2024x Version News

Released on: November 10, 2023

The 2024x release introduces general modeling and infrastructure, as well as collaborative modeling enhancements.

For general modeling and infrastructure, this release presents the DSLS licensing option, the ability to zoom the Modeling Browser using keyboard shortcuts, and additional Legend adornment properties in Tables. Additionally, OpenJDK is now updated to version 17.0.8+7, CentOS Linux 7 is now replaced with Oracle Linux 8.8 support, and the JavaScript Rhino engine is now upgraded from 1.7R4 to the 1.7.13 version.

Several features have been discontinued with the 2024x version, such as the JavaScript Nashorn language usage, Record Macro functionality, and the SPEM plugin.

We have exciting news for collaborative modeling, as well. The new file exchange format .szip is now out of technology preview and was improved with a UI dialog for ease of use. Also, we introduce a major new feature: the Model Patch mechanism, a significantly lighter solution to move project changes. There are enhancements for **3D**EXPERIENCE projects, too; you can now manage used projects more easily and open certain projects in a read-only mode.

To download the latest version of the modeling tool, see Downloading installation files. For further information, check the product documentation.

> ⚠️ **2024x Hot Fix 2 available**
>
> 2024x Hot Fix 2 is now available for CATIA Magic and No Magic portfolios. It includes a number of improvements and bug fixes, and vulnerability fixes in our modeling tools, plugins, and server products . Learn more >>

Discontinued Features

- JavaScript Nashorn Scripting
- Record Macro Functionality
- SPEM Plugin

Known Migration Issues

Modeling and Infrastructure

- DSLS Licensing
- Zoom in Model Browser
- Advanced Legend Adornments in Tables
- Other Improvements

Collaboration

Teamwork Cloud

- New File Exchange Format for Server Projects
- Model Patch Mechanism (Technology Preview)

Power'By

- New Features to Manage Used Projects
- Opening Projects in Read-Only Mode

Discontinued Features

The following features have been discontinued with the 2024x version release.

JavaScript Nashorn Scripting

The JavaScript Nashorn language usage has been removed from the modeling tool. Please use JavaScript *Rhino* instead. This affects expression-related functionality, e.g., custom validation rules, derived properties, smart packages, tables, and macros.

Learn more about the deprecated JavaScript Nashorn >>

Record Macro Functionality

The Record Macro functionality has been discontinued. However, any previously recorded macros can still be used in the modeling tool.

SPEM Plugin

The SPEM 2.0 Plugin (16.8 and 16.9 versions) has been discontinued.

Known Migration Issues

Projects created using modeling tools of version 19.x, may get corrupted after migration to version 2024x.

To avoid project corruption, before migrating or opening projects for the first time, close the modeling tool, open the <modeling_tool_install_dir>\bin\<modeling_tool>.properties file, find the JAVA_ARGS line, and add the -Dskip.ProjectCleanup=true (for MAC OS: -Dskip. ProjectCleanup\=true) argument as one of its values.

Modeling and Infrastructure

DSLS Licensing

Starting with the 2024x release, we are introducing a new licensing option - DSLS (Dassault Systèmes License Server). DSLS is a licensing system developed by Dassault Systèmes that provides these benefits:

- License usage statistics, debugging, and simple UI to administer and view statistics.
- Licenses are bound to their expiration date rather than the product version.
- Nodelock (seat), floating, and managed licensing options.

