



# Femtet Ver.2023.0 What's New





Functionality	What's New
Solver	<ul> <li>Stress/Thermal: Bond as a Boundary Condition</li> <li>Stress: Higher Analysis Accuracy for 1st-order Hexahedral Elements</li> <li>Fluid &amp; Fluid-Thermal: Free Surface Analysis (VOF Method)</li> <li>Fluid &amp; Fluid-Thermal: Free Surface Analysis (VOF Method)</li> <li>Fluid &amp; Fluid-Thermal: Moving Wall as a Boundary Condition</li> <li>Fluid &amp; Fluid-Thermal: Diffusion Analysis with Weight of Diffusing Materials Taken into Account</li> <li>Fluid &amp; Fluid-Thermal: Enhanced Boundary Condition for Diffusion Analysis</li> <li>Fluid &amp; Fluid-Thermal: Enhanced Result Table for Diffusion Analysis</li> <li>Fluid &amp; Fluid-Thermal: Improved Setting of Fluid Boundary Condition</li> <li>Coupled: Two-way Coupled Analysis in Electric-Fluid-Thermal Analysis</li> <li>Coupled: Calculation of Surface Loss Density in Electromagnetic-Thermal Analysis</li> <li>Coupled: Fluid-Thermal-Stress Coupled Analysis</li> <li>Electromagnetic: New Examples</li> <li>Acoustic: New Examples</li> </ul>



Functionality	What's New( released in Femtet2022.1 Japanese Version)
Solver	<ul> <li><u>Solver in General: Improvement in Results Import</u></li> <li><u>Stress: Higher Analysis Accuracy for 1st-order Hexahedral Elements</u></li> <li><u>Stress: Imaginary Part Entry on Acceleration Tab</u></li> <li><u>Fluid&amp;Fluid-Thermal: Type and Unit of Diffusion Quantity Setting</u></li> <li><u>Fluid&amp;Fluid-Thermal: Output of Quasi-steady State</u></li> </ul>



Functionality	What's New
Mesher	<ul> <li><u>Mesher: Improved Robustness</u></li> <li><u>Mesher: Sweep and Free Coexisting Meshes</u></li> <li><u>Mesher: Adaptive Mesh on Curved Face</u></li> <li><u>Mesher: Adaptive Meshing Improved in Quality</u></li> <li><u>Mesher: Improved Creation of Layer Meshes for Fluid Analysis</u></li> <li><u>Mesher: Layer Mesh Check for Fluid Analysis</u></li> </ul>
Result Display	<u>Result Display: Improved Cross-Section Display</u>
Miscellaneous	<u>Miscellaneous: Autosave of Project Data File</u>
UI	<u>Customization of Mouse Settings</u>
Modeler	Body Separation in Importing



### Allows you to connect the separate meshes discontinuously.

Mechanical	Symmetry/Continuity	
Symmetry/Conti	Symmetry	<b>E</b> 1 4 <b>G</b> 1 1 1
Notes	Reflective	Example of Stress Analysis
	Periodic	
	Continuity	
	Contactor Surface     Contactee Surface	Separate meshes are connected discontinuously
	1	

- Discontinuously connecting separate meshes can improve meshing success rate and quality.
- Bond boundary condition is applicable in the stress and thermal analyses.
- Other solvers are going to support the bond boundary condition.

Improves analysis accuracy for 1<sup>st</sup>-order hexahedral elements in the stress analysis.

- We implemented the enhanced assumed strain method to improve the analysis accuracy for 1<sup>st</sup>-order elements. We had not supported hyperelastic and elasto-plastic materials yet.
- In the version 2023.0, hyperelastic and elasto-plastic materials have been applicable for the enhanced assumed strain method. The method also has improved the possibility of convergence for large displacement.



## Solver: Fluid & Fluid-Thermal Free Surface Analysis (VOF Method)



### Available for fluid & fluid-thermal solvers

Fluid Analysis		Multiphase Flow Setting	>
Analysis Type O Steady-state Analysis © Transient Analysis Laminar Flow/Turbulent Flow O Laminar Flow	Initial Value/Restart Use the last analysis results Use another an lysis result (Results Import Detailed setting for restart Layer Mesh Setting for Wall Surface	Execute free surface analysis (VOF method)  Free Surface Analysis (VOF Method) Setting  Phase Setting  Material Property Name  Add  Phase No. Fluid Material Name  Phase 1 000_Air  Phase 2 100_Water  Modify	<u>.</u>
Options	General Settings	Take into account weight	
Diffusion Analysis Setting Multiphase Flow Setting	Detailed Settings	OK Cancel <u>H</u> elp	

To take into account the buoyancy , the temperature distribution must be calculated at the same time. Select Thermal Analysis as well when selecting the solver.

