Lite3D 2023.1
What's New

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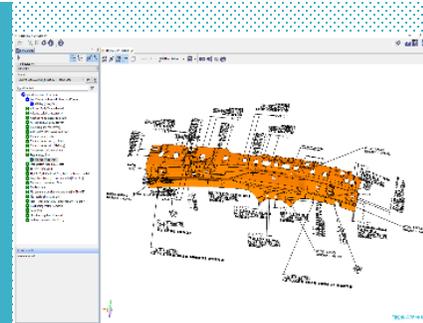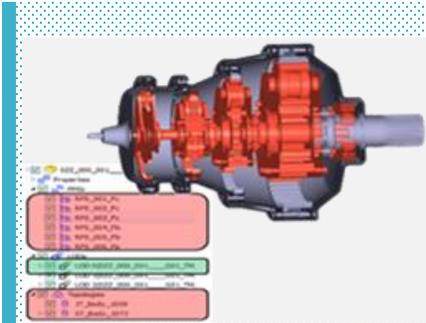# Lite3D 2023.1 Portfolio
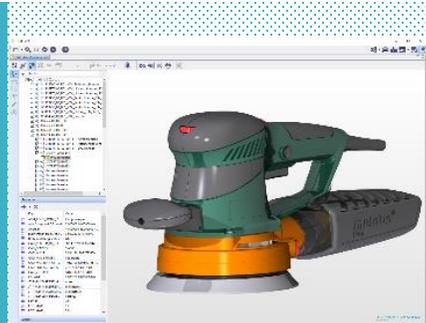
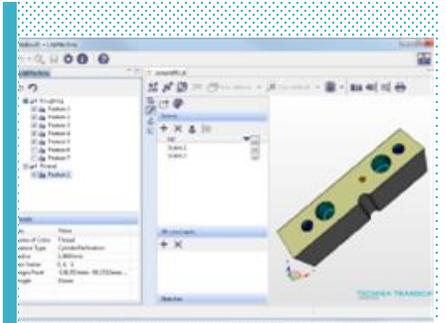**LiteBox3D 2.3.1**
Desktop Viewer
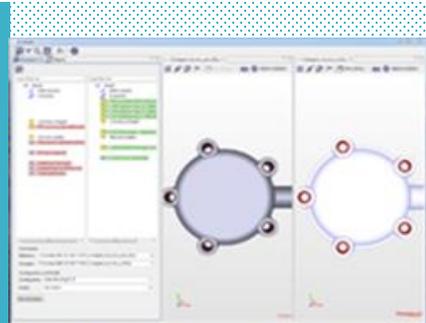
xCompare JT/JT 2.5.2
Validation

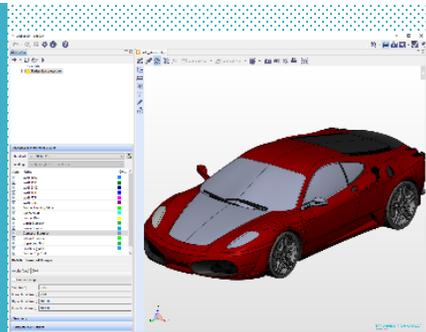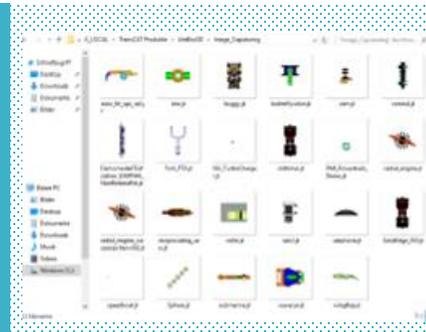**LiteComply 1.17.1**
Data Quality

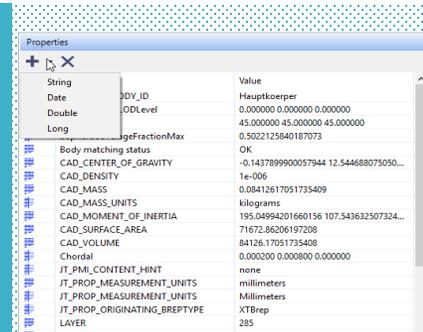**LiteDrop 2.3.2**
Data simplification & IP Protection

