

Simcenter™ Flotherm™ Release Highlights

Software Version 2304
April 2023

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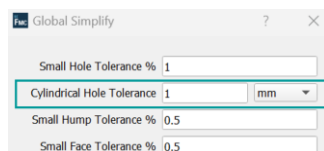
Introduction

This document provides a high-level summary of this release of Simcenter™ Flotherm™ software. It includes a summary of the new features in this release, any authorization code changes required, any major installation changes, and any transitioning issues you should be aware of before installing.

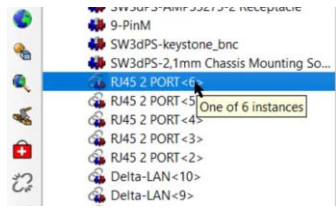
New Features

The following new features are available in this release: **Model the Complexity – Improved interface with CAD tools with enhancements to MCAD Bridge.**

- Added support for importing from:
 - Siemens NX
 - Siemens Solid Edge
 - Parasolid
 - JT
 - PLMXML
 - XTXML
- **Deprecated** support for
 - STL (import & export)
 - DXF (import)
 - SAT (export)
- Added remove cylindrical holes option in global simplify tool.
 - Allows the quick removal of holes of a specified size and smaller across whole model in a single action.

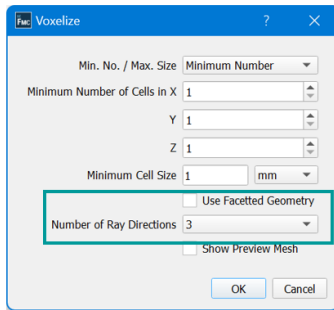


- Instance support.
 - Identifies multiple instances of an object and enables user to act upon one entity and reproduce effects on all the instances.

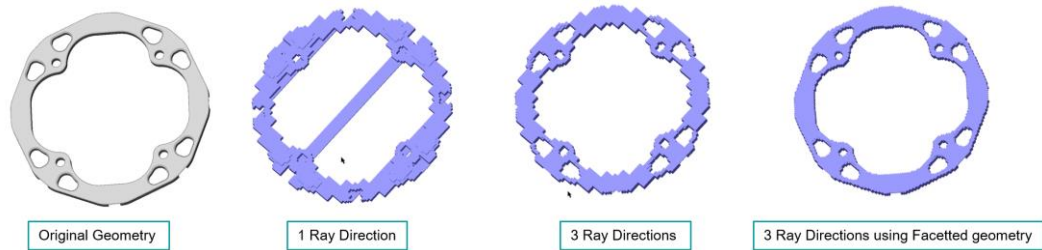


- User can break connection if required to produce different results on each instance.

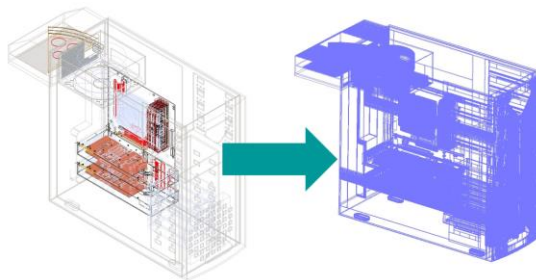
○ Improved voxelization tool.



- Number of Ray directions and Use Facetted options to control quality of geometry representation after voxelization.

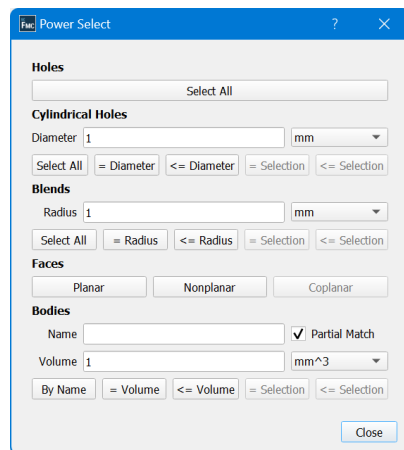


○ Improved performance of voxelization process



Voxelize Speed	3 Rays	1 Ray
MCAD Bridge 2304	2m 28s	46s
MCAD Bridge 2210	N/A	2h 20m 54s

- Separate disjoint bodies functionality.
 - Where an imported part may be made up with separate bodies MACD Bridge will in certain circumstance ignore the separation – for example replacing with a single body. It is possible to use the Separate Disjoint Bodies tool to ensure that the distinct parts are maintained.
- New Power select tool.