- Multiphase flow including multiple fluids, gas or liquid, can be analyzed.
- The movement of boundaries between gas and liquid caused by gravity, surface tension, and wetting (contact angle) can be calculated.
- Only available in the transient analysis.

## Solver: Fluid & Fluid-Thermal Free Surface Analysis (VOF Method)



### Available for fluid & fluid-thermal solvers

Example 14: Dam Break Analysis

Example 15: Droplet Formation Analysis

Example 16: Capillary Action Analysis



Example 17: Solder Wicking Analysis



#### Note:

- Calculating the movement of a boundary requires a small timestep.
- Meshes as small and as regular as possible are required to reproduce the boundary shape precisely. Sweep meshes are recommended.

## Solver: Fluid & Fluid-Thermal Moving Wall as a Boundary Condition



## Available for fluid & fluid-thermal solvers

Edit Body Attribute [Top]

Thickness/Width	Solid	Example 18: Flow Around Spinning Top
Fluid Solid Direction Analysis Domain	Fluid Setting on Solid Surface Solid Wall Type Layer Mesh Setting	Top
Notes	Multiphase Flow Setting   Moving Wall Setting  Multiphase Flow Setting  Making   Multiphase Flow Setting  Making   Multiphase Flow Setting  Making   Multiphase Flow Setting  Making   Multiphase Flow Setting  Multiphase Fl	The state of the

- Translation velocity and rotational angular velocity can be specified to the wall face.
- The velocity component in the direction parallel to the wall face is taken into account and the velocity component in the normal direction is ignored.
- The rotational condition is applicable for a rotational symmetric body such as a top.
- The moving wall can be selected on the [Edit Boundary Condition] or [Edit Body Attribute] dialog box.

multata Copyright © Murata Software Co., Ltd. All rights reserved

### Solver: Fluid & Fluid-Thermal Diffusion Analysis with Weight of Diffusing Materials Taken into Account

## Allows the analysis with weight of diffusing materials taken into account.

Diffusion Analysis Setting			Example 20: Room Ventilation (Air of Humidity
✓Execute diffusion analysis Diffusion Analysis Setting	Diffusing Material Setting Material D8 Setting 000_Ar v Input	Selection from material DB	× Higher Humidity
Analysis Type Steady-state Analysis Air Age Analysis Transient Analysis	Diffusing Material Property Material Property Name 500_Water_Vapor Gas/Juguid Setting @Gas Quine de	Base Material Property Material Property Name Set to the Body 000_Arr CashLigard Setting © Casa	Window: Natural Inflow Humidity of 60%
Type and Unit of Diffusion Quantity	Molar Mass (Molecular Weight)           18.01528         g/mol           Density         0.749427637093         kg/m3	Molar Mass (Molecular Weight) 28.9613 g.lmol Density 1.184 kg/m3 ~	Door: Natural Inflow Humidity of 30% Powered by Fentet https://www.arataseftware.com/ Weight Taken into Account
Diffusing Material Setting	Default Value of Concentration Molar Concentration 0.0 [mol/m3]	OK Cancel Help	V. 787 0.723 0.723 0.603 0.613 0.613 0.613 0.613 0.613 0.613 0.613 0.613 0.613 0.613 0.637 0.637 0.637 0.637 0.638 0.638 0.648 0.648 0.648 0.648 0.648 0.659 0.6488 0.6488 0.648 0.6488 0.6488 0.6488 0.6488 0.6488 0

- Setting a diffusing material allows the analysis with weight of diffusing materials taken into account.
- You can calculate water vapor diffusion in the air as follows.

As water vapor is lighter than dry air, buoyancy is generated in a humid area.

Then water vapor tends to stay around the top due to buoyancy.