LiteMachine 1.1.1
Design to Manufacture

LiteCar 1.13.2
Vehicle Homologation

LiteImage 1.18.1
Image Capture (Batch)

LiteProperties 1.2.1
Edit Properties (Batch)
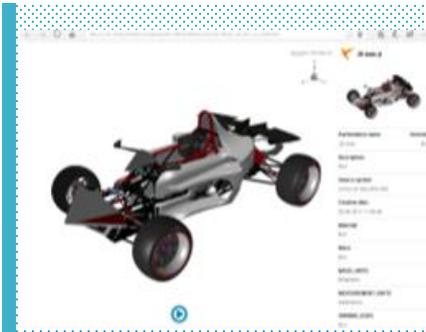
3D HTML 1.5.2
3DHTML Creator (Batch)

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What's new in LiteBox3D 2.3.1

Open from URL

- You can open a model file from a URL over http, https, and ftp.

- Open a file from a URL:
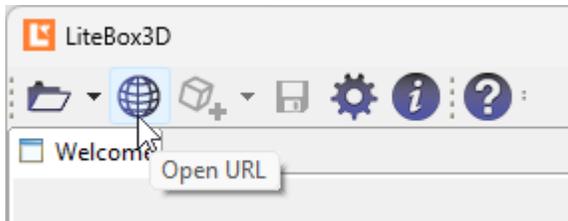
- Run LiteBox3D from the command line and open a file from URL:

```
LB3DStarter.exe –pluginCustomization c:\Lite3D\lite3d.ini –nl en
    --launcher.openFile "http://www.example.org/models/file.jt"
```

EXPERIENCE MATTERS

Mark components that could not be loaded

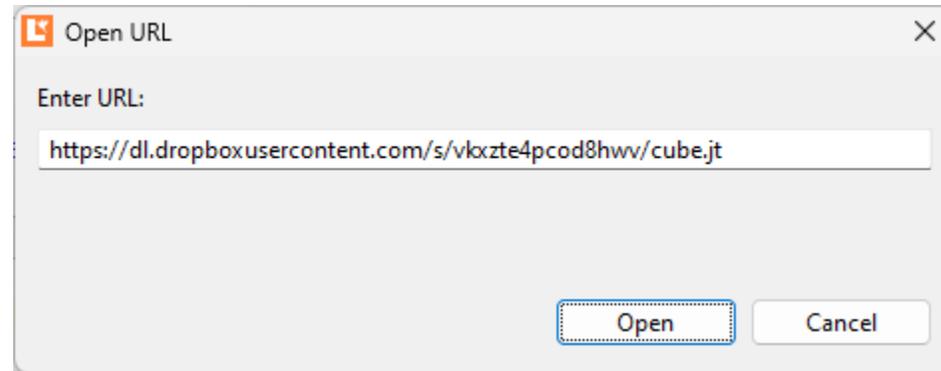PLMXML, STEP AP 242 XML and fully shattered JT models consist of multiple files.

 If a file cannot be loaded, the corresponding structure node is marked with an X on a red circle.
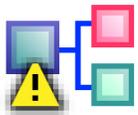
 All parents of the structure node are marked with an exclamation mark on a yellow triangle.

Details about the file can be found in *Details > Not loaded item.*

Export and print model views

- Export models views as multi-page PDF or separate PNG images (LiteBox3D Pro required)

