



StressCheck COM API 4.0 Updates (v11.0 Release)

New Functions

The following new functions were introduced with COM API 4.0:

Application.**ModelInformationBinary**
byte[] fileContents

Application.**GraphicsDriver**

Application.**LicenseErrorDetails**

Document.LicenseManager.**VerifyConnection**

Document.**Upgrade**

(Note: this launches the same interactive File Upgrade Utility dialog box that StressCheck GUI does.)

Model.Automeshes.**AddAutoMeshSimCrackFront**

str setname
bool is_active (default true)
bool ratio_manual (default false)
bool layers_manual (default false)
bool inner_thickness_manual (default false)
bool total_thickness_manual (default false)
string ratio_str
string layers_str
string inner_thickness_str
string total_thickness_str

Model.Automeshes.**ConvertToString**

AutomeshSide in

Model.Boundaries.**AtIndex**

int index

Model.Display.**SetLoadArrowScale**

ScaleType type
double manualScaleFactor

Updated Functions

The following functions were updated with COM API 4.0:

Model.Automeshes.*

several default values updated

Model.Boundaries.AddBoundaryConstraint

new argument: `const_force_option` (default `constForceLengthArea`)

New Objects

The following new objects were introduced with COM API 4.0:

Application.ModelInformationBinary

string Title

string Description

string[] Keywords

byte[] Image

byte[] data

Updated Objects

The following objects were updated with COM API 4.0:

Constraint

new: `BoundaryConstraintForceOption`

new: `bool isSpring`

Extraction

new: `PlasticStrainFunctions[] Points_PlasticStrainFunction`

new: `PlasticStrainFunctions[] MinMax_PlasticStrainFunction`

LinearSolution

new: `int ContactIterations`

new: `double ContactPressureTolerance`

new: `ContactRayTolerance`

Model.Display

(`ObjectResolution` range changed from 0-100 to 5-150 in 11.0 Update 1)

New Enums

The following new enums were introduced with COM API 4.0:

AutomeshSide

- meshSideBoth
- meshSidePositiveNormal
- meshSideNegativeNormal

BoundaryConstraintForceOption

- constForceLengthArea
- constForceLength

ScaleType

- stManual
- stAutomatic

Updated Enums

The following enums were updated with COM API 4.0:

Automesher

- new types: amtMeshSimExtrudeAdv, amtMeshSimCrackFront

AutomeshProperty

- deprecated:** apIsopar
- new: apSize, apSuppressSmallFeatures, apSuppressSlivers

ConvertMappingType

- deprecated:** cemIsoparametric
- new: cemQuadratic

Direction

- new: dtContact

ElasticityFunctions

- removed:** efK1Angle
- new: efK2, efInitialGap, efFinalGap, efContactPressure

Function

- removed:** fK1Angle
- new: fK2, fInitialGap, fFinalGap, fContactPressure