



Simcenter™ Flotherm™ Release Highlights

Software Version 2210
October 2022

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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.

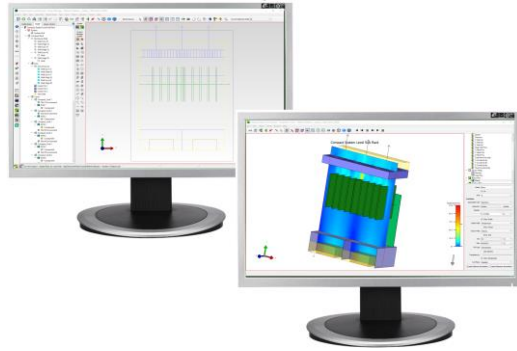
New Features

The following new features are available in this release:

- **Model the Complexity – Full support for analysis at any timescale.**
 - Accurately representing sub-microsecond time variations for power cycling of IC packages and other systems.
 - Uses double precision technology to enable accurate solving for transients of any timescale.
 - Able to define time varying conditions in microseconds and lower.
 - Define time steps to the order of microseconds and smaller.

- **Model the Complexity – Lifted a restriction with overlapping sources in Die SmartPart.**
 - Speed up creation of complex die structures by allowing greater flexibility.
 - When Discrete sources are defined for a non-uniform die dissipation they are now allowed to overlap.
 - Warning given.
 - Sources are additive in overlapping region.

- **Go Faster – Optional independent Visualization Viewer separate to Project manager Create / Analyze modes.**
 - Reduce model creation time by leveraging multiple views of geometry.
 - Launch Visualization Viewer separately and place alongside drawing board / existing analysis window or on a separate monitor.



- Independent viewing controls for:
 - Solid / wireframe
 - Single / Multiple view ports.
 - View orientation
- Synchronized object selection across all windows.
- Duplication of result plots between Visualization Viewer and existing Analysis mode.

- **Stay Integrated – Export of native files for Simcenter 3D.**
 - *Bring reliability to the forefront of design by integrating the workflows of Simcenter Flotherm and Simcenter 3D to connect thermal and mechanical analysis.*
 - One click access to export a Simcenter 3D standard file format (.FLD) that contains the Simcenter Flotherm transient results.
 - Solid Temperature results can be exported for the entire model, or a nominated part.
 - The entire transient event can be exported, or a smaller time period specified.
 - Process fully supported with scripting.

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.

Preview Features

Preview features are subject to Beta code license terms.

The following preview feature is available in this Simcenter Flotherm software release.

- **Model the complexity – Automatic creation of localized grid regions.**
 - *Zero engineering time required to create a ready to solve grid for new users and an easily refinable starting point for experts.*
 - This feature uses the geometry (key points), user applied grid constraints and overall system grid settings to automatically create the localized regions. The automatic grid will obey such rules as ensuring that certain objects remain completely inside a single local region. If deemed necessary, the feature will create nested local mesh regions. The system can be completely automatic or will interact with local grid regions manually set by the user – for example if local mesh has been applied to a library object.

Licensing

This release uses Mentor Standard Licensing (MSL) for the Siemens Advanced Licensing Technology (SALT) 1.4.3, mgcld vendor daemon and licenses.

SALT is a new Siemens licensing solution based on FlexNet licensing technology. SALT 1.4.3 requires FLEXnet license server running at version 11.16.4.0 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>

Alternatively, the license server is available from the product installation or media. Please note that this will be the last release where the license server is available from the product installation or media.

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 same 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

No changes to authorization codes are required for this release.

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

This release utilizes a new installer package. Full details are provided in the installation guides.

Supported Platforms

Supported Operating Systems (Full Software)

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

Supported Operating Systems (Solver Only)

- Linux RHEL 7.5 x64
 - Please note that this will be the last version to support Linux RHEL 7.5 x64
- Linux RHEL 7.8 x64
- Linux RHEL 8.3 x64
- Linux SUSE SLES 12.4 x64

Localized Languages

- Japanese
- Simplified Chinese

Compatible releases

The following releases are compatible with Simcenter Flotherm 2210:

- HEEDS 2022.1

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 2210 the default location following installation is: “C:\Program Files\Siemens\SimcenterFlotherm\2210\WinXP\bin\flotherm.bat”

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