Humidity of 60% Door: Natural Inflow Humidity of 30% Powered by Femtet

Weight not Taken into Account

🗈 Murata Software

## Solver: Fluid & Fluid-Thermal Enhanced Boundary Condition for Diffusion Analysis

## Allows you to set the movement of diffusing materials from a wall face.

#### Edit Boundary Condition [Boundary\_Condition\_001]

Finite	Fluid	Example 19: Convection Caused by
Fluid		Generation of Impurity Substance
Symmetry/Conti	Boundary Condition Type	I J
Notes	Solid Wall     O Inlet     O In	
	○ Slip Wall ○ Outlet ○ N	
	O Inlet/Outlet	
	Solid Wall Type	
	Static Wall	
New	OMoving Wall Osp	
	Diffusion Analysis	Source (Specified by Flow Flux)
	Diffusion Analysis Setting	×
	Type of Diffusion Boundary Conditio O Zero Diffusion Flux Molar Concentration OFlux O Transfer Coefficient	Molar Concentration Use Ambient Value 0.0 [mol/m3] • Weight Function Weight Function Mamming 1 see
		OK Cancel Help

You can set a diffusion source on a wall face.

Concentration Distribution

 $\mathbf{E}_{\mathrm{max}} = 11$  10.  $\mathbf{C}_{\mathrm{max}} = 11$ 

🗈) Murata Software

## Solver: Fluid & Fluid-Thermal Enhanced Result Table for Diffusion Analysis



## Allows outputs of the inflow rate, outflow rate, and an average, of diffusing materials on a boundary.



Mixed Flow Analysis of Diffusing Materials

FEM Info Convergence status Molar Concentration [mol/m3] Molar Concentration Flow Rate [mol/s]

	Value
Inlet	10.000
Inlet_2	30.000
Outlet	13.100
Outer_Boundary_Con	11.334

Concentration of Diffusing Materials at Outlet

FEM Info Convergence status Molar Concentration [mol/m3] Molar Concentration Flow Rate [mol/s]

	Value
Inlet	3.055e-3
Inlet_2	1.681e-3
Outlet	-4.736e-3
Outer_Boundary_Con	-7.247e-7

Flow Rate of Diffusing Materials at Inlet

## Solver: Fluid & Fluid-Thermal Improved Setting of Fluid Boundary Condition



# Allows easy fluid boundary condition setting to the boundary between solid and fluid.

#### Before



- 1. Apply Boolean operation (Subtract).
  - ➡ Create a fluid domain
- 2. Set a boundary condition on the face of the fluid.
  - \*Only for wall boundaries, not available for inflow/outflow boundaries.

Ver.2023.0



- 1. Set a boundary condition on the face of the solid.
  - (Without Boolean operation) \*Also available for inflow/outflow boundaries

Example 19: Convection Caused by Generation of Impurity Substance



## **Application Examples**

- An inlet located on a solid surface. (Air conditioner, Humidifier, etc.)
- A diffusion source located on a solid surface.

## Solver: Coupled Two-way Coupled Analysis in Electric-Fluid-Thermal Analysis Murata Software

Allows two-way coupling between Electric Analysis and Fluid-Thermal Analysis

- Loss density is calculated in the electric analysis. Then using the loss density as a heat density, fluid-thermal analysis will be performed. This procedure allows the electric-fluid-thermal analysis.
- Allows the electric-fluid-thermal analysis with temperature dependency of conductivity taken into account.



**Temperature Distribution** 



Temperature Distribution of Air around Heating Substrate

Solver: Coupled Two-way Coupled Analysis in Electromagnetic-Thermal Analysis

Allows two-way coupling between Electromagnetic-Harmonic Analysis and Thermal Analysis

Murata Software

- Allows the electromagnetic-harmonic analysis and the thermal analysis with temperature dependency of permittivity taken into account.
- Applicable for the thermal steady-state and thermal transient analyses.



Solver: Coupled Calculation of Surface Loss Density in Electromagnetic-Thermal Analysis

### Allows you to calculate surface loss density and display the result.

- If lumped-constant or surface impedance is set to boundary conditions, you can calculate the surface loss density.
- The result display permits you to check the distribution of surface loss density visually.





### Allows the fluid-thermal-stress coupled analysis.

- Perform the stress analysis using temperature distribution obtained from the fluid-thermal analysis.
- The coupling is one-way from thermal to stress. It is not possible to analyze how the deformation affects the flow and temperature fields.