- Select multiple model views for export or print

- Option to select only model views defined on the first structure level

- Additional output options: PMI color, background color, orientation

- Rendering output with improved performance and less memory consumption

- Improved progress bar
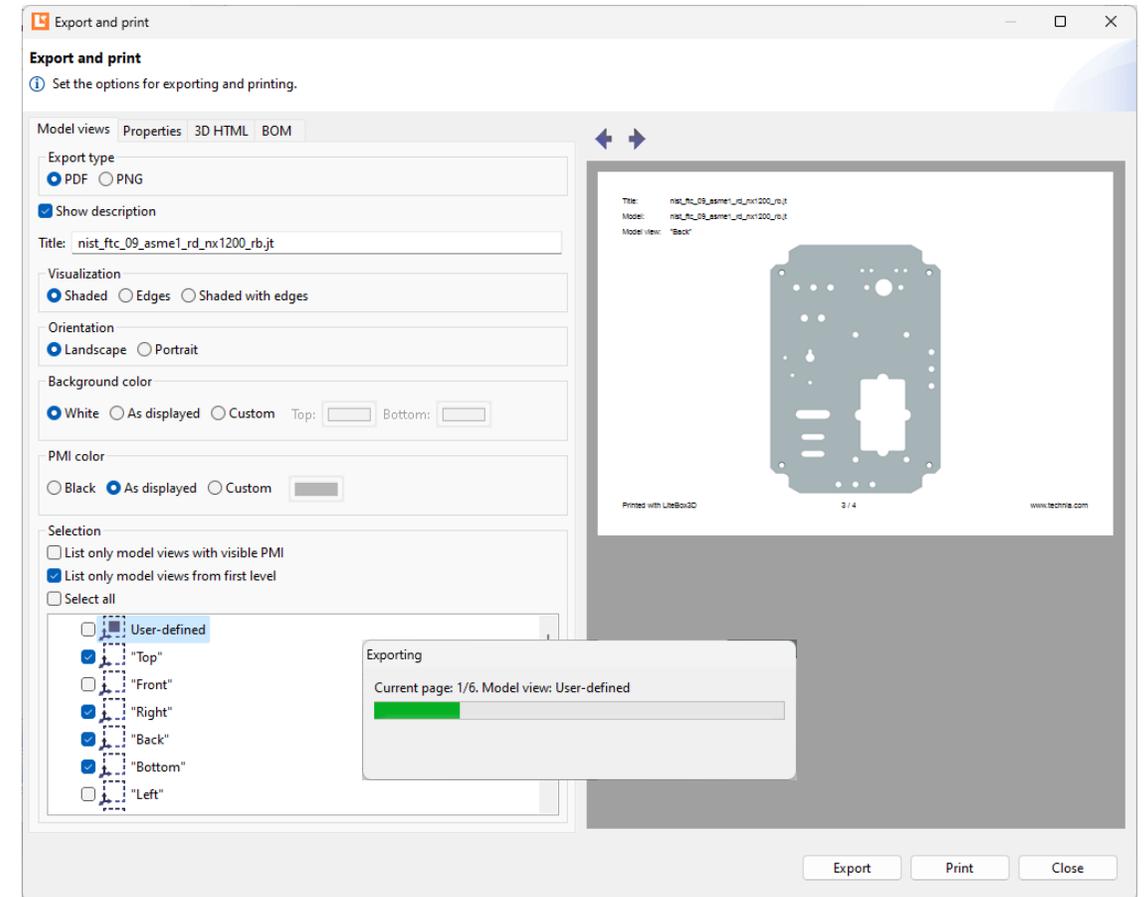
Text formatting options for file name in snapshots

Formatting options for the optional file name caption in snapshots
(Preferences > Lite3D > LiteBox3D > Snapshot)

