



Setting the resources path

Loading resources path

Resources Loaded

Setting the XML file path:

Initializing Study

Loading study properties...

Set study definition...

Getting study element data...

Getting study name...

Setting study type...

Setting mesh ID...

Setting product full version (Formatted: Year/Date Code)...

Preparing to separate product version date code...

Setting product version year...

Extracting document name...

Setting document name: SimScaleElectromagnetics

Extracting mesh file name

Setting mesh file name: mesh

Initializing log file

Initializing dev file...

Dev file initialized

Log file initialized

Initializing temp file

Temp file initialized

Started on : Thu Jan 9 10:20:53 2025

Initializing study properties

Non Linear Residual Error: 1e-06

1 Solid(s) found in the current study

EMW_ERROR_25: No solid body found or no material applied

Type: Error!

Cure: Check the input file or model to ensure that it is properly formatted and that all

necessary data is included. Make sure that the model includes at least one solid geometry. Verify the material assignment to ensure that it is accurate and complete. Ensure that all elements are correctly assigned to the appropriate material properties.

Ended on : Thu Jan 9 10:20:53 2025

EMW_WARNING_60017: Resources estimation is not done for this solving session. Consider using the argument -RunMode with value Estimation, before doing full run to check if resources are available.

Type: Warning!

Start fill elements an node arrays from json mesh file

Getting Points (Nodes) coordinates from the mesh

Start reading global surface mesh faces

Filling the elements array

Start reading global volume mesh

End reading global volume mesh

number of elements: 355139

number of nodes: 121257

Compute security key done

Preparing mesh database

Preparing database... (0 / 14) ...

Preparing database... (1 / 14) ...

Preparing database... (2 / 14) ...

Creating tets

Vertices created

Number of vertices : 121257

Number of edges : 597633

Number of triangels : 831516

Number of tets : 355139

Preparing database... (3 / 14) ...

Preparing database... (4 / 14) ...

Preparing database... (5 / 14) ...

Preparing database... (6 / 14) ...

Euler characteristic of the complex is : 1

Is the complex connected : 1

Preparing database... (7 / 14) ...

Preparing database... (8 / 14) ...

Preparing database... (9 / 14) ...

Preparing database... (10 / 14) ...

Preparing database... (11 / 14) ...

Preparing database... (12 / 14) ...

Number of cohomology generators = 0

Preparing database... (13 / 14) ...

Preparing database... (14 / 14) ...

Start filling elements boundary conditions

End filling elements boundary conditions

```

Finish preparing mesh dataBase
EstimatedRunTime:135.497s
Progress: 1%
Estimated Time: 0:2:16
Remaining Time: 0:2:16
Available Memory(GB): 28.22
Available Memory 0 Mb
-----< CTransientMagneticStudy::Run 1>-----
-----< CTransientMagneticStudy::Run 2>-----
-----< CTransientMagneticStudy::Run 3>-----
Checking component and materials status
Checking Components and mesh availability
Checking Load/Restraint mesh
EMW_INFO_30009: Number of mesh faces found in the Boundary Condition Tangential Flux
- 1 is: 242681
Type: Info
EMW_INFO_30009: Number of mesh faces found in the Boundary Condition  is: 242681
Type: Info
Finish All mesh checking
Checking Force torque mesh
-----< CTransientMagneticStudy::Run 4>-----
Setting Coils parameters...
-----< CTransientMagneticStudy::Run 5>-----
Getting Coils mesh data
-----< CTransientMagneticStudy::Run 6>-----
Getting Gauss values
-----< CTransientMagneticStudy::Run 7>-----
Checking material non linear status
-----< CTransientMagneticStudy::Run 8>-----
Solving Coils conduction problem...
Forming Coils Support Regions
Preparing linear system...
Get Degree of Coupling For Conduction  Timing: 00:00:00
>>> Nbr of used cores: 4
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus 4
>> Start Solving
>>>Solver :: Multi_Cores Pardiso Direct Solver
Multi_Cores Pardiso Direct Solver:Total spent Cpu Time 0.015302
Multi_Cores Pardiso Direct Solver:Total spent Wall Time 0.014000
>>End Solving
Solving 00:00:00 Dimension 17 Non_Zeroes 19
reading file

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Main call: Finished scanning the solution file for the multi-core solver: Dimension = 17
File size = 136 Timing: 00:00:00
0 timing on seconds
Done solving conduction for Coil 1
-----< CTransientMagneticStudy::Run 9>-----
Intermediate Steps before the main solver
-----< CTransientMagneticStudy::Run 10>-----
Start Prepare Linear system for vector TS
PrepareLinearSystemForVectorTS 1
PrepareLinearSystemForVectorTS 1
NumberGlobalForVectorTs 1
NumberGlobalForVectorTs 1
NumberGlobalForVectorTs 2
NumberGlobalForVectorTs 2
NumberGlobalForVectorTs 3
NumberGlobalForVectorTs 3
PrepareLinearSystemForVectorTS 2
PrepareLinearSystemForVectorTS 2
PrepareLinearSystemForVectorTS 3
PrepareLinearSystemForVectorTS 3
PrepareLinearSystemForVectorTS 4
PrepareLinearSystemForVectorTS 4
>>> Nbr of used cores: 4
Finish Prepare linear system for vector TS
Distributing the currents for Coil 1
>> end ScanDataFromFiles
>> Number of Cpus 4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 545 , true residual: 8.95027e-10
Multi_Cores Iterative Solver:Total spent Cpu Time 1.840142
Multi_Cores Iterative Solver:Total spent Wall Time 2.027000
>>End Solving
Solving 00:00:02 Dimension 233831 Non_Zeroes 1857029
reading file
Main call: Finished scanning the solution file for the multi-core solver: Dimension =
233831 File size = 1870648 Timing: 00:00:00
0 timing on seconds
reading file
Distributed Current successfully for Coil 1
-----< CTransientMagneticStudy::Run 11>-----