Fluid-Thermal-Stress Coupled Analysis Example 1: Substrate Warping Caused by IC Heat Generation





#### Allows the fluid-stress coupled analysis.

- Perform the stress analysis using the pressure/shear stress distribution on a solid surface obtained from the fluid analysis.
- The coupling is one-way from flow to stress. It is not possible to analyze how the deformation affects the flow field.

(The example allows you to analyze the movement of the disc just after the moment when the disc has been pulled up.)

Fluid-Stress Coupled Analysis Example 1: Nozzle Suction Analysis

muRata



#### Movement Just After Being Pulled Up



#### Electromagnetic Analysis Examples are added.

Example 45: Radar Cross Section (RCS) of Conductive Sphere



Femtet can not calculate RCS directly. Just adding the values from Femtet in Excel will give you RCS [dBsw].

#### **Example 44: Thin Electrode Elements**



Electromagnetic waves passing through a thin electrode are analyzed.

全体寸法 : 2 mm



#### Acoustic Analysis Examples are added.

#### Example 12: Damping

This example demonstrates how to apply a known attenuation rate [db/m] to a simulation.



#### Example 13: Sound-absorbing Material

- This example demonstrates how to perform the acoustic analysis using a sound-absorbing material.
- Enter the frequency response of complex sound speed and complex density in the table.
- Obtain the frequency response of the absorption ratio as shown on the right.





## Allows you to use the meshes of the imported results for analysis

Solver	Results Import		
Stress Analysis	Import Type	Specify Results	
Resonant Analy	() None	Specify Analysis Model	
Harmonic Analy	O Deformed Shape	Analysis Model 🗸	
ransient Analysis	Initial Stress (Deformed shape included)	⊖ Specify pdt File	
Step/Thermal Lo	OPressure	Reference	
Acceleration	Initial Temperature		
Angular Velocity	Reached Temperature	Specify Mode	
Constant Tempe	Initial Values for Fluid Analysis	Automatic (Use the last result)	
High-Level Setti	Heat Density (Loss Density)	○ Manual     0     ↓       Select from the lst     No selection     ∨	
Notes	Restart Information	O Match Time	
Ma	Mesh Import		
	☑Use meshes of the imported results		
· · ·			

- In some functions of the results import, if the meshes of the analysis model and imported result are different, the results import may fail.
- This option can solve the problem above.
- Meshes of the imported results are applicable for analysis if [None] is selected for the import type. The effect is the same as [Run Solver with Existing Meshes].

Solver: Stress Higher Analysis Accuracy for 1<sup>st</sup>-order Hexahedral Elements

Improves analysis accuracy for hexahedral and rectangular elements in the stress analysis.

- If meshes are coarse, Femtet ver. 2022.0 may not achieve the intended analysis accuracy.
- The newly introduced formulation method, Enhanced Strain Assumption Method, has greatly improved the analysis accuracy for 1<sup>st</sup>-order elements of 3D hexahedrons and 2D rectangles.



Analysis Result of Displacement

\*Hyperelastic, elasto-plastic, and shell elements are not applicable.

\*Not supported by the piezoelectric analysis.

muRata Copyright © Murata Software Co., Ltd. All rights reserved.





#### Available in the stress-harmonic analysis.

Α	cceleration	
	Acceleration	Т
Analysis Condition	Real Part	-
Acceleration Tab	X 0.0	C
	Y 0.0 m/s2 ~	a
	Z 0.0	
	Imaginary Part	12
	X 0.0	ew
	Y 0.0 m/s2 ~	
	Z 0.0	
	State in purpliced and silvertation land in the descenario	

\*It is applied as vibration load in the harmonic analysis.

By entering the values above, a vibration revolving about a center can be generated, as illustrated on the right.

The stress solver has been able to calculate the imaginary part as well as the piezoelectric solver does.



## Solver: Fluid & Fluid-Thermal Type and Unit of Diffusion Quantity Setting



## Allows you to set the type and unit of diffusion quantity.

Execute diffusion analysis		There Types for Worar Concentration
Diffusion Analysis Setting		Diffusion Analysis 0: 0.000000e+00[s] Flow Velocity 1m/s
Analysis Type	Diffusion Coefficient	Molar Concentration [r Value 2mol/m2
O Steady-state Analysis	-5	Molar Concentration [mol/m3]
Air Age Analysis	1.0 X10 [m2/s]	Turbulent Diffusion Coefficient [m2/s]
Transient Analysis		Molar Concentration Gradient [mol/m4]
Type and Unit of Diffusion Quantity	Ambient Value (Default Value)	Molar Concentration Flux [mol/m2/s]
ew		
Molar Concentration [mol/m3] V		
Molar Concentration [mol/m3] Mass Concentration [kg/m3]	Tottal Value	-0.0 要交援 : 4.0提
Mole Fraction Mole Fraction [%]		
Mass Fraction Mass Fraction [%]		シルン 1200000-000[5] マイールド: 10.00000-000[5] フィールド: 10.00000-000[5]
Low Concentration [ppm]	0.0 [mol/m3] Distribution Data	Flow Velocity 2m/s
		Molar Concentration 1mol/m3

