

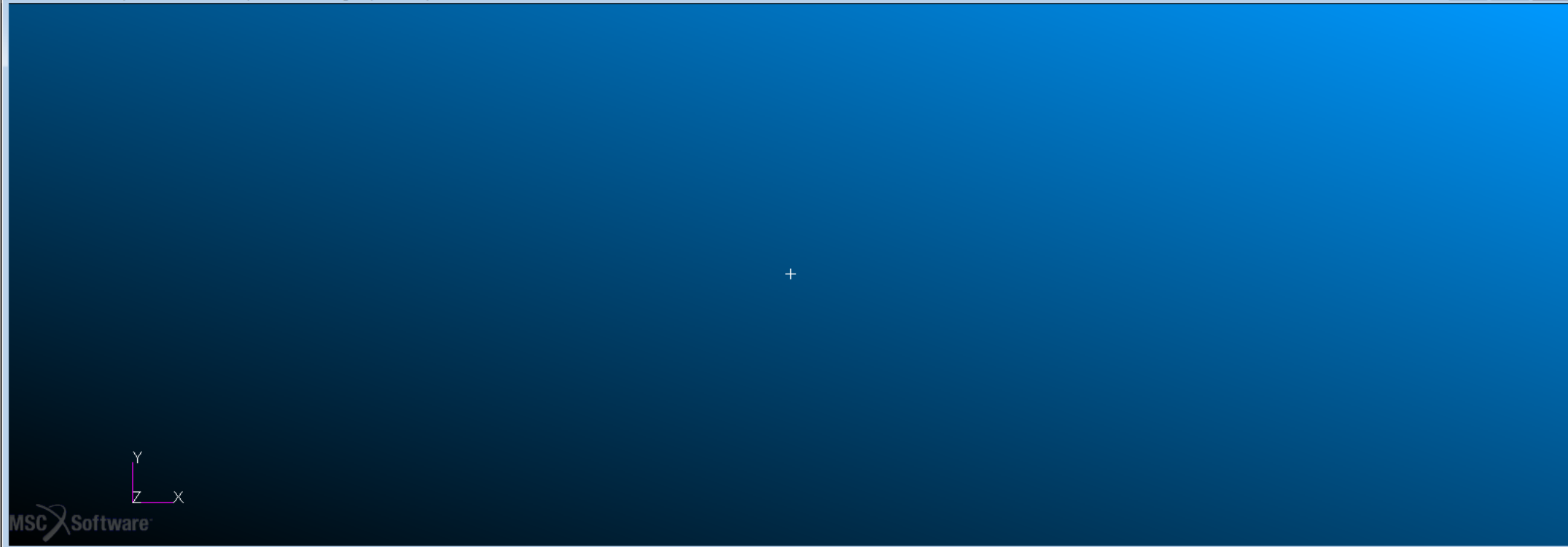
Contact analysis



File Group Viewport Viewing Display Preferences Tools Help Utilities

contatto_easy.db - default_viewport - default_group - Entity

contatto_easy.db - default_viewport - default_group - Entity



```
Command Window
$# Database version 3.18 created by Patran 2017.0.1 successfully opened.
$# The available hardware graphics driver initialized for use has been set to the OpenGL graphics driver.
$# Current graphics driver type in use: HardwareDriver
$# Creating journal file D:\Users\Riccardo\contatto_easy.db.jou at 18-Sep-19 16:00:09
$# Synchronizing the User Data Manager
set_current_dir( "D:\Users\Riccardo" )
$# The current working directory has been changed to the database location shown.
```

Command Output Selection Choices(=)

RHS Window

Geometry Preferences

Geometry Representation
☐ Exportable to Neutral File
☒ Import to Parametrized Solid

Solid Origin Location
☒ MSC.Patran Convention
☐ PATRAN 2 Convention

Solid Property Assignment
☐ Inherit From Parent

☒ NURBS Accelerator

☒ Auto Update Solid Mesh/LBC

Geometry Scale Factor
1000.0 (Millimeters)

Reset

Apply

Cancel

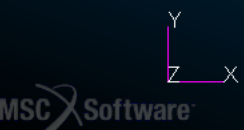
Menu Home Geometry Materials Properties Loads/BCs Meshing Analysis Results Options

