manager, you can click the Help **?** **button found at the top right corner of the window to read the** CimLM Licensing Guide**.**

You should have received an email from 3D Systems with your activation code. If you have not received an email from 3D systems, contact them at Geomagic.Support.Americas@3DSystems.com.

If you are an existing user and have already activated the license on your PC with the previous version of the application, you can run the newer version of the application without re-activating the license.

For more information, go to the Licensing section on the getting-started page.

WHAT'S NEW IN 2021.2.1

Updated Licensing System

The **CimLM Licensing System** has now been updated to the latest version of CimLM 3.2. CimLM 3.2 contains compliance related fixes that allow the user to enable trial licenses for Geomagic Wrap.

WHAT'S NEW IN 2021.2.0

Geomagic Wrap for Freeform Plus

Allowed a version of Geomagic Wrap 2021 to be licensed using a Freeform Plus license. The users with a valid Freeform Plus license are now able to install and use a version of Geomagic Wrap 2021.

WHAT'S NEW IN 2021.1.0

Combine Point Objects

A new **Keep Original Data** option has been added. When combing unordered points, you can now retain the original point clouds.

Hexagon Plug-In

The **Hexagon Plug-In** has now been updated with the newest arm releases.

Updated Licensing System

The **CimLM Licensing System** has now been updated to the latest version of CimLM 3.1. This update brings the user lots of fixes and improvements of security and stability.

Improved wrapCORE Experience

The wrapCore can now send output to console as well as a log file for various purposes.
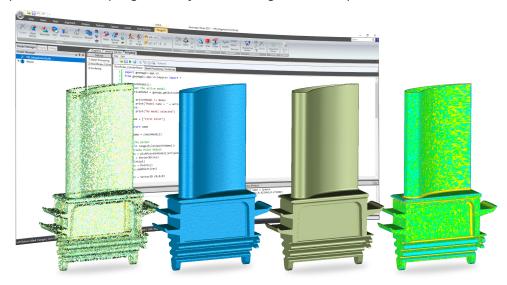
Python Scripting API

Creating and Recording scripts and macros are restricted to Python only for better structuration and productivity. Playing existing non-Python macros will still be allowed.

WHAT'S NEW IN 2021.0.0

Updated Automation Experience

Scripting IDE

Geomagic Wrap has had the scripting tab that you can manage and develop macros and customized automation routines.

The in-app scripting editor has been updated to include many new features for in-app scripting and macro creation and editing.

- Intellisense™
- Contextual highlighting
- Collapsible text blocks
- 90+ additional features

Documentation update

The accompanying **Python® API** documentation has been updated and reformatted for easier use and navigation.

Macro Help

A **Macro Help** system has been implemented to improve the editing experience when modifying Macros. This system reports to the user what errors have occurred during the execution of the macro and the correct inputs for each macro function.
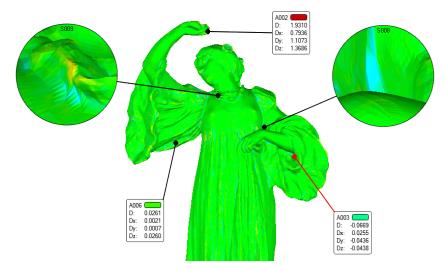
Upgraded Analysis tools

Persistent 3D Compare

With Geomagic Wrap 2021 you now have the ability to retain 3D Comparisons between models. These comparisons can now be easily referenced in other places in your workflow to ensure and check any modifications you make to a part.

Annotations

With a 3D Compare in your part file, **Annotations** are now available to be used. This enables further investigation into areas of the model or simple part checking between objects. This helps round out any workflow.

Texture Modification Tools

UV Parameterization methods

Updated **UV Parameterization** tools introduce the new ability to easily generate large texture regions on the surface of a mesh. There is no need to manually unroll a surface into a UV map, the parameterizations methods allow for a selection to make a corresponding parameterized region.

With this tool we have also introduced three new parameterization methods based on the area selected for a total of four different methods:

- Feature
- Geomagic
- Lofted
- Flattening

Copy/Paste Texture

With this new tool modify existing textures by copy and pasting similar areas of a mesh reducing the processing time of texture models before moving to a downstream web rendering application.

HD Mesh Construction

Utilize a new Mesh Triangulation method for intelligent and smooth surface triangulation. The new **HD Mesh Construction** feature can quickly and intuitively recreate almost perfect mesh data from sparse and even long-range data. This new general purpose meshing tool gives you a new option to triangulate data when there are large data sets, noise and overlapping point clouds.

Miscellaneous Enhancements

New 3D Systems Licensing System

A new licensing management tool has been implemented providing additional security and stability.

General improve updates

You may notice general performance improves when using the **Exact Surfacing** and **Curve** tools.

Deselect Largest in Fill All Holes

The value in the Deselect Largest option in the Fill All Holes command can now be set to 0. This allow you to ignore this option and fill all holes detected in a mesh.