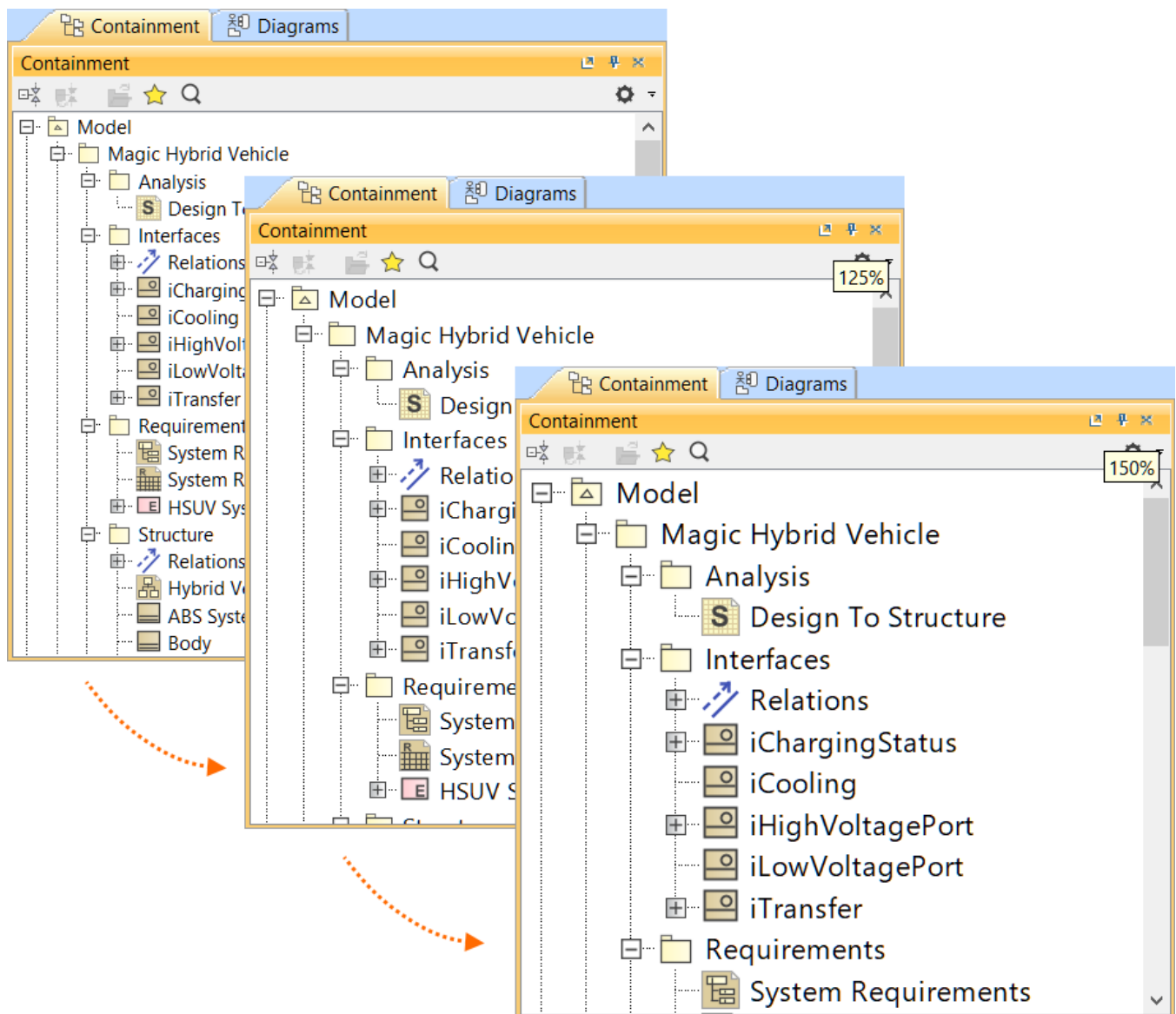Thus, now you can choose to use either FlexNet or DSLS for product licensing.

> ⚠ The DSLS version must be compatible with the modeling tool version you use (currently, DSLS version R2024x with modeling tool version 2024x).