Defaults Transforms Viewport Display Orientation Misc. Web Model Tree

File Group Viewport Viewing Display Preferences Tools Help Utilities

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```
## Current graphics driver type in use: HardwareDriver
## Creating journal file D:\Users\Riccardo\contatto_easy.db.jou at 18-Sep-19 16:00:09
## Synchronizing the User Data Manager
set_current_dir( "D:\Users\Riccardo" )
## The current working directory has been changed to the database location shown.
uil_pref_analysis.set_analysis_preference( "MSC.Nastran", "Implicit Nonlinear", ".bdf", ".op2", "No Mapping" )
pref_geometry_set_v4( TRUE, TRUE, FALSE, TRUE, 1000., FALSE, TRUE )
```

Command Output Selection Choices(=)

RHS Window

Analysis Preference

Analysis Code:

MSC.Nastran

Analysis Type:

Implicit Nonlinear

Input File Suffix:

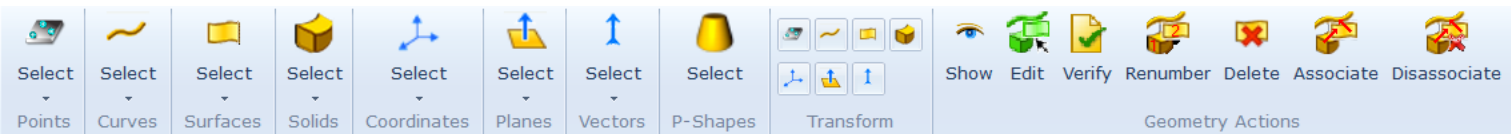
.bdf

Output File Suffix:

.op2

OK

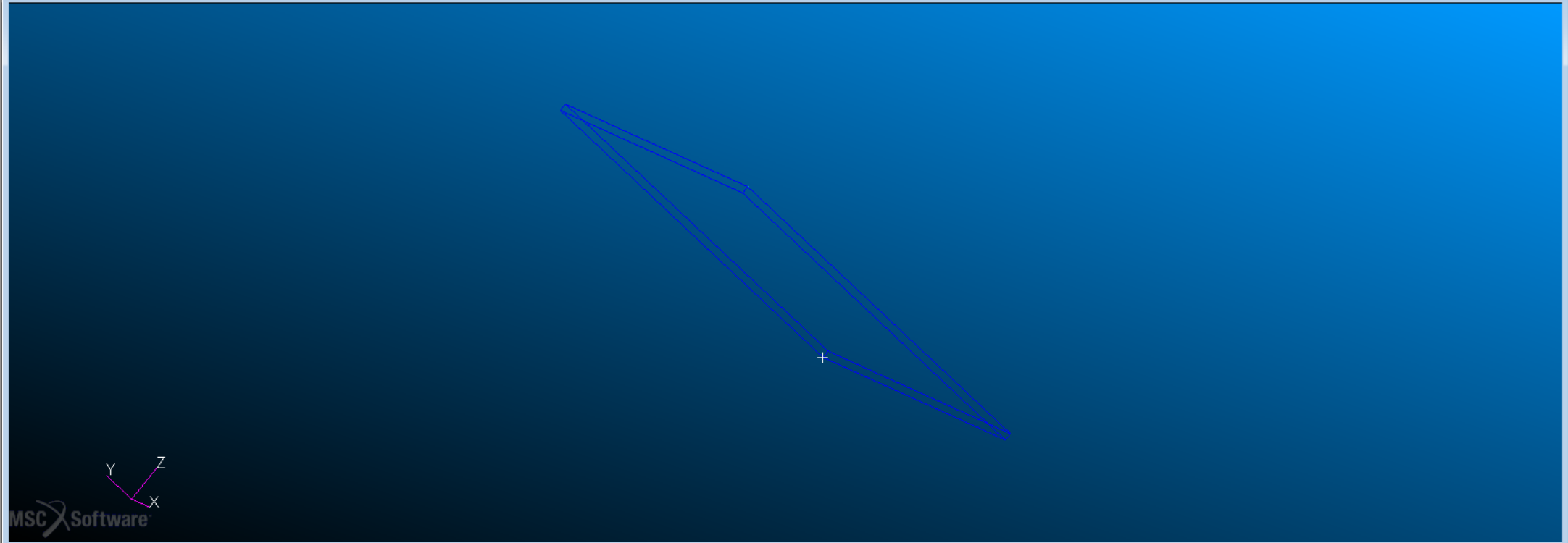
Cancel



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Command Window

