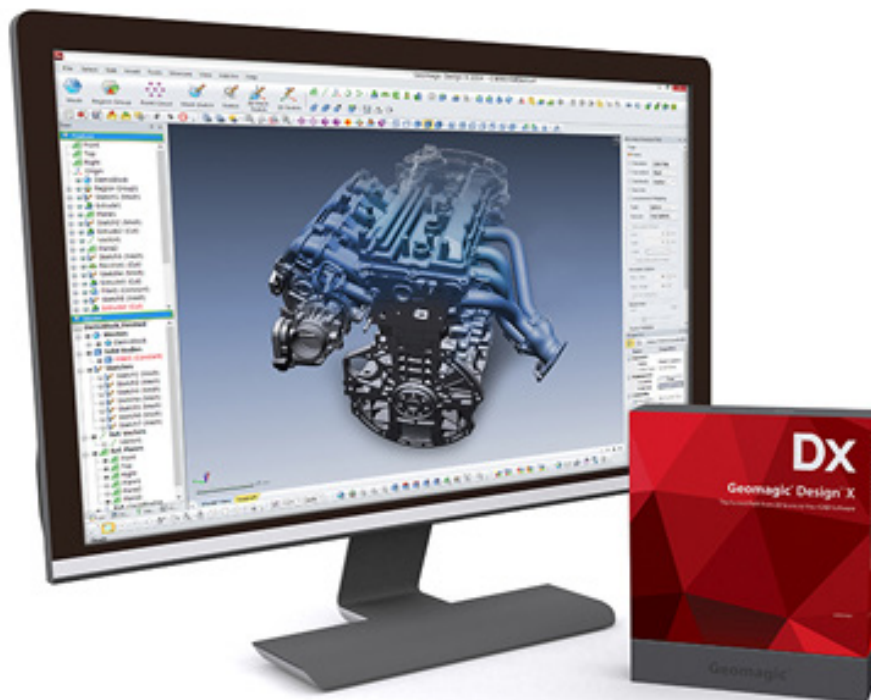


Geomagic[®] Design X[™]

The Fastest Path from 3D Scans
to Your CAD Software



Release Notes

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1 INTRODUCTION

We are pleased to announce the availability of the new version of Geomagic Design X. Geomagic Design X is the only reverse engineering software that combines history-based CAD with 3D scan data processing so you can create feature-based, editable solid models compatible with your existing CAD software.

New features in this release were made to deliver intuitive and efficient user experiences. Work more productively with a new Ribbon UI. This release also includes many more enhancements and some bug fixes.

For more information, please visit www.geomagic.com.

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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 Geomagic Support Center. Some users have had success running system configurations that deviate from the supported listed on our website. 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 website for the latest system requirement information and specific qualified systems.

DOWNLOAD AND INSTALL SOFTWARE

You can download and install the software from gettingstarted.geomagic.com, select the Geomagic Design X product, then select to download Geomagic Design X.

In addition, automatic software updates are available if you set the **Update Product Automatically** option to **True** in Preferences and 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.

You can also manually check if a newer version is available by going to [Help > Check For Update](#).

ACTIVATE LICENSE

Geomagic Design X 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 Utility window opens. The License Utility allows you to activate and use the Geomagic Design X software.

NOTE: When you launch the License Utility, you can click the Help button to read the 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 gettingstarted.geomagic.com, select the Geomagic Design X product, then click Licensing.

3 NEW FEATURES AND ENHANCEMENTS

WHAT'S NEW IN 2016.1.1

New File format support

Importing GPD Files

Geomagic Design X now supports the **Geomagic Point Data** file format (.gpd). The GPD is ordered points file format, and can contain point data with color and normal information. See Insert > Import in the Design X Help for more information.

Enhancements

Scanning Performance

The performance of scanning using **LiveScan**, as well as post-scanning processing has been greatly enhanced. You will now experience a much faster scanning experience.

Upgraded Licensing platform and Installer

The licensing platform has been updated so that it enhances security and robustness, as well as displays the license type in the title bar.

Importing / Exporting PLY File Format

The **PLY** file format has been updated to allow importing and exporting of points with normal information, if the data type is points.

Anonymous Usage Statistics

Added an optional feature to allow the collection of anonymous usage statistics to improve the product and user experience.

WHAT'S NEW IN 2016.1.0

The Faro Array Imager support

Geomagic Design X 2016.1.0 now supports the FARO Array Imager.

The FARO Array Imager is a high performance non-contact 3D imaging system, capable of collecting millions of points in just seconds. Using blue-light projection technology, the FARO Array Imager achieves high accuracy point cloud data on parts, assemblies, and tools for inspection and reverse engineering applications.

See Insert > Scanner Direct Control > Faro Array Imager in the Design X Help for more information.



(Source : FARO, www.faro.com)

New CAD Versions Support in LiveTransfer™

The LiveTransfer has been improved to support newest versions of CAD applications.

The following is a list of CAD versions newly supported in LiveTransfer.

- SolidWorks 2016
- SIEMENS NX 8.5 / 9 / 10
- Creo(Pro/E) 3.0

See “LiveTransfer(TM)” in the Design X Help for more information.