- Select all holes in selected objects.
- Select cylindrical holes or blends based upon being equal to or equal and less than the defined size.
- Select a cylindrical hole or blend then select others of equal or equal and less than size.
- Select different types of faces.
- Select bodies by name, partial name, or volume.
 - Name is case sensitive.
 - Property sheet for selected objects shows geometrical information to assist power select by volume.



- **Deprecated** support for Dissect tool.

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- **Go Faster – Improvements handling extremely large models.**
 - Improvements have been made to the time taken to load projects.
 - Efficiency gains with pre-solution tasks to reduce time taken to start solution phase.
 - Tests have shown that Simcenter Flotherm 2304 is between five and ten times faster than the previous release.

For a detailed list of new features, refer to your product specific release notes manual or README file, available in the installed software tree or on Support Center.

Licensing

This release uses Mentor Standard Licensing (MSL) for the Siemens Advanced Licensing Technology (SALT) 2.0.1, mgcld vendor daemon and licenses. The port number for SALT_LICENSE_SERVER has changed from 1717 to 29000.

SALT is a new Siemens licensing solution based on FlexNet licensing technology. SALT 2.0.1 requires FLEXnet license server running at version 11.19.0 or higher. If you use server-based licenses, you will need to update the license server accordingly. Download the latest Siemens License Server Installer from Support Center:

<https://support.sw.siemens.com/en-US/product/1586485382>

Note that the license server is no longer available from the product installation or media.

The port number for SALT_LICENSE_SERVER has changed from 1717 to 29000. If you are currently using the environment variable MGLS_LICENSE_FILE then you need to set a new environment variable SALT_LICENSE_SERVER with the new value. MGLS_LICENSE_FILE can remain set to support older versions.

For more information on SALT and Siemens License Server refer to [Knowledge Base article MG612613](#) “Getting Started with Siemens Advanced Licensing Technology (SALT) and the Siemens License Server (SLS)”, [Knowledge Base article MG612618](#) “Siemens Advanced Licensing Technology (SALT) Migration Guide for Mentor Products” on Support Center and new licensing documentation: Siemens Digital Industries Software License Server Installation Instructions and Siemens Digital Industries Software Licensing Manual for Mentor Products.

Authorization Codes

Starting with Release 2304, a new authorization code feature line (**psflomcad**) is required for the MCAD Bridge product to enable it. You may request your updated authorization codes by opening a non-technical Service Request on Support Center.

No other changes to authorization codes are required for this release and you can download your existing authorization codes from Support Center -> Account Center -> Licenses:

account.sw.siemens.com/licenses

For additional information on licensing, refer to the *Siemens Digital Industries Software Licensing Manual for Mentor Products*.

Product Installation

As the license software is no longer provided with the product installer or media any options regarding the license software have been removed from the installation process.

Product Transition

Starting with Release 2304 there is a new product for MCAD Bridge: *292951 Simcenter Flotherm MCAD Bridge Ap SW* replacing all the previous MCAD Bridge products:

239822 Simcenter MCAD Bridge Ap SW
239823 Simcenter MCAD Bridge ProE Rdr Op SW
239824 Simcenter MCAD Bridge SolidW Rdr Op SW
239825 Simcenter MCAD Bridge Catia V5 Rdr Op SW
238139 Simcenter MCAD.Bridge Catia V4 Rdr Op SW

Supported Platforms

Supported Operating Systems (Full Software)

- Microsoft Windows 11 Version 21H2 (64 Bit Pro and Enterprise).
- Microsoft Windows 10 Versions 20H2, 21H2 and 22H2 (64 Bit Pro and Enterprise).
- Microsoft Windows Server 2019 Version 1809, (64 Bit Standard Edition).

Supported Operating Systems (Solver Only)

- Linux RHEL 7.8 x64
- Linux RHEL 8.3 x64
 - Please note that this will be the last version to support Linux RHEL 8.3 x64.