- Text size and color

- Text outline with variable color

- Text background color with variable color and transparency
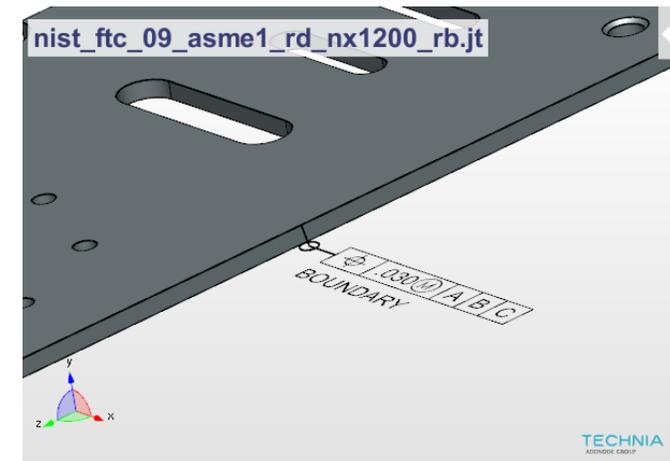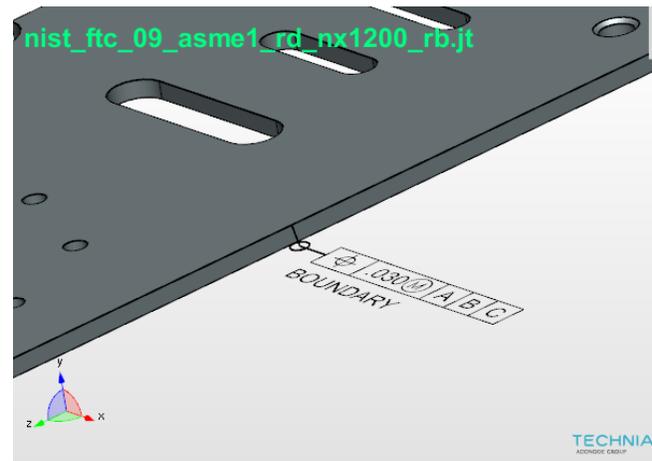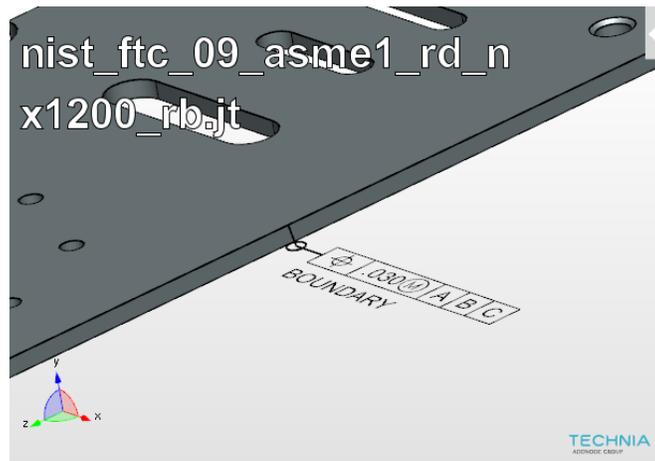
Further improvements to LiteBox3D

- Improved detection of the file format irrespective of the file name extension

- Adjustments to messages containing long file paths

- Improved support for CJK characters in property tooltips and the caption of snapshots
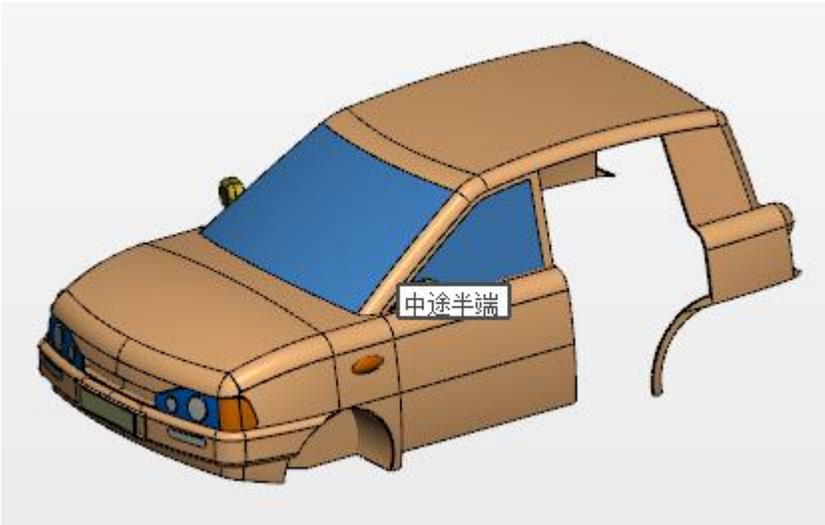
Further improvements to LiteBox3D (2)

- Computation of bounding boxes for STEP files has been improved.

- Reading compressed STEP files (extension stpZ) has been improved.