Learn more about DSLS Licensing >>

Zoom in Model Browser

From now on, you can easily increase the size of the displayed data in the Model Browser tabs. Zoom in and out using keyboard shortcuts to modify the view to your liking.
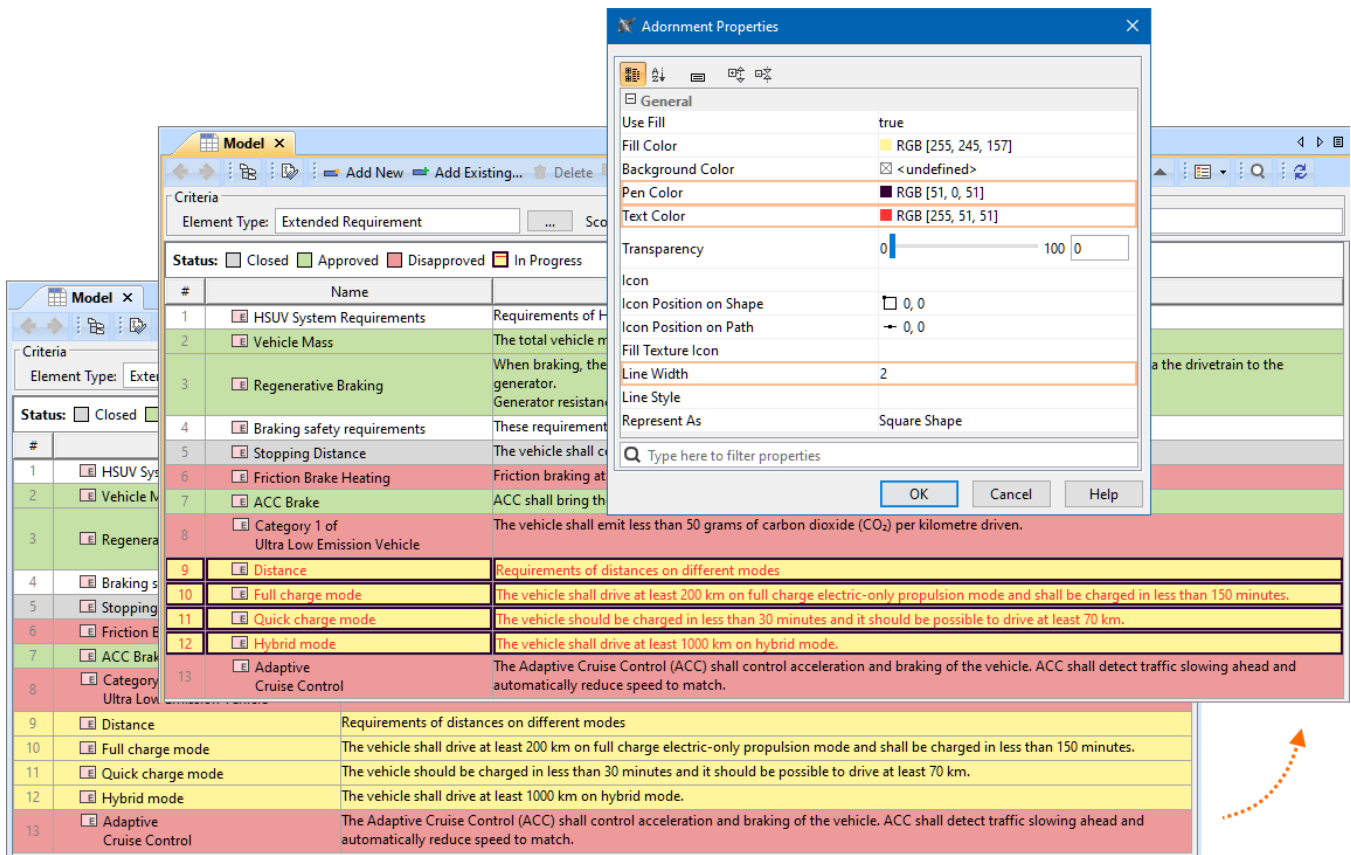
Zooming in the Model Browser using keyboard shortcuts.

Learn more about zooming in the Model Browser>>

Advanced Legend Adornments in Tables

In addition to using Legend Items' Fill Color property to color table cells, now you can also add and color cell borders via the Pen Color and Line Width properties, as well as change the color of the text via the Text Color property, allowing you more options to emphasize specific data rows in tables.

Text Color, Pen Color, and Line Width adornment properties are specified for the Legend Item *In Progress*.