## Field Types for Molar Concentration

- By setting a type and unit of diffusion quantity in the dialog box above, a concentration value in the diffusion analysis becomes easy to set, and a result display becomes easy to view.
- The field value of a field type is indicated accompanied by a unit.



Nonconvergence

# Allows you to output quasi-steady state if periodically fluctuating vibration prevents analysis residuals from reducing and causes non-convergence.

Detailed Settings of Fluid Analysis		Tonconvergence		
Advection Scheme	Relaxation Coefficient	Non-Linear Residuals		
Velocity 2nd-order Upwind Differen $ \lor $	Steady-state Transient Velocity 0.7 0.7	0.1 Duasi-state Calculation		
Temperature 2nd-order Upwind Differen	Pressure 0.3 0.7	0.01		
Convergence Judgment Setting Steady-state Transient	К 0.7 0.8	0.001 Flow Velocity Residuals Continuous Residuals		
Maximum Number of Iterations per Step 300 🔹 20 🔹	epsilon 0.7 0.8	0.0001 - Convergence Judgement		
Convergence X10 Judgment (Heat)	Temperature 0.9 0.99	1E-05		
Convergence Judgment (Fluid) 1.0 X10	Diffusion 0.9 0.99	0 50 100 150 200 250 300 350 400		
Convergence Judgment by Monitoring Value	Reset to Default Setting			
Temperature Tolerance 0.5 [deg]	Result Output Setting			
Automatic Monitoring Setting Intermediate Results in Iteration				
For the transient analysis, use the same pressure calculation method as the steady-state analysis	Output only when the calculation     did not converge			
Calculate quasi-steady state in the case of non-convergence	Output at all times			
	ОК	Ouasi-state of Karman Vortex		

- If not converging, switch the analysis type to the transient analysis with finite timesteps and calculate the quasi-steady state.
- An instantaneous state of the vibration is output.
- After the calculation with no convergence, restart allows you to start calculating the quasi-steady state.



Improves meshing success rate by the updated algorithm

Error occurrence rate has decreased by 80% and meshing success rate has increased.



Extract the models that cause meshing errors from big data of CAD models or ABC Dataset. \*1

\*1 ABC Dataset: https://deep-geometry.github.io/abc-dataset/

The algorithm that divides curved faces and restores edges and faces has been improved to increase the meshing success rate.

## Mesher Sweep and Free Coexisting Meshes



## Allows sweep and free coexisting meshes

#### New Meshing Setup Dialog



Air is divided by tetrahedral free mesh. Connected with sweep meshes **by bond boundary**.



Air is divided by hexahedral free mesh. Connected with sweep meshes **continuously**.



Coil and core are divided by sweep mesh.





#### Allows you to create adaptive meshes on a curved face.

- We have tried adaptive meshes on the polyhedron, the plate, that was used for the initial meshing. We noticed due to this, the errors in shape to the curved face have been disadvantageously larger.
- Femtet ver.2023.0 can create adaptive meshes on a curved face, decreasing in errors.
- The graph below indicates as the number of iterations of applying the adaptive mesh method increases, the inductance increases and approaches the real value.







Created on the Polyhedron Cre

Created on the Curved Face





## Mesher Adaptive Meshing Improved in Quality



## Allows the mesh elements to change gradually instead of becoming locally concentrated.

- We tried the adaptive mesh method to notice as follows. It arranges much smaller elements in the area where the electric field and the stresses concentrate or drastically change. This may cause the quality of meshes to degrade and the convergence of calculation to be delayed.
- The adaptive mesh method of Ver.2023.0 has achieved a good quality of meshes by changing the mesh elements gradually from properly small elements.
- The diagram on the right shows the meshes of a bar magnet after the adaptive mesh method has been applied ten times. The meshes concentrated around Edge exhibit gradual variation in size.