- The preferred display name for items in the model tree is now also used for parts in the PMI tree *(Preferences > Lite3D > LiteBox3D > Model tree > Default model tree names of STPX file).*

- The list of recently opened files shows the correct file type icons even if the file extension is wrong or missing

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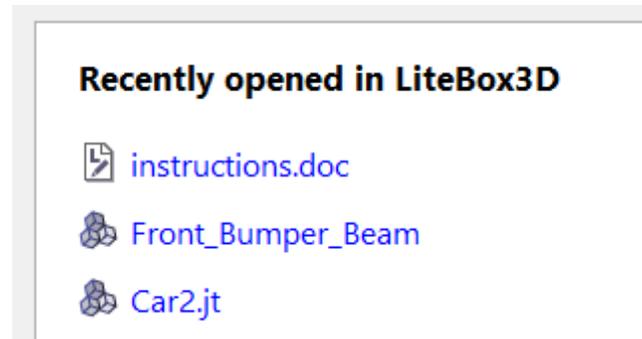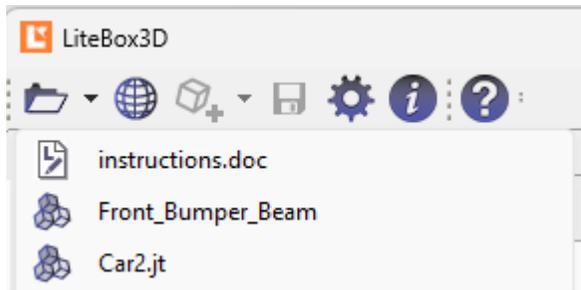
Fixes in LiteBox3D

- In Preferences, a deselected option containing an invalid file path prevented the dialog from being closed.

- Align view to planar face/curve stopped working after selecting non-planar elements and clicking on the background.

- The changed position of a redlining shape was not remembered when creating a new shape before having exited edit mode for the moved shape.

- 3DHTML could not be exported if the file name of the original model contains certain characters.

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Fixes in LiteBox3D (2)

Fixes related to Export and Print:

- Model views printed in portrait orientation were cropped in some cases.

- Clipping planes were disabled after closing the Export and Print dialog.

- The preview in *Export and Print > Model views* did erroneously show the outline of clipped geometry. The same preview also was not correct for user-defined model views with a section.

- The application became unresponsive while initializing the Properties tab of the dialog with many properties.
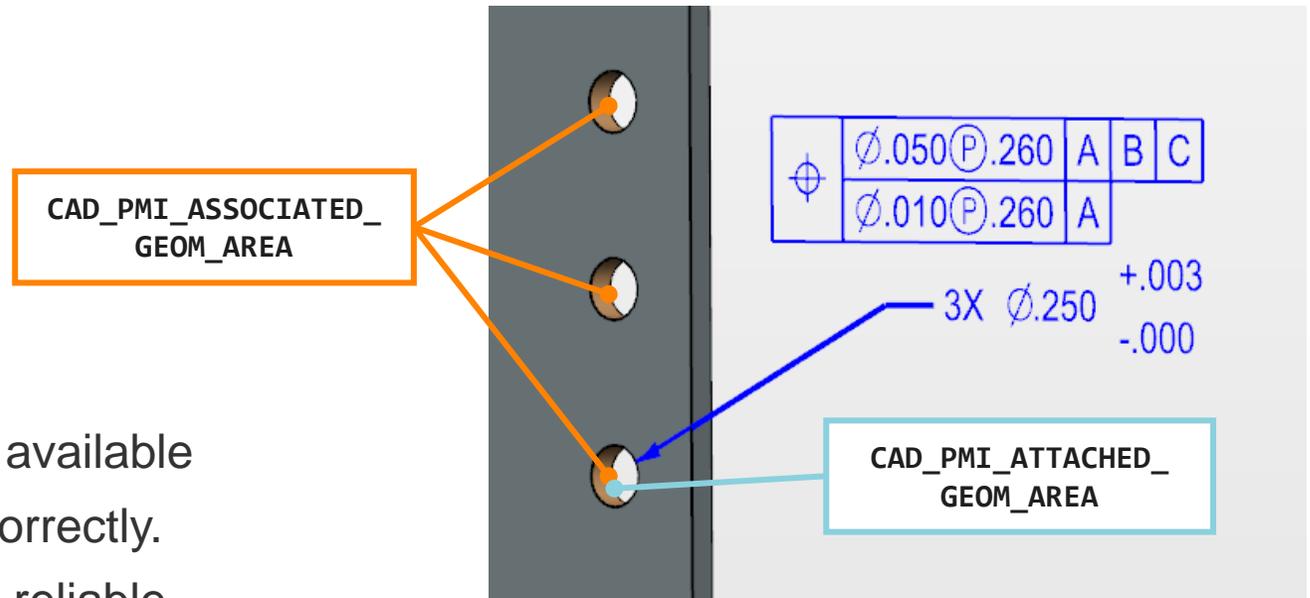
What's new in LiteComply 1.17.1