Performance Improvements

Modeling Performance

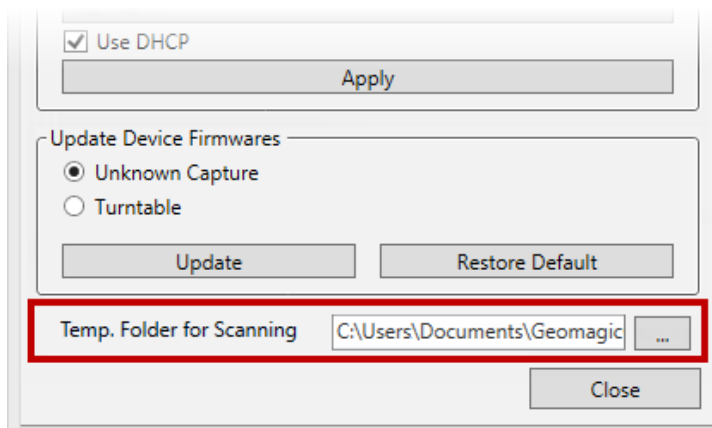
Improved modeling performance for better your work environment. Regardless of the number of modeling features, you can maintain stable modeling performance in your design works.

Scanning Performance

Improved scanning performance to provide better user experience in scanning with high-resolution scanning devices such as FARO HD ScanArm.

Temporary Folder for Scanning

Improved to better support sustainable scanning process using Geomagic Capture 3D scanner. In Geomagic Capture application, you can now set the path of a temporary folder where temporary files are stored during the scanning. For more information, click “Help” from the Geomagic Capture plug-in to open the *Geomagic Capture User's Guide*.



New File format support

Importing E57 Files

The E57 file format (.e57) is now supported. The E57 file format is an extensible industry standard for 3D Imaging Data developed by ASTM International and specified in the 'ASTM E2807 - 11 Standard Specification for 3D Imaging Data Exchange' standard.

The E57 file format stores data in a combination of binary and XML for Laser Scanners/ Radars (LADAR), Optical Range Cameras (Flash LADAR) and LIDAR images. This file format can contain point data with normal and color information.

See Insert > Import in the Design X Help for more information.

Importing Lsproj Files

The Lsproj file format (.lsproj) is now supported. This is FARO SCENE project file format, can contain point data with normal and color information. See Insert > Import in the Design X Help for more information.

BUG FIXES IN 2016.1.1

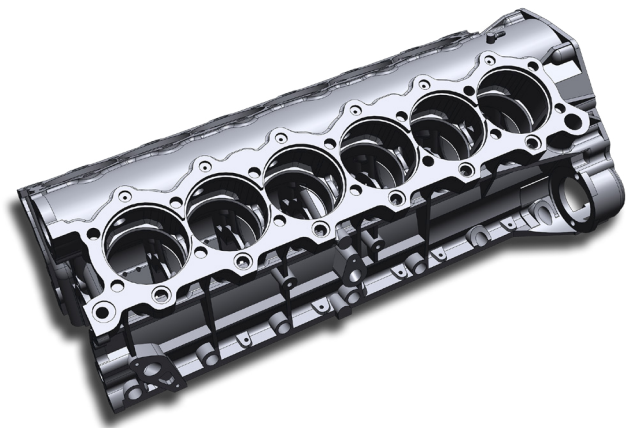
This section lists issues that have been resolved since Geomagic Design X v2016.1.0:

- **GDX-2673:** Fixed an issue where the ‘.’ character in Mesh name prevented export
- **GDX-2801:** Improved .3pi file import results
- **GDX-2737:** Fixed an issue where in some cases, Faro FLS files could not be imported
- **GDX-2720:** Improved performance for AMD graphic cards by default preferences
- **GDX-2791:** Fixed an issue where sometimes target or rotary alignments would fail.
- **GDX-2803:** Updated the FARO 3D Imager name to Faro Cobalt Array Imager
- **GDX-2682:** Renamed LDI interface to Laser Design Surveyor Scanner
- **GDX-2831:** Improved forced removal of empty folder during installation
- **GDX-2742:** Fixed an issue where Redistributable packages were unintentionally removed
- **GDX-1843:** Removed duplicate files during installation
- **GDX-2869:** Fixed an issue where in some cases, ghost scans are visible after LiveScan.
- **GDX-2823, GDX-2733, GDX-2711:** Minor language translations fixed
- **GDX-2789:** The visibility preference of “Measurements” are preserved on re-open of a file

BUG FIXES IN 2016.1.0

This section lists issues that have been resolved since Geomagic Design X v2016.0.1:

- **GDX-2428:** The Cube Maps in the Environment mapping have left and right image mixed up.
- **GDX-2439:** In the Auto Surface, in the Mechanical method, the Target Patch Count does not work properly.
- **GDX-2441:** The application crashes when editing radius in the Variable fillet.
- **GDX-2465:** The application crashes when attempting to align point clouds, which do not have normal information, with the Do Not Align Between Moving Object option.
- **GDX-2480:** The Linear Pattern and Circular Pattern Modeling Features are registered with wrong names in the Feature Tree.
- **GDX-2431:** The application crashes when using the Sweep Wizard in a certain model.
- **GDX-2498:** An entity was accidentally copied just by holding the Ctrl key and picking the entity with a slight mouse move.



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