## Mesher Improved Creation of Layer Meshes for Fluid Analysis (D) Murata Software

## Improves the layer mesh creation.

- Meshing errors during mesh generation process have been greatly reduced.
- The layer meshes can have proper thickness regardless of the models.





### Allows you to check the state of layer mesh generation.



- You can check the information on the meshes on the wall surface by the field values.
- If you cannot get your desired convergence or accuracy, the information will give you some hints for a better model.



Distance Between Facing Surfaces

Layering-suspended Area

#### **Correction Coefficient of Height**

- You can check the area where the height has been corrected lower during the layer mesh process.
- The area where the correction coefficient is extremely small may have problems in the model.

#### **Distance between facing surfaces**

- You can check the distance to the facing wall.
- If the distance is extremely small, the model may include an unintended gap.

#### Layering-suspended area

- You can display the non-layered area.
- The non-layered area may hinder the convergence.



## Allows improved cross-section display for result display.

 Faster generation process of the cross-section Parallel processing Reconstructed cash data structure

• Improved user interface for intuitive operation

Time of processing cross section for large-scale model

Previous	Improved
6 [s]	2 [s]

**Previous UI** 

Improved UI









## Allows automatic regular saving of the restoration Femtet project file.

- The restoration file for Femtet project data has been saved automatically and regularly. In case of emergency for Femtet applications, that file allows you to restore the normal state.
- By default, every ten minutes, the data is saved.
- In General Settings, autosave can be switched on/off and its interval time can be changed. General Settings

Destant the Astronaut Desired	GUI Setting Mouse Color Transparency Database Par	rallel Computing Switch Object Optional Licenses Reset
Restore the Autosaved Project X	Common Settings	Modeling Setting
Autosaved files are found. Select the target file and restore it.	Version Of OpenGL OpenGL 1.0 © OpenGL 3.2	Show individual colors of face/edge topologies (The graphics performance will be
[] (Select All)           [] test_modelA.Analysis Model (2023/11/15 10:47)           [] test_modelB.Analysis Model (2023/11/15 10:48)           [] test_modelC.Analysis Model (2023/11/15 10:49)	If drawing is unstable, switch to OpenGL 1.0. Restart Femtet to apply this setting.	Disable Paint and Shade during Viewpoint Operation (The graphics performance will be improved) Check the minute dimensions automatically © to to (Set up Grids) on the ribbon menu to set the grid interval of input angle Direction accurace of rec.
	Show Teine: Unity of the project  Open all modeling windows when opening the project  Copend.3.2)  Save Automatic Recovery Data At the Interval Below.  D  Every Minute.  Coll Every Minute.  Coll Every Minute.	Drawing accuracy of arc 100 %     Low High     Results Display Setting     Display the field automatically after the simulation completer     Save the deformed mesh result
Disable Autosave.	Scale Factor of Boundary 1.0 Condition Vectors 1.0 The Number of Steps for Fit and Zoom in to Area 10	when saving the calculation result     High-speed Mode (switch it off if instable)     Get [Limit the maximum drawable number of elements]     for vectors a default.     Output Nastran meshes only.
	·	OK Cancel Apply

Help

🛑 Murata Software

Customizes the operations of rotate viewpoint, scaling, and move by mouse.

Viewpoint operations by mouse can be tailored according to your preference.

Example: Change the default setting, Femtet, to Type B.



[Application Menu]>[General Settings], and select the [Mouse] tab

## Modeler Body Separation in Importing



## Allows you to separate physically off-contact objects into single bodies when .x\_t files are imported.

				Separated	
File <u>n</u> ame: Files of type:	Parasolid (*x_t;*x_b)	~	<u>O</u> pen Cancel	Body Tree Filter All bodies  Create	
Import Setup		Help Processing After Import Find Minute Entities Yield To Speed		Iayer Iayer Bodyol / PartA / Matu Bodyol / PartA / Matu	
		Healing Property Na Vield To Names Vield To	Setting ame Handover Assembly Component	Body Tree	
		- Names		Filter     All bodies     Create       Image: State of the state	

When imported, even physically off-contact bodies might be imported as one body. By selecting the [Import Setup], the bodies will be automatically separated.



## For more information, contact us at

## https://www.muratasoftware.com/en/support/inquiry/