New rule: Validate CAD_PMI-Geo Properties (beta)

Upcoming versions of the JT file format define special properties for validating the correctness of PMI on element level. You can use LiteComply to perform this validation. Values from the native CAD system are validated against corresponding values calculated by LiteComply:

- **CAD_PMI_ATTACHED_GEOM_LENGTH**

- **CAD_PMI_ASSOCIATED_GEOM_LENGTH**

- **CAD_PMI_ATTACHED_GEOM_AREA**

- **CAD_PMI_ASSOCIATED_GEOM_AREA**

In LiteComply 1.17.1, the rule is a **beta feature** available for public testing. Some data may not be read correctly. Therefore, the results may be incomplete or not reliable.

CAD_PMI_ASSOCIATED_GEOM_AREA

CAD_PMI_ATTACHED_GEOM_AREA

∅.050 (P) .260 | A | B | C
∅.010 (P) .260 | A
3X ∅.250 +.003 -.000

Further improvements & fixes to LiteComply

- Improvements in tessellation for closed surface (like torus, sphere, cylinder,..)

- Fixed the handling of the unit of measurement for type Wireframe Rep

What's new in LiteCar 1.13.1

Pedestrian Protection: Engine Hood Edge

The new engine hood edge sub-feature calculates additional check points on the bonnet (engine hood) edge.

A measuring devices (sphere) is aligned at target points under specific impact angles. At every target point, LiteCar calculates the center point of the device and the touch point between device and bonnet top geometry.

The sub-feature can use either bonnet top grid points (according to Euro NCAP 8.4) or points distributed on the bonnet side curve (according to ECE R-127 Rev. 02).
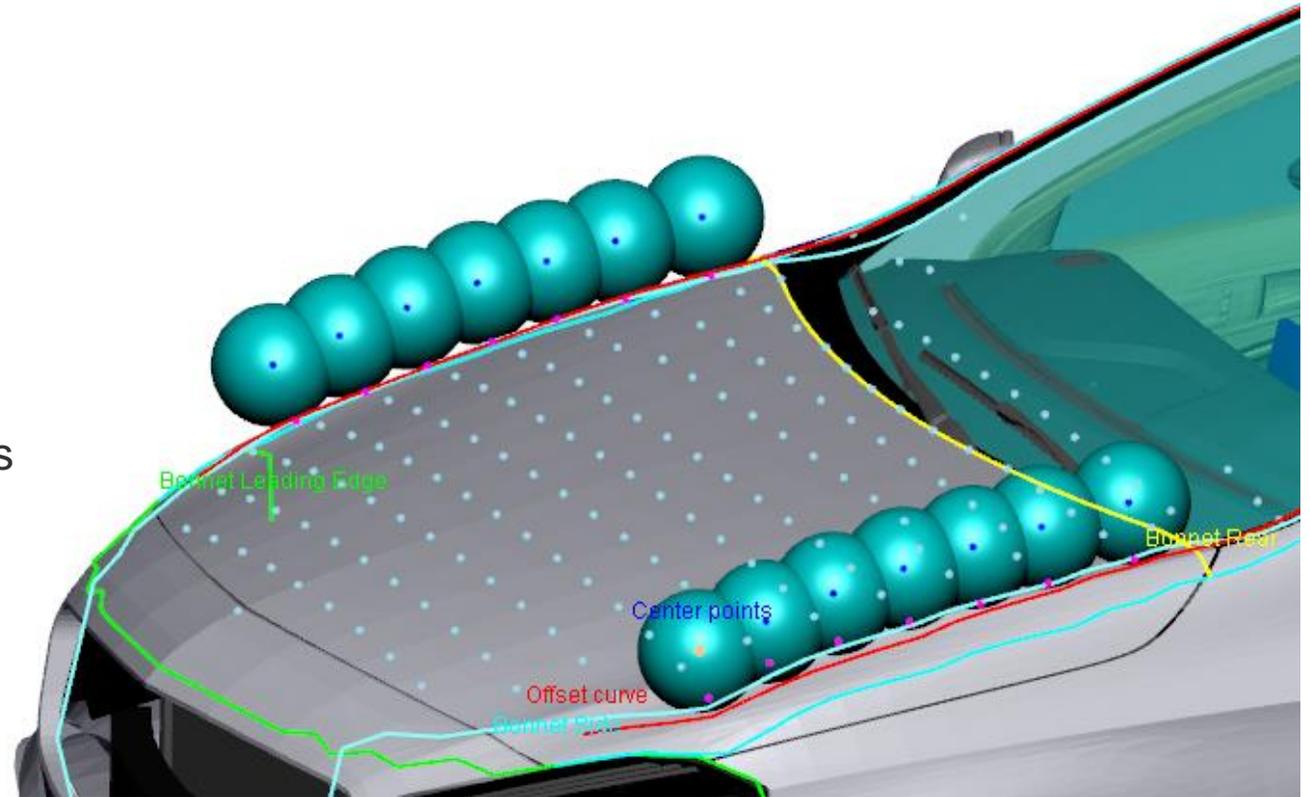
Further improvements to LiteCar