```

Done Distributing the currents

IMT Fix Order TransientMagnetic Timing: 0: 0: 0

Number of cohomology generators = 0

Get degree of coupling for transient magnetic Timing: 0: 0: 1

>>> Nbr of used cores: 4

Start solving for TOmega 0.000000e+00

Assembling matrices for Time 0.000000e+00

Assembling matrices for Time 0.000000e+00

CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore

Timing: 0: 0: 1

CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory Used = 0

Solving matrices for Time0.000000e+00

Solving matrices for Time0.000000e+00

Solver in progress...

>> end ScanDataFromFiles

>> Number of Cpus 4

>> Start Solving

>>>Solver :: Multi_Cores Iterative Solver

>> Set Iterative Parameters

>> WriteSolverParameters

>> RunIterativeSolver

Number of iterations: 1 , true residual: 2.29576e-14

Multi_Cores Iterative Solver:Total spent Cpu Time 0.000360

Multi_Cores Iterative Solver:Total spent Wall Time 0.000000

>>End Solving

Solving 00:00:00 Dimension 17 Non_Zeroes 21

reading file

EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fef5e6db-03c6-48df-b65f-7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1

Type: Error!

Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure that the file name specified in the software is correct and matches the actual file name. Ensure that the file format is compatible with the software.

>>>>>

CTransientMagneticStudy::AssembleGlobalForTransientInductanceDecember2017

Timing: 0: 0: 1

>> end ScanDataFromFiles

>> Number of Cpus 4

>> Start Solving

>>>Solver :: Multi_Cores Iterative Solver

>> Set Iterative Parameters

>> WriteSolverParameters

>> RunIterativeSolver

Number of iterations: 1 , true residual: 4.59151e-17
 Multi_Cores Iterative Solver:Total spent Cpu Time 0.000314
 Multi_Cores Iterative Solver:Total spent Wall Time 0.000000
 >>End Solving
 Solving 00:00:00 Dimension 17 Non_Zeroes 21
 reading file
 EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
 Type: Error!
 Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure that the file name specified in the software is correct and matches the actual file name. Ensure that the file format is compatible with the software.
 Progress: 7%
 Estimated Time: 0:2:16
 Remaining Time: 0:2:6
 Available Memory(GB): 28.09
 Current CPU Percentage: 34.88
 Average cores per hour: 1.40
 Computing Circuit Quantities

 Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
 Done solving for TOmega
 Writing Solution... 0.000000e+00
 Compute Forces And Torques Transient Timing: 0: 0: 1
 Progress: 14%
 Estimated Time: 0:2:16
 Remaining Time: 0:1:56
 Available Memory(GB): 28.05
 Current CPU Percentage: 52.83
 Average cores per hour: 2.11
 Write Solution PerPart Timing: 0:0:6
 Write Solution PerPart Timing: 6037.000000ms
 Start solving for TOmega 1.000000e-04
 Assembling matrices for Time 1.000000e-04
 Assembling matrices for Time 1.000000e-04
 CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
 Timing: 0: 0: 1
 CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
 Used = 0
 Solving matrices for Time1.000000e-04
 Solving matrices for Time1.000000e-04
 Solver in progress...
 >> end ScanDataFromFiles
 >> Number of Cpus 4

```

>> Start Solving
>>> Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000319
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
  Solving  00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done  solving for TOmega
Writing Solution... 1.000000e-04
Compute Forces And Torques Transient  Timing:  0: 0: 1
Progress: 22%
Estimated Time: 0:2:16
Remaining Time: 0:1:46
Available Memory(GB): 28.12
Current CPU Percentage: 54.80
Average cores per hour: 2.19
Write Solution PerPart  Timing: 0:0:7
Write Solution PerPart  Timing: 7305.000000ms
Start solving for TOmega 2.000000e-04
Assembling matrices for Time 2.000000e-04
Assembling matrices for Time 2.000000e-04
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing:  0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time2.000000e-04
Solving matrices for Time2.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus  4
>> Start Solving

```

```

>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000319
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
  Solving   00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fef5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done  solving for TOmega
Writing Solution... 2.000000e-04
Compute Forces And Torques Transient  Timing:   0: 0: 1
Progress: 29%
Estimated Time: 0:2:16
Remaining Time: 0:1:36
Available Memory(GB): 28.09
Current CPU Percentage: 52.02
Average cores per hour: 2.08
Write Solution PerPart  Timing: 0:0:8
Write Solution PerPart  Timing: 7245.000000ms
Start solving for TOmega 3.000000e-04
Assembling matrices for Time 3.000000e-04
Assembling matrices for Time 3.000000e-04
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing:      0: 0: 0
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time3.000000e-04
Solving matrices for Time3.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus  4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver

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```

>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000316
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
  Solving  00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done  solving for TOmega
Writing Solution... 3.000000e-04
Compute Forces And Torques Transient  Timing:  0: 0: 1
Progress: 36%
Estimated Time: 0:2:16
Remaining Time: 0:1:26
Available Memory(GB): 28.06
Current CPU Percentage: 48.75
Average cores per hour: 1.95
Write Solution PerPart  Timing: 0:0:7
Write Solution PerPart  Timing: 7229.000000ms
Start solving for TOmega 4.000000e-04
Assembling matrices for Time 4.000000e-04
Assembling matrices for Time 4.000000e-04
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing:  0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time4.000000e-04
Solving matrices for Time4.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus  4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters

```

```

>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000344
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
  Solving   00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fef5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done solving for TOmega
Writing Solution... 4.000000e-04
Compute Forces And Torques Transient  Timing:  0: 0: 1
Progress: 44%
Estimated Time: 0:2:16
Remaining Time: 0:1:16
Available Memory(GB): 28.04
Current CPU Percentage: 47.88
Average cores per hour: 1.92
Write Solution PerPart  Timing: 0:0:7
Write Solution PerPart  Timing: 7201.000000ms
Start solving for TOmega 5.000000e-04
Assembling matrices for Time 5.000000e-04
Assembling matrices for Time 5.000000e-04
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing: 0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time5.000000e-04
Solving matrices for Time5.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus  4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters

```

```

>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000330
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
Solving  00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done solving for TOmega
Writing Solution... 5.000000e-04
Progress: 51%
Estimated Time: 0:2:16
Remaining Time: 0:1:6
Available Memory(GB): 28.03
Current CPU Percentage: 48.50
Average cores per hour: 1.94
Compute Forces And Torques Transient Timing: 0: 0: 1
Write Solution PerPart Timing: 0:0:8
Write Solution PerPart Timing: 7252.000000ms
Start solving for TOmega 6.000000e-04
Assembling matrices for Time 6.000000e-04
Assembling matrices for Time 6.000000e-04
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing: 0: 0: 0
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time6.000000e-04
Solving matrices for Time6.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus 4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver

```

Number of iterations: 1 , true residual: 2.29576e-14
 Multi_Cores Iterative Solver:Total spent Cpu Time 0.000336
 Multi_Cores Iterative Solver:Total spent Wall Time 0.000000
 >>End Solving
 Solving 00:00:00 Dimension 17 Non_Zeroes 21
 reading file
 EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
 Type: Error!
 Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure that the file name specified in the software is correct and matches the actual file name. Ensure that the file format is compatible with the software.
 Computing Circuit Quantities

 Progress: 58%
 Estimated Time: 0:2:16
 Remaining Time: 0:0:56
 Available Memory(GB): 27.99
 Current CPU Percentage: 53.20
 Average cores per hour: 2.13
 Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
 Done solving for TOmega
 Writing Solution... 6.000000e-04
 Compute Forces And Torques Transient Timing: 0: 0: 1
 Write Solution PerPart Timing: 0:0:7
 Write Solution PerPart Timing: 7259.000000ms
 Start solving for TOmega 7.000000e-04
 Assembling matrices for Time 7.000000e-04
 Assembling matrices for Time 7.000000e-04
 CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
 Timing: 0: 0: 1
 CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
 Used = 0
 Solving matrices for Time7.000000e-04
 Solving matrices for Time7.000000e-04
 Solver in progress...
 >> end ScanDataFromFiles
 >> Number of Cpus 4
 >> Start Solving
 >>>Solver :: Multi_Cores Iterative Solver
 >> Set Iterative Parameters
 >> WriteSolverParameters
 >> RunIterativeSolver
 Number of iterations: 1 , true residual: 2.29576e-14

Multi_Cores Iterative Solver:Total spent Cpu Time 0.000349
Multi_Cores Iterative Solver:Total spent Wall Time 0.001000
>>End Solving
Solving 00:00:00 Dimension 17 Non_Zeroes 21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure that the file name specified in the software is correct and matches the actual file name. Ensure that the file format is compatible with the software.
Computing Circuit Quantities

Progress: 66%
Estimated Time: 0:2:16
Remaining Time: 0:0:46
Available Memory(GB): 27.97
Current CPU Percentage: 55.55
Average cores per hour: 2.22
Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done solving for TOmega
Writing Solution... 7.000000e-04
Compute Forces And Torques Transient Timing: 0: 0: 1
Write Solution PerPart Timing: 0:0:7
Write Solution PerPart Timing: 7287.000000ms
Start solving for TOmega 8.000000e-04
Assembling matrices for Time 8.000000e-04
Assembling matrices for Time 8.000000e-04
Progress: 73%
Estimated Time: 0:2:16
Remaining Time: 0:0:36
Available Memory(GB): 27.95
Current CPU Percentage: 52.52
Average cores per hour: 2.10
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing: 0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time8.000000e-04
Solving matrices for Time8.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus 4
>> Start Solving

```

>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000354
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
  Solving   00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fef5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done  solving for TOmega
Writing Solution... 8.000000e-04
Compute Forces And Torques Transient  Timing:   0: 0: 0
Progress: 80%
Estimated Time: 0:2:16
Remaining Time: 0:0:26
Available Memory(GB): 27.93
Current CPU Percentage: 53.15
Average cores per hour: 2.13
Write Solution PerPart  Timing: 0:0:7
Write Solution PerPart  Timing: 7282.000000ms
Start solving for TOmega 9.000000e-04
Assembling matrices for Time 9.000000e-04
Assembling matrices for Time 9.000000e-04
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing:           0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time9.000000e-04
Solving matrices for Time9.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus  4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver

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>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000342
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
  Solving  00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done  solving for TOmega
Writing Solution... 9.000000e-04
Compute Forces And Torques Transient  Timing:  0: 0: 1
Progress: 88%
Estimated Time: 0:2:16
Remaining Time: 0:0:16
Available Memory(GB): 27.91
Current CPU Percentage: 54.75
Average cores per hour: 2.19
Write Solution PerPart  Timing: 0:0:7
Write Solution PerPart  Timing: 7257.000000ms
Start solving for TOmega 1.000000e-03
Assembling matrices for Time 1.000000e-03
Assembling matrices for Time 1.000000e-03
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing:  0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time1.000000e-03
Solving matrices for Time1.000000e-03
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus  4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters

```

```
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time   0.000318
Multi_Cores Iterative Solver:Total spent Wall Time   0.000000
>>End Solving
  Solving   00:00:00   Dimension   17 Non_Zeroes   21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fef5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities
```

```
Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done   solving for TOmega
Writing Solution... 1.000000e-03
Compute Forces And Torques Transient   Timing:   0: 0: 1
Progress: 95%
Estimated Time: 0:2:16
Remaining Time: 0:0:6
Available Memory(GB): 27.90
Current CPU Percentage: 47.75
Average cores per hour: 1.91
Write Solution PerPart   Timing: 0:0:8
Write Solution PerPart   Timing: 7258.000000ms
Done   solving for TOmega
```

```
-----< CTransientMagneticStudy::Run 18>-----
Begin CleanupMemory Transient Available Memory = 0 Mb
-----< CTransientMagneticStudy::CleanupMemory 1>-----
-----< CTransientMagneticStudy::CleanupMemory 2>-----
-----<   FreeMemory 1>-----
-----<   FreeMemory 5>-----
-----<   FreeMemory 6>-----
-----<   FreeMemory 7>-----
-----< FreeMemory 8>-----
-----<   FreeMemory 9>-----
-----<   FreeMemory 10>-----
-----<   FreeMemory 11>-----
-----<   FreeMemory 12>-----
-----< FreeMemory 13>-----
-----< FreeMemory 14>-----
```



```

-----< FreeMemory 15>-----
Begin: Free Memory of Study's Solver
End: Free Memory of Study's Solver
-----< CTransientMagneticStudy::CleanupMemory 3>-----
-----< CTransientMagneticStudy::CleanupMemory 4>-----
-----< CTransientMagneticStudy::CleanupMemory 5>-----
-----< CTransientMagneticStudy::CleanupMemory 6>-----
-----< CTransientMagneticStudy::CleanupMemory 7>-----
-----< CTransientMagneticStudy::CleanupMemory 8>-----
-----< CTransientMagneticStudy::CleanupMemory 9>-----
-----< CTransientMagneticStudy::CleanupMemory 10>-----
Allocated memory released
End CleanupMemory: Available memory = 0
-----< CTransientMagneticStudy::Run 19>-----
Transient Run Finished successfully!
-----< CTransientMagneticStudy::Run 20>-----
Begin CleanupMemory Transient Available Memory = 0 Mb
-----< CTransientMagneticStudy::CleanupMemory 1>-----
-----< CTransientMagneticStudy::CleanupMemory 2>-----
-----< FreeMemory 1>-----
-----< FreeMemory 7>-----
-----< FreeMemory 8>-----
-----< FreeMemory 9>-----
-----< FreeMemory 10>-----
-----< FreeMemory 11>-----
-----< FreeMemory 12>-----
-----< FreeMemory 13>-----
-----< FreeMemory 14>-----
-----< FreeMemory 15>-----
Begin: Free Memory of Study's Solver
End: Free Memory of Study's Solver
-----< CTransientMagneticStudy::CleanupMemory 3>-----
-----< CTransientMagneticStudy::CleanupMemory 4>-----
-----< CTransientMagneticStudy::CleanupMemory 5>-----
-----< CTransientMagneticStudy::CleanupMemory 6>-----
-----< CTransientMagneticStudy::CleanupMemory 7>-----
-----< CTransientMagneticStudy::CleanupMemory 8>-----
-----< CTransientMagneticStudy::CleanupMemory 9>-----
-----< CTransientMagneticStudy::CleanupMemory 10>-----
Allocated memory released
End CleanupMemory: Available memory = 0
Total run time   Timing: 0:2:14
Total run time   Timing: 134457.000000ms
Total simulation time: 0:2:19

```

***** 1 *****

Setting the resources path

Loading resources path

Resources Loaded

Setting the XML file path:

Initializing Study

Loading study properties...

Set study definition...

Getting study element data...

Getting study name...

Setting study type...

Setting mesh ID...

Setting product full version (Formatted: Year/Date Code)...

Preparing to separate product version date code...

Setting product version year...

Extracting document name...

Setting document name: SimScaleElectromagnetics

Extracting mesh file name

Setting mesh file name: mesh

Initializing log file

Initializing dev file...

Dev file initialized

Log file initialized

Initializing temp file

Temp file initialized

Started on : Thu Jan 9 10:20:53 2025

Initializing study properties

Non Linear Residual Error: 1e-06

1 Solid(s) found in the current study

EMW_ERROR_25: No solid body found or no material applied

Type: Error!