Other Improvements

- **OpenJDK version update.** Desktop applications (MagicDraw, Cameo Systems Modeler, Cameo Enterprise Architecture, Magic Software Architect, Magic Cyber Systems Engineer, Magic Systems of Systems Architect) and Teamwork Cloud are now only run using OpenJDK 17.0.8+7 version.
- **Supported operating system changes for Linux.** CentOS Linux 7 has reached End of Life; thus, it is no longer supported. It is now replaced with Oracle Linux 8.8 support.
- **JavaScript Rhino version update.** The JavaScript Rhino engine is now upgraded from 1.7R4 to the 1.7.13 version.
- It is no longer necessary to display the pin's type when displaying its multiplicity due to the newly introduced Show Multiplicity symbol property.
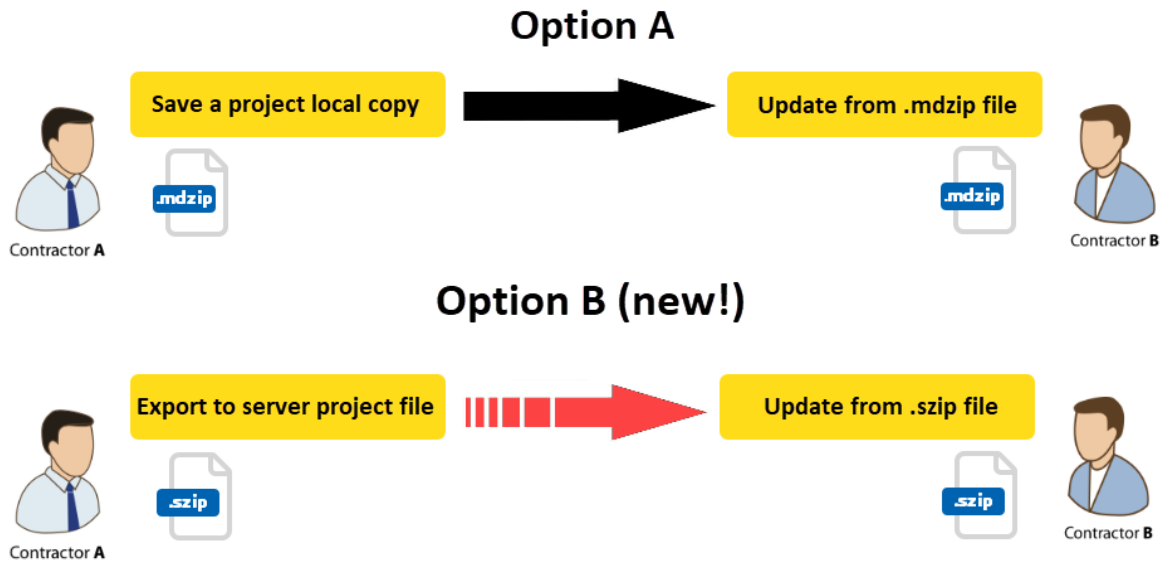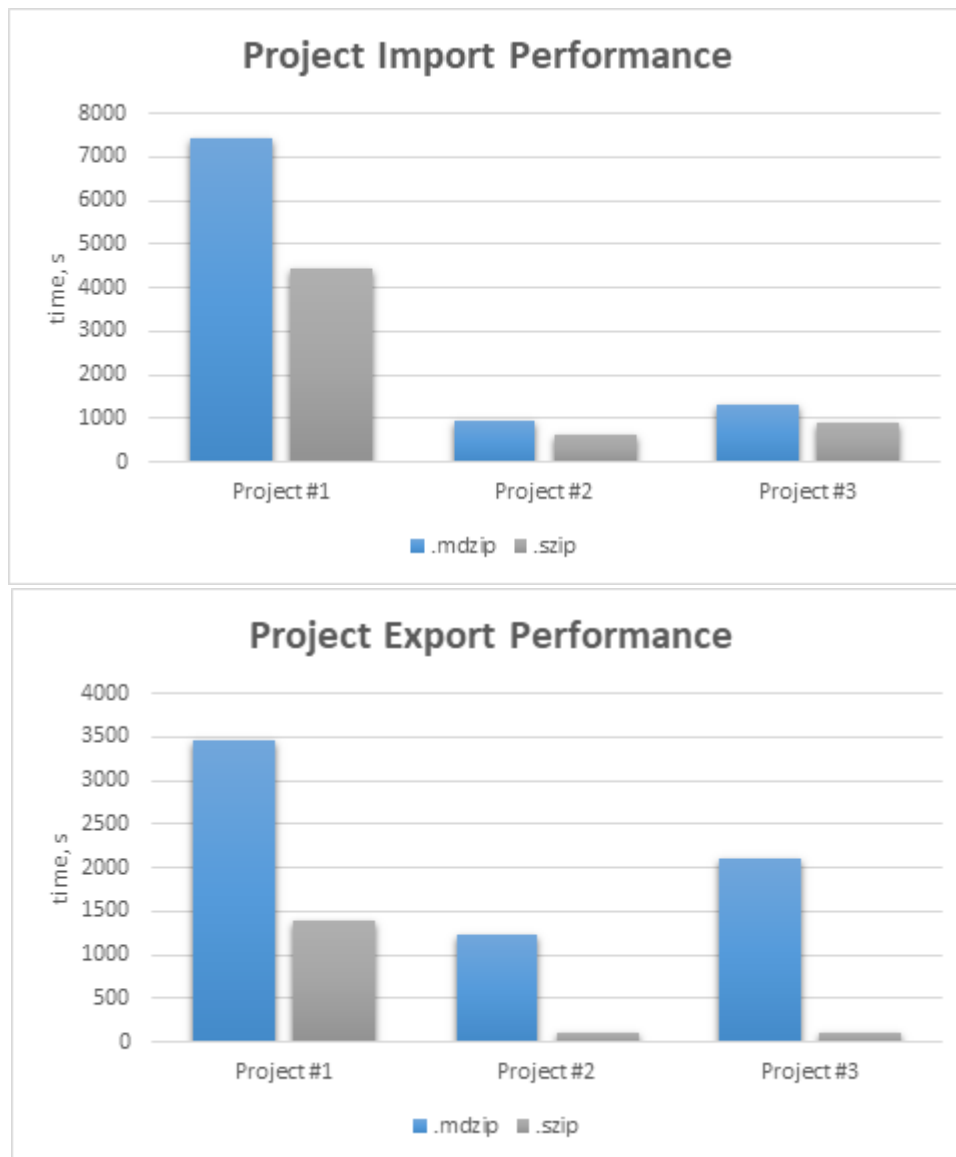
Collaboration

