1.4.6

BUG 195   OverlayTextBox alignment did not work correctly when alignment was changed on existing text box

BUG 194   VTFx export using DISPLAY_MODEL_ONLY model exported wrong node positions when having scaled displacements.

BUG 187   VisualizationPartQuery::visibleNodes() and ::visibleElements() now uses size_t for indices.

BUG 184   Fixed crash when highlighting isovolumes

BUG 183   Color legends with logarithmic mapping and custom level values for the Color Mapper type FILLED_CONTOURS did not work as expected when properties were loaded from VTFx files.

BUG 181   ScalarSettings::autoRangeModel set to VISIBLE_ITEMS required two calls to updateVisualization() and crashed if an adaptive model was used. Both issues have been fixed.

1.4.5

BUG 178   Texture mapping in the geometry model was sometimes wrong (mixup of textures) after adding, removing and re-adding parts with texture effects.

BUG 175   Fixed several issue with logarithmic mapping in the UnstructGrid model. Now works both for all 3 color mappers and also for export/import to VTFx, as well as support for legacy VTFx files.

BUG 167   Halo highlighting of cutting planes produced a lot of highlighted interior edges when clipping was enabled.

1.4.4

BUG 159   Reference counting in C# did not work for factory methods (methods producing objects but not keeping an internal reference) and some other cases where references were returned from C3DC.

BUG 158   Changing node positions and then using the updateVisualization(cee::ug::UnstructGridModel::NODE_POSITIONS) did not update the bounding boxes of the UnstructGridModel.

BUG 153   Flat shading failed on hardware without GL_EXT_gpu_shader4 extension (e.g. on VM's using Mesa based rendering).

BUG 151   Mode shape animation setup failed if setup twice with the exact same parameters.

BUG 142   regionIntersect() and polygonIntersect() did not respect the part visibility in the UnstructGridModel.

BUG 128   ElementHighlighter only showed the initial step when using mode shape animations. The ElementsQuery class did not support mode shape animations.

Both have been resolved and we added ElementsQuery(const UnstructGridModel* model, size_t frameIndex, size_t geometryIndex, int partId) constructor to use when having mode shape animations.

1.4.3

BUG 150   Display model is updated when nodes visibility is changed after setting the model's grid

BUG 144   DataElementSetGenerator did not honor the part visibility when creating sets (did not consider PartSettings::setVisible() flag).

BUG 143   DataPoints parts in the geometry model did not respect the transformation matrix of the part and the model.

1.4.2

BUG 125   The color legend was hidden if a scalar result was set as fringes in the modelSpec but no parts had fringesVisible set to true, but it was still used for scalar filtering.

This behavior has been changed and the color legend is visible for any scalar result that is used for scalar filtering.

BUG 124   Scalar filtering (ScalarSettings::enableFringesElementFiltering()) did not work in combination with mode shape animations.

BUG 123   OverlayItems with absolute position had a 3 pixel offset to the specified position causing them to be slightly off the given position.

BUG 122	ImportCae: Got rid of a useless assert that was triggered when displaying results on the top layer of a mixed element model. The assert occurred because volume elements are not compatible with layers - for these, results are stored in the bottom layer and other layers are undefined.

1.4.1

BUG 120	ImportCae: Fixed problem with reading results from ODB file where system state is local deformed. (STATE_ROTANG)
BUG 118	Fixed problem with setting fonts as properties in C#
BUG 117	Fixed element highlighting issue in PyQt demo app when using rubberband picking
BUG 116	Enabled LogDestination to be inherited i C# to be able to create your own log destination.
BUG 109	Plot2D: Fixed bug with axis range /auto range not being set correctly.
BUG 107	Fixed wrong value returned by OverlayPlot::yValuesMaximum().
BUG 91	Fixed bug in picking. When zooming out, returned picking information was flawed in some situations. The bug was to consider that ray intersection points with lines of the model were on the hit lines, not the ray. Due to this, the determination of the picked items was producing unexpected results.

1.4.0

BUG 89	updateVisualization(NODE_POSITION) and mode shape animation setup with partial generation crashed when using setUseShaderComputedFlatNormals() in UnstructGridModel.
BUG 87	cee::ug::setOptimizePartRendering(true) and animations with DataResultTransformation results did not update the parts with eyeLift != 0.
BUG 86	DataSourceMemory::updateDirectoryFromStates() did not create displacements info for the missing displacement results.

1.3.1

BUG 84	MarkupModel::rayIntersect could cause an assert if an item was added and no rendering of the items was done before doing a rayIntersect().
BUG 83	GeometryModel::rayIntersect() did not handle clipping planes if not created from Camera. If a Ray was manually created and the min and max distances in the ray not properly set, the rayIntersect() method in GeometryModel would not honor clipping planes. This has now been fixed. Also added two new methods for convenience: UnstructGridModel::rayIntersect(int x, int y, const vis::View& view, HitItem* hitItem) and GeometryModel::rayIntersect(int x, int y, const vis::View& view, HitItem* hitItem). Both methods honor clipping planes.
BUG 82	Transparent parts (both with opacity and transparent textures) did not respect the lighting setting when using DepthPeeling or WeightedAverage transparency modes, and was thus always rendered with lighting on.
BUG 81	Image situations inserted into VTFx tagged plugins has the wrong aspect ratio

1.3.0

BUG 76	Warning (log) and not an assert if the geometry index in the VTFx file properties are illegal. Added DataSource::geometryCountPerState()