BUG FIXES IN 2021.2.1

This section lists issues that have been resolved since the last version of Geomagic Wrap:

- **GWR-1360:** The primary CimLM license log file was named incorrectly. The primary log file should be "CimLib.log" to be consistent with all other 3D Systems Geomagic products.
- **GWR-1358, GWR-1342, GWR-1341, GWR-1325:** Geomagic Wrap stopped working some time after it's launched due to licensing issues. This happened in both online and offline environments.
- **GWR-1351:** There was an issue where the "ComparePointsToCAD" arguments were used incorrectly in the provided example script.
- **GWR-1347:** There was an issue where the "CreateMeshFromCADFile" arguments didn't work properly.
- **GWR-1346:** The Convert to Polygons command didn't record or work in a macro.
- **GWR-1339:** When saving large data as a WRP file and its size became more than 1GB, not all the contents would be saved in the file.
- **GWR-1320:** The License Server installer was not included in the Geomagic Wrap installer.

BUG FIXES IN 2021.2.0

This section lists issues that have been resolved since the last version of Geomagic Wrap:

- **GWR-1200:** Importing STL files with large number of triangles took a long time.
- **GWR-1199:** CPU usage increased and performance got slow down when navigating the menus on the Getting Started tab.
- **GWR-963:** Geomagic Wrap crashed while going back and forth between the Define UV and the Curve tools.
- **GWR-1223:** All probed features lost from the project after using the Combine Points command. This happened only when using ordered data.
- **GWR-1175:** Geomagic Wrap crashed when using the "Distance" Fitting with a very small values in the Curve > Create by Section.
- **GWR-1069:** Geomagic Wrap crashed when drawing a curve on the mesh that duplicated from a mesh with curves.
- **GWR-1021:** Selections with bad triangles, or polygon data that includes multiple open loops and different directions caused Geomagic Wrap to crash when using the Define UV command with the "Lofted" Mapping Type.

BUG FIXES IN 2021.1.0

This section lists issues that have been resolved since the last version of Geomagic Wrap:

- **GWR-600:** The Convert to Points created a "TEST" object in the model manager. A point object is now created with the mesh's name.
- **GWR-608:** The first parameter in 3DCompare macro did not work properly.
- **GWR-939:** The application crashed while using the Auto Surfacing command.
- **GWR-943:** When using the Fill Holes command, combined objects were not selected properly.
- **GWR-1014:** The application would crash when entering the Defeature command for a specific file.
- **GWR-1025, GWR-1096:** The application kept crashing when saving a NURBS object in AMF(ASCII) format. AMF file format is no longer supported as of Wrap 2021, but this is now replaced by 3MF file.
- **GWR-1060:** The Edit Sketch did not work on planar curves.
- **GWR-1070:** The application crashed or hung during using the Define UV tool.
- **GWR-1085:** The Flattering option in the Define UV would fail to create a proper UV if using it with an iso-curve.
- **GWR-1088:** Python modules failed to install due to incorrect Path and location of the pyd files.

- **GWR-1097:** The application crashed when using the ComputeVertexDeviations modifier in the script.
- **GWR-1114:** Scripts reacted differently depending on Wrap Language Setting.
- **GWR-1115:** When applying a Python3 macro to a mesh, ValueError would occur depending on Wrap Language Setting.
- **GWR-1137:** The Batch Process generated a file format different from the one specified in the Save Files option.
- **GWR-1139:** Output would not display in the Output window.
- **CFS-1907:** During the installation, a blue screen occurred and this caused Windows to crash and stop working.

BUG FIXES IN 2021.0.0

This section lists issues that have been resolved since the last version of Geomagic Wrap:

- **GWR-1068:** If a file has a set of point clouds in which one of them has dependent features tied to it, the file would crash when running the Combine Point Objects.
- **GWR-1031:** The Comment and Uncomment buttons didn't work for some languages.
- **GWR-733:** Not able to use Imported libraries.
- **GWR-731:** (Python) IntSlider Widget was broken.
- **GWR-686:** Crashed when saving after running "Enhance Mesh for Surfacing" with specific file.
- **GWR-667:** Orientation of features on ACIS model was incorrect.
- **GWR-638:** Autosurface macro record from a script omitted macros.
- **GWR-602:** The Silent install template was not saving System reporting information.
- **GWR-573:** Move to origin command broke surface patches.
- **GWR-540:** Allowed a specific mesh model to be directly saved out in the ASCII STL format.
- **GWR-492:** Could not use GAML file created from older version of Wrap.
- **GWR-360:** Script crashed when running Wrap from command line with wrapCORE.exe.
- **GWR-356:** Added ability to turn off (FARO) Arm as mouse.
- **GWR-877:** Combine point objects brought back deleted ordered data.
- **GWR-774:** Enable suppression of WrapCORE.exe window completely.
- **GWR-412:** SelectPointsByDistance selected a rectangular region instead of a spherical region.
- **GWR-411:** Vector2D value could not be set the way the documentation showed.
- **GWR-401:** The Probing overlay guiding window was not appearing.

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