Teamwork Cloud

New File Exchange Format for Server Projects

In version 2022x Refresh2, we introduced **.szip** – a new server project exchange format. It addresses the issues of slow performance and project structural changes associated with the .mdzip format. Using .szip, you can export and import projects more quickly without altering the project structure.

In version 2024x, we further improved the .szip format by introducing a new UI dialog that allows you to select which projects you want to import to the server and which to skip. This gives you greater control over the file exchange process.

Option A

Save a project local copy ➡️ **Update from .mdzip file**

Contractor **A**   .mdzip   .mdzip   Contractor **B**

Option B (new!)

Export to server project file ➡️ **Update from .szip file**

Contractor **A**   .szip   .szip   Contractor **B**

The charts below depict how the .szip project format increases the performance of project export and import operations when compared to .mdzip. Depending on the project size element and used project count-wise, the performance gain for export can vary between 2-20 times, while the project import speed has been increased by roughly 40%.
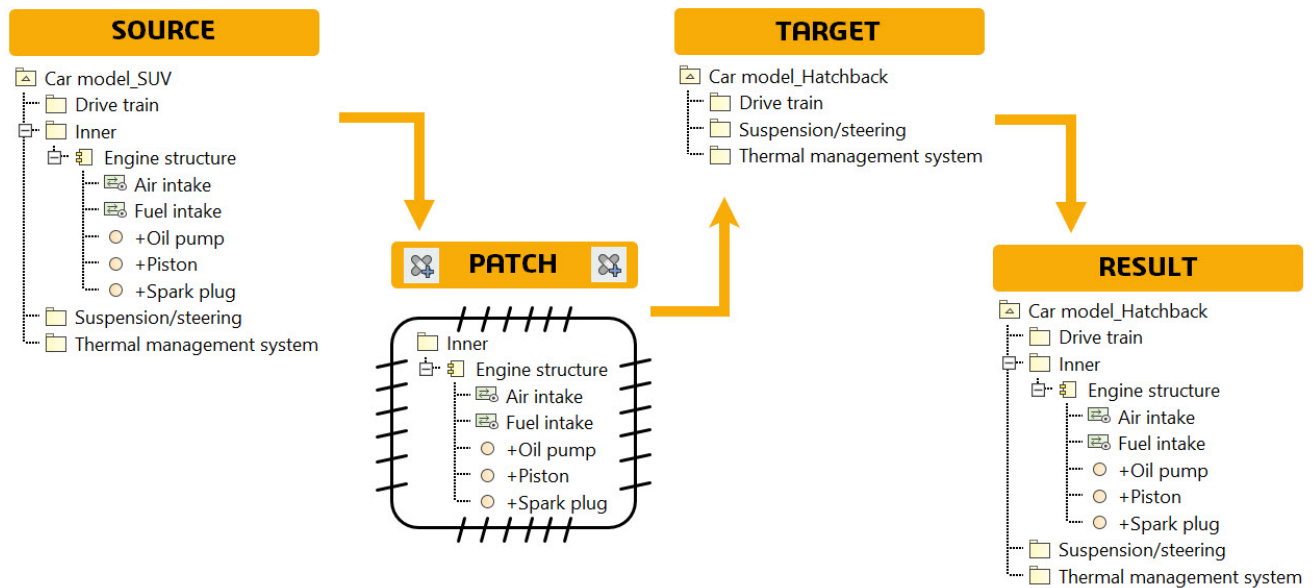
Comparing the import and export performance of Project #1 (1M elements, 57 Used Projects), Project #2 (2M elements, 7 Used Projects), and Project #3 (2M+ elements, 3 Used Projects).

Model Patch Mechanism (Technology Preview)

We introduce the technology preview of the Model Patch mechanism, a more lightweight way to move model changes. Model Patch can help you:

- Move changes from one branch to another without the need to perform a full Merge operation, which can be slow and cumbersome;
- Transfer only a specific scope of model changes between disconnected teams instead of the entire model;
- Reuse only the necessary subset of an external model as an alternative to bringing in the whole model as a Used Project.
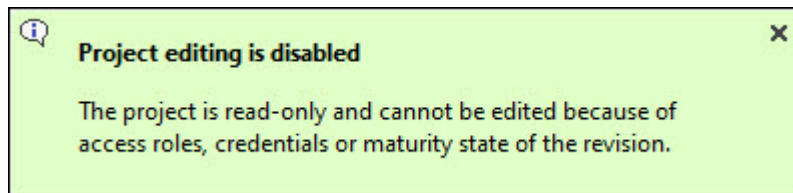
Power'By

New Features to Manage Used Projects

We added new features that provide you with better capabilities to manage used projects in **3D**EXPERIENCE:

- Export packages as a new server project;
- Move elements to/from used projects;
- Import used projects.

Opening Projects in Read-Only Mode

Beginning with version 2024x, you can open **3D** EXPERIENCE projects in Read-Only mode. Projects open in this mode with a balloon notification if you do not have the necessary access rights or if the project is in Read-Only mode because of its maturity state.

Notification informing the user that the **3D**EXPERIENCE project is read-only.

Version news of servers and plugins

- Teamwork Cloud 2024x
- SysML Plugin 2024x
- Cameo Simulation Toolkit 2024x
- UAF 1.2 Plugin 2024x
- Cameo DataHub 2024x

MagicDraw Documentation

- MagicDraw 2024x

News of earlier versions

- MagicDraw 2022x Refresh2
- MagicDraw 2022x Refresh1
- MagicDraw 2022x
- Product News Archive