1.2.1

BUG 75	Fixed Qt "pro" files for use with Qt5. Added missing opengl libraries to link line.
BUG 74	Invisible pre-computed isosurfaces, isovolumes and particle traces exported to VTFx and thus visible in the 3D Viewer.
BUG 73	Fixed bug in DataSourceReader::reload(), ensuring that tensor-derived results are present when leaving the method
BUG 72	Invisible pre-computed cutting planes exported to VTFx and thus visible in the 3D Viewer.
BUG 70	Fixed problem with creating a custom DataReader in .NET
BUG 69	Assert when having iso surfaces (and not iso volumes) and a custom cee::ug::DataReader

1.2.0

BUG	68	UnstructGridModel::rayIntersect() returned an intersection point normal only if the picked item was of type cee::ug::HitItem::PART. No information was provide for cee::ug::HitItem::CUTTING_PLANE, cee::ug::HitItem::ISO_SURFACE or cee::ug::HitItem::ISO_VOLUME
		The method now ensures that a normal is provided for types of items. The information is conveyed to UnstructGridModel::rayIntersect() through an extension of VTSelectItem, which now includes a new intersectionPointNormal public member. For parts, this normal is set in DoPickCvfParts, in the calls to VTPart::DoPickSourceTriangles() (calling cvf::Ray::triangleIntersect()) or VTPart::PickDrawableGeo() (calling cvf::DrawableGeo::rayIntersect). Note that the normal is set to zero when picking lines or points in DoPickSourceLines() and DoPickSourcePoints()). For cutting planes, isosurface or isovolumes the normal is set when parsing for picking through the VTFeatureExtractionResults of the object, in VTFeatureExtractionResult::Pick() (also calling cvf::DrawableGeo::rayIntersect).. All methods that collect the intersection point normal ultimately rely on cvf::Ray::triangleIntersect().
BUG	67	Fixed bug in sampleScalar() and sampleVector() methods on CuttingPlane, Isosurface and Isovolume which reported wrong results.
BUG	66	Fixed uninvertible projection matrix issue by avoiding field of view angle = 180.
BUG	64	Assert when computing min/max of a scalar which is not allocated on all parts
BUG	58	Scalar results with a very narrow range were not yielding the expected number of fringes.
BUG	57	MarkupPartText3d items did not render properly (not respecting z buffer) when some parts were transparent and non-simple transparency was used. Also general problems with transparent parts in the Markup Model.
BUG	55	Fixed appending compatible cases to Vtfx files
BUG	54	Fixed crash observed when querying values from a data source in DataSourceQuery. The method now handles points on which result values are undefined
BUG	53	Fixed bad assert (in debug) in setAmbientIntensity/setSpecularIntensity in cee::geo::EffectColor/EffectTexture/EffectFrontAndBackColor.
BUG	52	Qt demo app crashed when selected scalar is cleared after one has been selected
BUG	49	cee::ug::ModelSpec::clear() did not clear stateIds, vectorIds and setIds
BUG	45	Removed obsolete error message shown in some cases when updating the Geometry Module model
BUG	44	Fixed bug in the Geometry Module causing a removed Part not to be removed when adding a new Part before updating the model, in some cases.

1.1.1

BUG	48	Derived results missing after DataSourceReader::reload()
BUG	46	Removed unnecessary assert on number of polygons containing a path point <= 1 . The case of multiple polygons being found on a path point is handled.
BUG	41	Bounding box query before rendering a MarkupModel (i.e creating the underlying display model) did not work.
BUG	40	SurfacePathQuery fixed for queries for scalar values on DataBases with no DataInterface. Queries on vectors or tensors are unsupported in this version
BUG	39	UnstructGridModel::clearVisualization() asserted when called on a model without any frames.
BUG	37	Changing visual attributes (e.g. surface color) on cutting planes, isosurfaces and isovolumes and then calling e.g. updateVisualization(CUTTING_PLANE) did not update the cut/iso/isovol.
BUG	36	The Mfc tutorial runner launched the texture tutorial when selecting the "custom reader" menu entry.
BUG	31	UnstructGridModel::updateVisualization() with NODE_POSITIONS flag did not work with optimizePartRendering was set to true.

1.1.0

BUG	34	Transparent triangle parts in the Markup Model were opaque when rendering with shaders (hardware based OpenGL).

BUG	32	In some setups the topmost and the second topmost label on the color legend in the UnstructGridModel would overlap. This happend when some of the tick mark labels were omitted due to restricted height of the color legend.
BUG	30	Added workaround for bug in Intel HD Graphics driver related to FrameBufferObjects that would give INVALID_OPERATION and distort the view when having multiple viewers and e.g. using depth peeing transparency.

1.0.3

BUG	29	Transparency mode "DepthPeelingFront" did not work as expected on some Amd FirePro cards.
BUG	28	Dual Depth Peeling and Transparent Weighted Average failed on Intel HD 4400 with shader compile error.
BUG	27	Cutting plane clipping is not updated when using UnstructGridModel::updateVisualization(CUTTING_PLANE)

1.0.2

BUG	22	Automatic resizing of color legends did not work as expected when one UnstructGridModel was shown in multiple views with different height.
BUG	21	Overriding effects in the Geometry Model sometimes cased all parts with the same original effect to be affected, not just the part(s) that had extra (override) effects.
BUG	20	Depth Peeling not working on some legacy graphics cards with OpenGL version 3.0