Cure: Check the input file or model to ensure that it is properly formatted and that all

necessary data is included. Make sure that the model includes at least one solid geometry. Verify the material assignment to ensure that it is accurate and complete. Ensure that all elements are correctly assigned to the appropriate material properties.

Ended on : Thu Jan 9 10:20:53 2025

EMW_WARNING_60017: Resources estimation is not done for this solving session. Consider using the argument -RunMode with value Estimation, before doing full run to check if resources are available.

Type: Warning!

Start fill elements an node arrays from json mesh file

Getting Points (Nodes) coordinates from the mesh

Start reading global surface mesh faces

Filling the elements array

Start reading global volume mesh

End reading global volume mesh

number of elements: 355139

number of nodes: 121257

Compute security key done

Preparing mesh database

Preparing database... (0 / 14) ...

Preparing database... (1 / 14) ...

Preparing database... (2 / 14) ...

Creating tets

Vertices created

Number of vertices : 121257

Number of edges : 597633

Number of triangels : 831516

Number of tets : 355139

Preparing database... (3 / 14) ...

Preparing database... (4 / 14) ...

Preparing database... (5 / 14) ...

Preparing database... (6 / 14) ...

Euler characteristic of the complex is : 1

Is the complex connected : 1

Preparing database... (7 / 14) ...

Preparing database... (8 / 14) ...

Preparing database... (9 / 14) ...

Preparing database... (10 / 14) ...

Preparing database... (11 / 14) ...

Preparing database... (12 / 14) ...

Number of cohomology generators = 0

Preparing database... (13 / 14) ...

Preparing database... (14 / 14) ...

Start filling elements boundary conditions

End filling elements boundary conditions

```

Finish preparing mesh dataBase
EstimatedRunTime:135.497s
Progress: 1%
Estimated Time: 0:2:16
Remaining Time: 0:2:16
Available Memory(GB): 28.22
Available Memory 0 Mb
-----< CTransientMagneticStudy::Run 1>-----
-----< CTransientMagneticStudy::Run 2>-----
-----< CTransientMagneticStudy::Run 3>-----
Checking component and materials status
Checking Components and mesh availability
Checking Load/Restraint mesh
EMW_INFO_30009: Number of mesh faces found in the Boundary Condition Tangential Flux
- 1 is: 242681
Type: Info
EMW_INFO_30009: Number of mesh faces found in the Boundary Condition  is: 242681
Type: Info
Finish All mesh checking
Checking Force torque mesh
-----< CTransientMagneticStudy::Run 4>-----
Setting Coils parameters...
-----< CTransientMagneticStudy::Run 5>-----
Getting Coils mesh data
-----< CTransientMagneticStudy::Run 6>-----
Getting Gauss values
-----< CTransientMagneticStudy::Run 7>-----
Checking material non linear status
-----< CTransientMagneticStudy::Run 8>-----
Solving Coils conduction problem...
Forming Coils Support Regions
Preparing linear system...
Get Degree of Coupling For Conduction  Timing: 00:00:00
>>> Nbr of used cores: 4
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus 4
>> Start Solving
>>>Solver :: Multi_Cores Pardiso Direct Solver
Multi_Cores Pardiso Direct Solver:Total spent Cpu Time 0.015302
Multi_Cores Pardiso Direct Solver:Total spent Wall Time 0.014000
>>End Solving
Solving 00:00:00 Dimension 17 Non_Zeroes 19
reading file

```

```

Main call: Finished scanning the solution file for the multi-core solver: Dimension = 17
File size = 136 Timing: 00:00:00
0 timing on seconds
Done solving conduction for Coil 1
-----< CTransientMagneticStudy::Run 9>-----
Intermediate Steps before the main solver
-----< CTransientMagneticStudy::Run 10>-----
Start Prepare Linear system for vector TS
PrepareLinearSystemForVectorTS 1
PrepareLinearSystemForVectorTS 1
NumberGlobalForVectorTs 1
NumberGlobalForVectorTs 1
NumberGlobalForVectorTs 2
NumberGlobalForVectorTs 2
NumberGlobalForVectorTs 3
NumberGlobalForVectorTs 3
PrepareLinearSystemForVectorTS 2
PrepareLinearSystemForVectorTS 2
PrepareLinearSystemForVectorTS 3
PrepareLinearSystemForVectorTS 3
PrepareLinearSystemForVectorTS 4
PrepareLinearSystemForVectorTS 4
>>> Nbr of used cores: 4
Finish Prepare linear system for vector TS
Distributing the currents for Coil 1
>> end ScanDataFromFiles
>> Number of Cpus 4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 545 , true residual: 8.95027e-10
Multi_Cores Iterative Solver:Total spent Cpu Time 1.840142
Multi_Cores Iterative Solver:Total spent Wall Time 2.027000
>>End Solving
Solving 00:00:02 Dimension 233831 Non_Zeroes 1857029
reading file
Main call: Finished scanning the solution file for the multi-core solver: Dimension =
233831 File size = 1870648 Timing: 00:00:00
0 timing on seconds
reading file
Distributed Current successfully for Coil 1
-----< CTransientMagneticStudy::Run 11>-----

```

Done Distributing the currents

IMT Fix Order TransientMagnetic Timing: 0: 0: 0

Number of cohomology generators = 0

Get degree of coupling for transient magnetic Timing: 0: 0: 1

>>> Nbr of used cores: 4

Start solving for TOmega 0.000000e+00

Assembling matrices for Time 0.000000e+00

Assembling matrices for Time 0.000000e+00

CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore

Timing: 0: 0: 1

CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory Used = 0

Solving matrices for Time 0.000000e+00

Solving matrices for Time 0.000000e+00

Solver in progress...