- Base data: Improved controls for wheels display
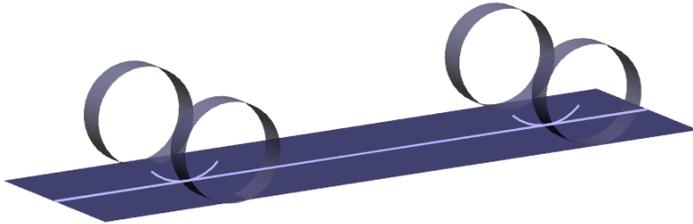
- Close range visibility: Improvements to Blind areas results tab

Status	Name	Current length	Permitted length
✅	Blind area 1	57.777	304.414
❌	Blind area 2	490.081	-407.643

- Improved tooltips and messages for input validation

Fixes in LiteCar 1.13.1

- Base data: Recompute was not available

- Base data: Loadings could not be removed

- Crash barriers: Entry card did remain visible after removing the feature

- Close range visibility: For camera and mirror, contour could not be selected

- Safety radius: Front bumper check had unwanted effect on Grille check
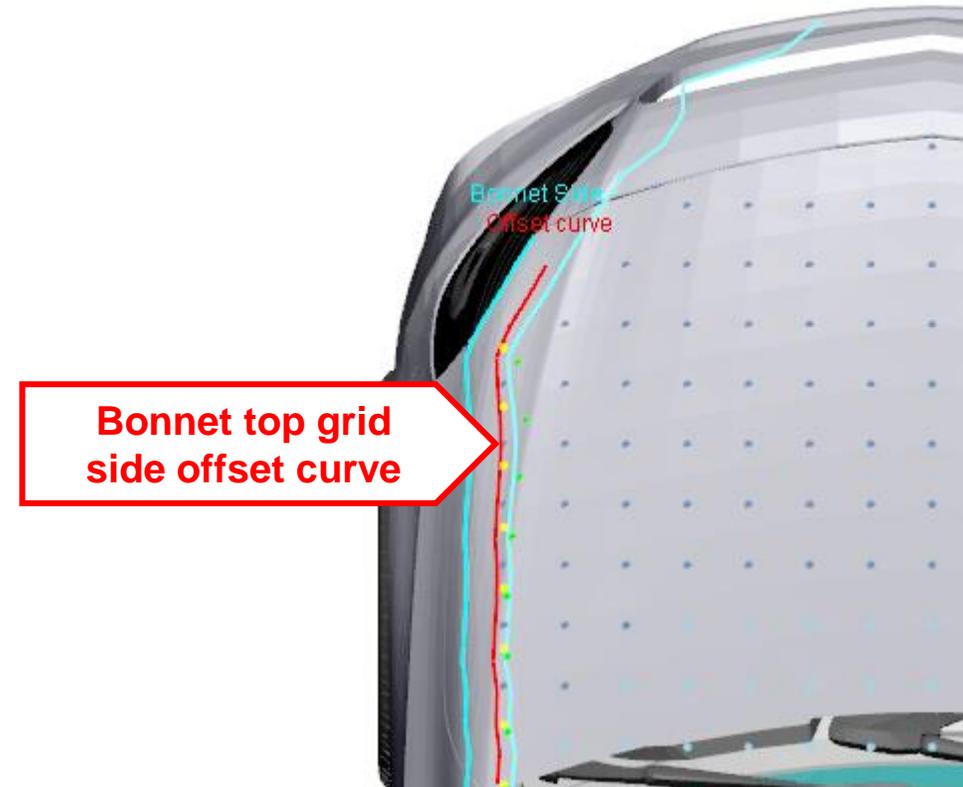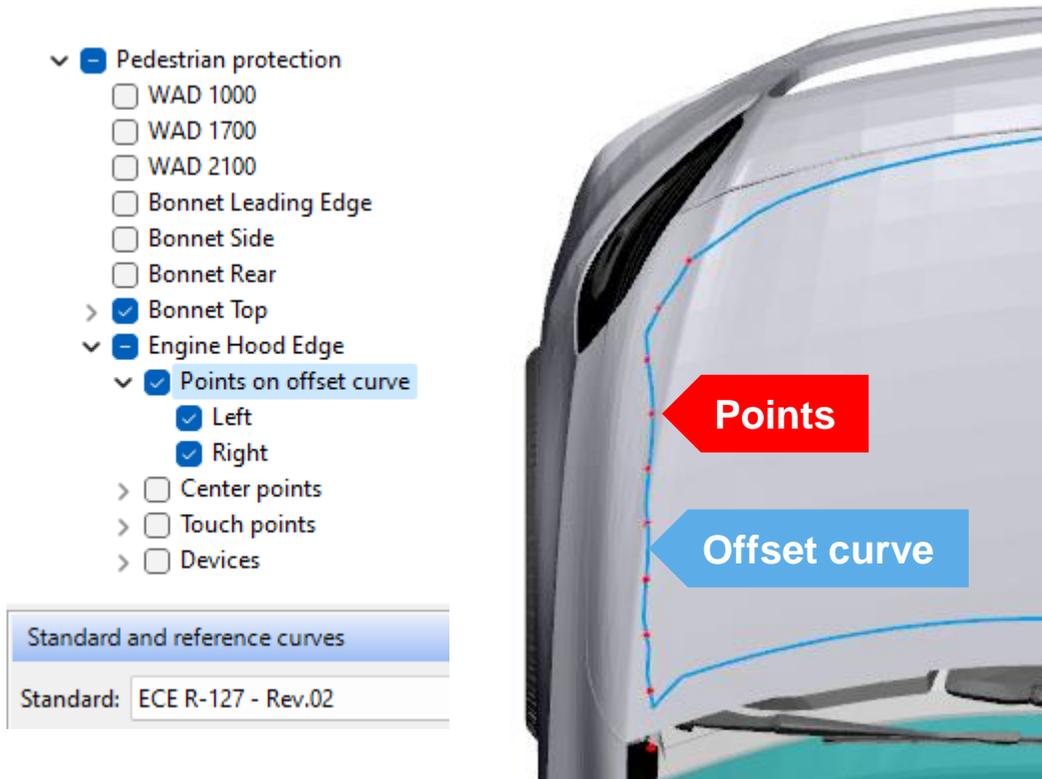
What's new in LiteCar 1.13.2

Pedestrian Protection: Engine Hood Edge

- Create a set of points on the Engine Hood Edge offset curve

- Use the proper bonnet side offset curve

Points

Offset curve

Bonnet top grid side offset curve

Fixes in LiteCar 1.13.2

Pedestrian Protection:

- Engine Hood Edge: Front area unit was wrong in ECE R-127 Rev. 0

Safety Radius:

- Unexpected error message was displayed for existing Floor line

User interface:

- Welcome page was blank after loading report in LiteCar and switching to LiteBox3D
- After recomputing, the tree state was not restored properly
- Error was reported at the end of loading the report if the output directory did not exist

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Thank you

If you have questions about
the new Lite3D release,
please contact us:

support@technia.com