

3.4.0

- BUG 492 `cee.ug.ModelSettings.setUseShaderPrograms()` now checks if the passed in value (true/false) is valid with regards to the current OpenGL context.
- Fixed crashes that might occur if shaders were disabled without support for fixed function, or if shaders were disabled and transparency (not SIMPLE) was used.
- Note that all transparency modes except SIMPLE requires use of shaders.
- BUG 490 Hidden lines parts with transparency did not render properly when `optimizePartRendering()` was enabled.
- BUG 489 Fixed bug with `cee::vis::OverlayImage::width()/height()` returning image size instead of overlay item size.
- BUG 488 Fixed an issue with previously invisible parts becoming visible and doing quick updates if the draw style or mesh style has been changes while it was invisible.
- BUG 471 Report: Fixed bug where VTFx file could not be embedded into the Office file (docx/pptx)
- BUG 284 Fixed size objects did not work as expected on the first redraw when using transparency modes other than SIMPLE.

3.3.0

- BUG 485 `cee::ug Particle Traces` : Fixed particle trace stopping or jumping across elements. If the particle stops, we push the particle until half of the current element size in the direction of the particle velocity to find another candidate.
- This becomes important when one element face has multiple neighbors. The velocity inertia will help the algorithm to find the best next element.
- BUG 484 `cee::ug::imp` Fixed white left space appearing in Displacement result name when loaded as a vector.
- BUG 483 `cee::ug::BulkCalculation` was missing from the Python API. `BulkCalculation` is now available.
- BUG 482 Fixed bug causing one of the end discs to be rotated 180 degrees when creating a cylinder with `cee::geo::DataGenerator::createCylinder(..)`. Only noticeable when creating a low-res (numSubDivisions) cylinder.
- BUG 479 When using the `View.renderToImage()` models with `setUse2dPixelProjection(true)` would not be rendered in the correct location.
- BUG 470 Export: Fixed invalid generation of VTFx file when exporting a model containg element sets using `DISPLAY_MODEL_ONLY`.
- BUG 467 Parts with draw style `cee::ug::PartSettings::HIDDEN_LINES_REMOVED` were not rendered correctly if the opacity of the part was not 1.0.
- BUG 466 Fixed issue with the color legend sometimes having wrong colors on the top levels if the levels are very unevenly distributed.
- BUG 465 Fixed an issue with Overlay Items not always being rendered in the same order.
- BUG 462 UG: Clipping was not always correct when using the `ModelSettings::optimizePartRendering()`.
- BUG 461 `OverlayItem::setVisible()` now works when item uses `ABSOLUTE_POSITION`.
- BUG 460 Fixed crash on specific old IFS models with parts without triangles shown as outline.
- BUG 382 When using the `View.renderToImage()` with another aspect ration than the current view, the image was stretched if the model was shown as transparent.

3.2.0

- BUG 457 Marc reader: Fixed bug when loading result with remeshing.
- BUG 456 Added legacy VTx properties for custom legends.
- BUG 455 Fixed rendering quality issue with `DepthPeeling` on Intel HD Graphics.
- BUG 454 Fixed issue with mesh lines and transparent parts where the mesh lines were stippled and flickering.
- This was present in all but simple transparency.
- BUG 452 Fixed error regarding normal shader and `u_specularIntensity` appearing in the log if a part was set to unlit (lighting off).

3.1.1

BUG 440 Fixed issues with rendering on Mesa based software rendering, e.g. when using Qt and Qt::AA_UseSoftwareOpenGL.

3.1.0

BUG 421 Fixed errors in casting to/from `cee::Image` and `Bitmap`. C# only.

BUG 406 Fixed C# casting from `System.Drawing.Bitmap` to `cee::Image` to include transparency

BUG 403 Fixed issue with some specific Fluent models being incorrectly reported as "no nodes or elements defined"

BUG 401 Fixed issue with cutting planes sometimes having holes if the model has polyhedrons with some specific topologies.

BUG 399 Fixed issue with some extra outline mesh edges rendered on isovolumes.

BUG 396 `OpenFoamReader`: If a surface cell has an undefined value it will now use the value of the volume cell sharing the same face

3.0.2

BUG 392 Fixed issue with results only on contour lines not producing any color legend. Also fixed issue with contour line results not being loaded from a `DataSourceReader`.

BUG 391 Fixed issues with contour lines on cutting planes and isosurfaces.

Rendering of contour lines on cutting planes with clipping was flickering and sometimes produced an assert. In some cases, the contour lines were not computed correctly.

3.0.1

BUG 389 Fixed issue with display model not being updated when removing the use of element sets.

BUG 387 Fixed issue with CUG export when not loading a model from a file (using `DataSourceMemory`)

3.0.0

BUG 385 Fixed regression in surface path query for non-interface based `DataSources`.

BUG 384 Removed lines from isovolumes. Lines produced by the min/max isosurface part of the isovolume are not needed and have been removed.

!Backlog

BUG 383