>> end ScanDataFromFiles

>> Number of Cpus 4

>> Start Solving

>>> Solver :: Multi_Cores Iterative Solver

>> Set Iterative Parameters

>> WriteSolverParameters

>> RunIterativeSolver

Number of iterations: 1 , true residual: 2.29576e-14

Multi_Cores Iterative Solver: Total spent Cpu Time 0.000360

Multi_Cores Iterative Solver: Total spent Wall Time 0.000000

>> End Solving

Solving 00:00:00 Dimension 17 Non_Zeroes 21

reading file

EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fef5e6db-03c6-48df-b65f-7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1

Type: Error!

Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure that the file name specified in the software is correct and matches the actual file name. Ensure that the file format is compatible with the software.

>>>>>

CTransientMagneticStudy::AssembleGlobalForTransientInductanceDecember2017

Timing: 0: 0: 1

>> end ScanDataFromFiles

>> Number of Cpus 4

>> Start Solving

>>> Solver :: Multi_Cores Iterative Solver

>> Set Iterative Parameters

>> WriteSolverParameters

>> RunIterativeSolver

Number of iterations: 1 , true residual: 4.59151e-17
 Multi_Cores Iterative Solver:Total spent Cpu Time 0.000314
 Multi_Cores Iterative Solver:Total spent Wall Time 0.000000
 >>End Solving
 Solving 00:00:00 Dimension 17 Non_Zeroes 21
 reading file
 EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
 Type: Error!
 Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure that the file name specified in the software is correct and matches the actual file name. Ensure that the file format is compatible with the software.
 Progress: 7%
 Estimated Time: 0:2:16
 Remaining Time: 0:2:6
 Available Memory(GB): 28.09
 Current CPU Percentage: 34.88
 Average cores per hour: 1.40
 Computing Circuit Quantities

 Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
 Done solving for TOmega
 Writing Solution... 0.000000e+00
 Compute Forces And Torques Transient Timing: 0: 0: 1
 Progress: 14%
 Estimated Time: 0:2:16
 Remaining Time: 0:1:56
 Available Memory(GB): 28.05
 Current CPU Percentage: 52.83
 Average cores per hour: 2.11
 Write Solution PerPart Timing: 0:0:6
 Write Solution PerPart Timing: 6037.000000ms
 Start solving for TOmega 1.000000e-04
 Assembling matrices for Time 1.000000e-04
 Assembling matrices for Time 1.000000e-04
 CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
 Timing: 0: 0: 1
 CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
 Used = 0
 Solving matrices for Time1.000000e-04
 Solving matrices for Time1.000000e-04
 Solver in progress...
 >> end ScanDataFromFiles
 >> Number of Cpus 4

```

>> Start Solving
>>> Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000319
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
  Solving   00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done solving for TOmega
Writing Solution... 1.000000e-04
Compute Forces And Torques Transient  Timing:   0: 0: 1
Progress: 22%
Estimated Time: 0:2:16
Remaining Time: 0:1:46
Available Memory(GB): 28.12
Current CPU Percentage: 54.80
Average cores per hour: 2.19
Write Solution PerPart  Timing: 0:0:7
Write Solution PerPart  Timing: 7305.000000ms
Start solving for TOmega 2.000000e-04
Assembling matrices for Time 2.000000e-04
Assembling matrices for Time 2.000000e-04
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing:           0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time2.000000e-04
Solving matrices for Time2.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus  4
>> Start Solving

```



```

>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000319
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
  Solving   00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fef5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done  solving for TOmega
Writing Solution... 2.000000e-04
Compute Forces And Torques Transient  Timing:   0: 0: 1
Progress: 29%
Estimated Time: 0:2:16
Remaining Time: 0:1:36
Available Memory(GB): 28.09
Current CPU Percentage: 52.02
Average cores per hour: 2.08
Write Solution PerPart  Timing: 0:0:8
Write Solution PerPart  Timing: 7245.000000ms
Start solving for TOmega 3.000000e-04
Assembling matrices for Time 3.000000e-04
Assembling matrices for Time 3.000000e-04
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing:      0: 0: 0
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time3.000000e-04
Solving matrices for Time3.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus  4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver

```

```

>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000316
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
  Solving   00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done  solving for TOmega
Writing Solution... 3.000000e-04
Compute Forces And Torques Transient  Timing:   0: 0: 1
Progress: 36%
Estimated Time: 0:2:16
Remaining Time: 0:1:26
Available Memory(GB): 28.06
Current CPU Percentage: 48.75
Average cores per hour: 1.95
Write Solution PerPart  Timing: 0:0:7
Write Solution PerPart  Timing: 7229.000000ms
Start solving for TOmega 4.000000e-04
Assembling matrices for Time 4.000000e-04
Assembling matrices for Time 4.000000e-04
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing:           0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time4.000000e-04
Solving matrices for Time4.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus  4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters

```

```

>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000344
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
  Solving   00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fef5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done  solving for TOmega
Writing Solution... 4.000000e-04
Compute Forces And Torques Transient  Timing:   0: 0: 1
Progress: 44%
Estimated Time: 0:2:16
Remaining Time: 0:1:16
Available Memory(GB): 28.04
Current CPU Percentage: 47.88
Average cores per hour: 1.92
Write Solution PerPart  Timing: 0:0:7
Write Solution PerPart  Timing: 7201.000000ms
Start solving for TOmega 5.000000e-04
Assembling matrices for Time 5.000000e-04
Assembling matrices for Time 5.000000e-04
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing:           0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time5.000000e-04
Solving matrices for Time5.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus  4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters

```

```

>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000330
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
Solving  00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done solving for TOmega
Writing Solution... 5.000000e-04
Progress: 51%
Estimated Time: 0:2:16
Remaining Time: 0:1:6
Available Memory(GB): 28.03
Current CPU Percentage: 48.50
Average cores per hour: 1.94
Compute Forces And Torques Transient Timing: 0: 0: 1
Write Solution PerPart Timing: 0:0:8
Write Solution PerPart Timing: 7252.000000ms
Start solving for TOmega 6.000000e-04
Assembling matrices for Time 6.000000e-04
Assembling matrices for Time 6.000000e-04
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing: 0: 0: 0
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time6.000000e-04
Solving matrices for Time6.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus 4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver

```

Number of iterations: 1 , true residual: 2.29576e-14
 Multi_Cores Iterative Solver:Total spent Cpu Time 0.000336
 Multi_Cores Iterative Solver:Total spent Wall Time 0.000000
 >>End Solving
 Solving 00:00:00 Dimension 17 Non_Zeroes 21
 reading file
 EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
 Type: Error!
 Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure that the file name specified in the software is correct and matches the actual file name. Ensure that the file format is compatible with the software.
 Computing Circuit Quantities

 Progress: 58%
 Estimated Time: 0:2:16
 Remaining Time: 0:0:56
 Available Memory(GB): 27.99
 Current CPU Percentage: 53.20
 Average cores per hour: 2.13
 Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
 Done solving for TOmega
 Writing Solution... 6.000000e-04
 Compute Forces And Torques Transient Timing: 0: 0: 1
 Write Solution PerPart Timing: 0:0:7
 Write Solution PerPart Timing: 7259.000000ms
 Start solving for TOmega 7.000000e-04
 Assembling matrices for Time 7.000000e-04
 Assembling matrices for Time 7.000000e-04
 CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
 Timing: 0: 0: 1
 CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
 Used = 0
 Solving matrices for Time7.000000e-04
 Solving matrices for Time7.000000e-04
 Solver in progress...
 >> end ScanDataFromFiles
 >> Number of Cpus 4
 >> Start Solving
 >>>Solver :: Multi_Cores Iterative Solver
 >> Set Iterative Parameters
 >> WriteSolverParameters
 >> RunIterativeSolver
 Number of iterations: 1 , true residual: 2.29576e-14

Multi_Cores Iterative Solver:Total spent Cpu Time 0.000349
Multi_Cores Iterative Solver:Total spent Wall Time 0.001000
>>End Solving
Solving 00:00:00 Dimension 17 Non_Zeroes 21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure that the file name specified in the software is correct and matches the actual file name. Ensure that the file format is compatible with the software.
Computing Circuit Quantities

Progress: 66%
Estimated Time: 0:2:16
Remaining Time: 0:0:46
Available Memory(GB): 27.97
Current CPU Percentage: 55.55
Average cores per hour: 2.22
Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done solving for TOmega
Writing Solution... 7.000000e-04
Compute Forces And Torques Transient Timing: 0: 0: 1
Write Solution PerPart Timing: 0:0:7
Write Solution PerPart Timing: 7287.000000ms
Start solving for TOmega 8.000000e-04
Assembling matrices for Time 8.000000e-04
Assembling matrices for Time 8.000000e-04
Progress: 73%
Estimated Time: 0:2:16
Remaining Time: 0:0:36
Available Memory(GB): 27.95
Current CPU Percentage: 52.52
Average cores per hour: 2.10
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing: 0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time8.000000e-04
Solving matrices for Time8.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus 4
>> Start Solving

```

>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time  0.000354
Multi_Cores Iterative Solver:Total spent Wall Time  0.000000
>>End Solving
  Solving   00:00:00  Dimension  17 Non_Zeroes  21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fef5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done  solving for TOmega
Writing Solution... 8.000000e-04
Compute Forces And Torques Transient  Timing:   0: 0: 0
Progress: 80%
Estimated Time: 0:2:16
Remaining Time: 0:0:26
Available Memory(GB): 27.93
Current CPU Percentage: 53.15
Average cores per hour: 2.13
Write Solution PerPart  Timing: 0:0:7
Write Solution PerPart  Timing: 7282.000000ms
Start solving for TOmega 9.000000e-04
Assembling matrices for Time 9.000000e-04
Assembling matrices for Time 9.000000e-04
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing:      0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time9.000000e-04
Solving matrices for Time9.000000e-04
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus  4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver

```

```

>> Set Iterative Parameters
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time   0.000342
Multi_Cores Iterative Solver:Total spent Wall Time   0.000000
>>End Solving
  Solving   00:00:00   Dimension   17 Non_Zeroes   21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fe5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities

Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done   solving for TOmega
Writing Solution... 9.000000e-04
Compute Forces And Torques Transient   Timing:   0: 0: 1
Progress: 88%
Estimated Time: 0:2:16
Remaining Time: 0:0:16
Available Memory(GB): 27.91
Current CPU Percentage: 54.75
Average cores per hour: 2.19
Write Solution PerPart   Timing: 0:0:7
Write Solution PerPart   Timing: 7257.000000ms
Start solving for TOmega 1.000000e-03
Assembling matrices for Time 1.000000e-03
Assembling matrices for Time 1.000000e-03
  CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore
Timing:           0: 0: 1
CTransientMagneticStudy::AssembleGlobalForTransientMagneticIterativeMulticore :Memory
Used = 0
Solving matrices for Time1.000000e-03
Solving matrices for Time1.000000e-03
Solver in progress...
>> end ScanDataFromFiles
>> Number of Cpus   4
>> Start Solving
>>>Solver :: Multi_Cores Iterative Solver
>> Set Iterative Parameters

```



```
>> WriteSolverParameters
>> RunIterativeSolver
Number of iterations: 1 , true residual: 2.29576e-14
Multi_Cores Iterative Solver:Total spent Cpu Time   0.000318
Multi_Cores Iterative Solver:Total spent Wall Time   0.000000
>>End Solving
  Solving   00:00:00   Dimension   17 Non_Zeroes   21
reading file
EMW_ERROR_113: Failed to open the file : /srvtc/job-data/fef5e6db-03c6-48df-b65f-
7ac683f258a9/Output/SimScaleElectromagnetics_Generic_SOL1
Type: Error!
Cure: Double-check the file path specified in the software to ensure that it is correct. Ensure
that the file name specified in the software is correct and matches the actual file name. Ensure
that the file format is compatible with the software.
Computing Circuit Quantities
```

```
Process To Compute Transient Circuit Parameters: Time Step= 1 Used memory = 0
Done   solving for TOmega
Writing Solution... 1.000000e-03
Compute Forces And Torques Transient   Timing:   0: 0: 1
Progress: 95%
Estimated Time: 0:2:16
Remaining Time: 0:0:6
Available Memory(GB): 27.90
Current CPU Percentage: 47.75
Average cores per hour: 1.91
Write Solution PerPart   Timing: 0:0:8
Write Solution PerPart   Timing: 7258.000000ms
Done   solving for TOmega
```

```
-----< CTransientMagneticStudy::Run 18>-----
Begin CleanupMemory Transient Available Memory = 0 Mb
-----< CTransientMagneticStudy::CleanupMemory 1>-----
-----< CTransientMagneticStudy::CleanupMemory 2>-----
-----<   FreeMemory 1>-----
-----<   FreeMemory 5>-----
-----<   FreeMemory 6>-----
-----<   FreeMemory 7>-----
-----< FreeMemory 8>-----
-----<   FreeMemory 9>-----
-----<   FreeMemory 10>-----
-----<   FreeMemory 11>-----
-----<   FreeMemory 12>-----
-----< FreeMemory 13>-----
-----< FreeMemory 14>-----
```

```

-----< FreeMemory 15>-----
Begin: Free Memory of Study's Solver
End: Free Memory of Study's Solver
-----< CTransientMagneticStudy::CleanupMemory 3>-----
-----< CTransientMagneticStudy::CleanupMemory 4>-----
-----< CTransientMagneticStudy::CleanupMemory 5>-----
-----< CTransientMagneticStudy::CleanupMemory 6>-----
-----< CTransientMagneticStudy::CleanupMemory 7>-----
-----< CTransientMagneticStudy::CleanupMemory 8>-----
-----< CTransientMagneticStudy::CleanupMemory 9>-----
-----< CTransientMagneticStudy::CleanupMemory 10>-----
Allocated memory released
End CleanupMemory: Available memory = 0
-----< CTransientMagneticStudy::Run 19>-----
Transient Run Finished successfully!
-----< CTransientMagneticStudy::Run 20>-----
Begin CleanupMemory Transient Available Memory = 0 Mb
-----< CTransientMagneticStudy::CleanupMemory 1>-----
-----< CTransientMagneticStudy::CleanupMemory 2>-----
-----< FreeMemory 1>-----
-----< FreeMemory 7>-----
-----< FreeMemory 8>-----
-----< FreeMemory 9>-----
-----< FreeMemory 10>-----
-----< FreeMemory 11>-----
-----< FreeMemory 12>-----
-----< FreeMemory 13>-----
-----< FreeMemory 14>-----
-----< FreeMemory 15>-----
Begin: Free Memory of Study's Solver
End: Free Memory of Study's Solver
-----< CTransientMagneticStudy::CleanupMemory 3>-----
-----< CTransientMagneticStudy::CleanupMemory 4>-----
-----< CTransientMagneticStudy::CleanupMemory 5>-----
-----< CTransientMagneticStudy::CleanupMemory 6>-----
-----< CTransientMagneticStudy::CleanupMemory 7>-----
-----< CTransientMagneticStudy::CleanupMemory 8>-----
-----< CTransientMagneticStudy::CleanupMemory 9>-----
-----< CTransientMagneticStudy::CleanupMemory 10>-----
Allocated memory released
End CleanupMemory: Available memory = 0
Total run time   Timing: 0:2:14
Total run time   Timing: 134457.000000ms
Total simulation time: 0:2:19

```

***** 1 *****