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- Linux SUSE SLES 12.4 x64
 - Please note that this will be the last version to support Linux SUSE SLES 12.4 x64.

Note that supported operating systems may change. For most up to date information please refer to Support Center documentation.

Localized Languages

- Japanese
- Simplified Chinese

Hardware Requirements

The following minimum hardware is required to run Simcenter Flotherm 2304:

- 64-bit capable AMD processor or an Intel processor with EM64T.
- 2 GB system memory (RAM) minimum, 8 GB recommended.
- Graphics card supporting hardware accelerated OpenGL version 2.0 or later.

Compatible releases

The following releases are compatible with Simcenter Flotherm 2304:

- HEEDS 2210

Note: To support a particular version of Simcenter Flotherm the portal setting in HEEDS need to be adjusted to use the appropriate Simcenter Flotherm files.

- In HEEDS go to File \ Options \ Analysis Portals.
- Select Simcenter Flotherm.
- Set “Solver Install” to correct location.
 - For Simcenter Flotherm 2304 the default location following installation is:
“C:\Program Files\Siemens\SimcenterFlotherm\2304\WinXP\bin\flotherm.bat”

File Imports and Exports

Supported CAD Files (Via MCAD Bridge)		
Importing CAD Files		
Siemens NX	*.ptr	Up to version 2212
Siemens Solid Edge	*.prt, *.asm	Up to version 2212
Parasolid	*.x_t, *.x_b, *.xmt_txt, *.xmt_bin	Up to version 35.0
JT	*.jt	Version 9.5
PLMXML	*.plmxml	Schema version 6
XTXML	*.xtxmla	Exported from Simcenter Flotherm XT 2304 Exported from Simcenter Flotherm Package Creator up to version 2304
IGES	*.iges	Up to version 5.3
STEP	*.stp	AP203, AP214, AP242
PTC Creo	*.prt.*, *.asm.*	Pro/E 2000i to Creo Parametric 8.0
CATIA V4	*.model, *.exp	Version 4.15 to 4.25
CATIA V5	*.CATPart, *.CATProduct	Up to V5-6R2021 SP4
SolidWorks	*.sldprt, *.sldasm	Versions 1999 to 2022
ACIS	*.sat, *.sab	Up to version 2021.1.0
Exporting CAD Files		
Parasolid	*.x_t, *.x_b, *.xmt_txt, *.xmt_bin	Version 35.0
JT	*.jt	Version 9.5
PLMXML	*.plmxml	Schema version 6
IGES	*.iges	Version 5.3
STEP	*.stp	AP242
CATIA V4	*.model, *.exp	Version 4.1.9

Supported ECAD Files (Import only via EDA Bridge)		
ODB++ Directory		Versions 7 and 8
ODB++ Archive	*.tar.gz, *.tgz, *.tar	Version 7 and 8
IDF	Board definition *.emn, *.bdf, *.brd, Component definition *.emp, *.idf, *.lib, *.pro	Version 2.0 and 3.0
Allegro ⁽¹⁾	*.floeda	PCB Designer 17.2 or later
APD ⁽¹⁾	*.floeda	Allegro Package Designer 17.2 or later
Boardstation ⁽¹⁾	*.floeda	Boardstation PCB 2005BST and 2006BSXE or later
CR5000 ⁽¹⁾	*.floeda	CR-5000 Board Designer 9.0 or later
Xpedition ⁽¹⁾	*.floeda	Xpedition Enterprise EEVX 1.1 or later

(1) Plugins for EDA software to create *.floeda files available within the installation directory `.\SimcenterFlotherm\2304\eda_interfaces`.

Support Information

A support contract with Siemens is a valuable investment in your organization's success. With a support contract, you have 24/7 access to the comprehensive and personalized Support Center portal.

Support Center features an extensive knowledge base to quickly troubleshoot issues by product and version. You can also download the latest releases, access the most up-to-date documentation, and submit a support case through a streamlined process.

support.sw.siemens.com/

If your site is under a current support contract but you do not have a Support Center login, register here:

support.sw.siemens.com/register

Simcenter Community

Join Simcenter community of experts to ask questions, solve issues, help others, and submit product ideas.

[Simcenter Flotherm \(siemens.com\)](https://simcenter.flotherm.com)