```
$# The current working directory has been changed to the database location shown.
uil_pref_analysis.set_analysis_preference( "MSC.Nastran", "Implicit Nonlinear", ".bdf", ".op2", "No Mapping" )
pref_geometry_set_v4( TRUE, TRUE, FALSE, TRUE, 1000., FALSE, TRUE )
STRING asm_create_hpat_xyz_created_ids[VIRTUAL]
asm_const_hpat_xyz( "1", "<50 50 1>", "[0 0 0]", "Coord 0", asm_create_hpat_xyz_created_ids )
$# 1 Hpat created: Hpat 1
ga_view_aa_set( -79.707741, 38.456261, 55.237118 )
```

Command Output Selection Choices(=)

RHS Window

Analysis Preference Geometry

Action: Create

Object: Solid

Method: XYZ

Solid ID List

2

Refer. Coordinate Frame

Coord 0

Vector Coordinates List

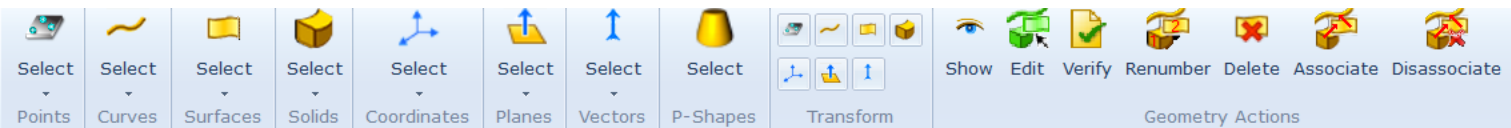
<50 50 1>

☒ Auto Execute

Origin Coordinates List

[0 0 0]

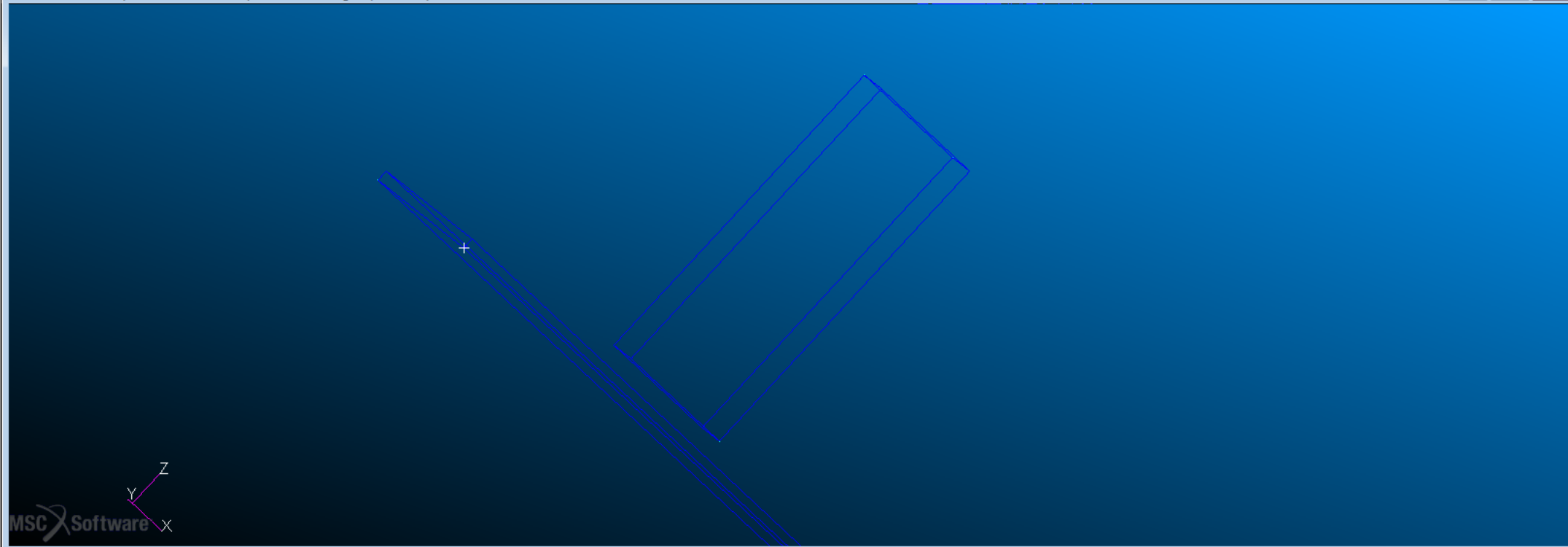
-Apply-



File Group Viewport Viewing Display Preferences Tools Help Utilities

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Command Window

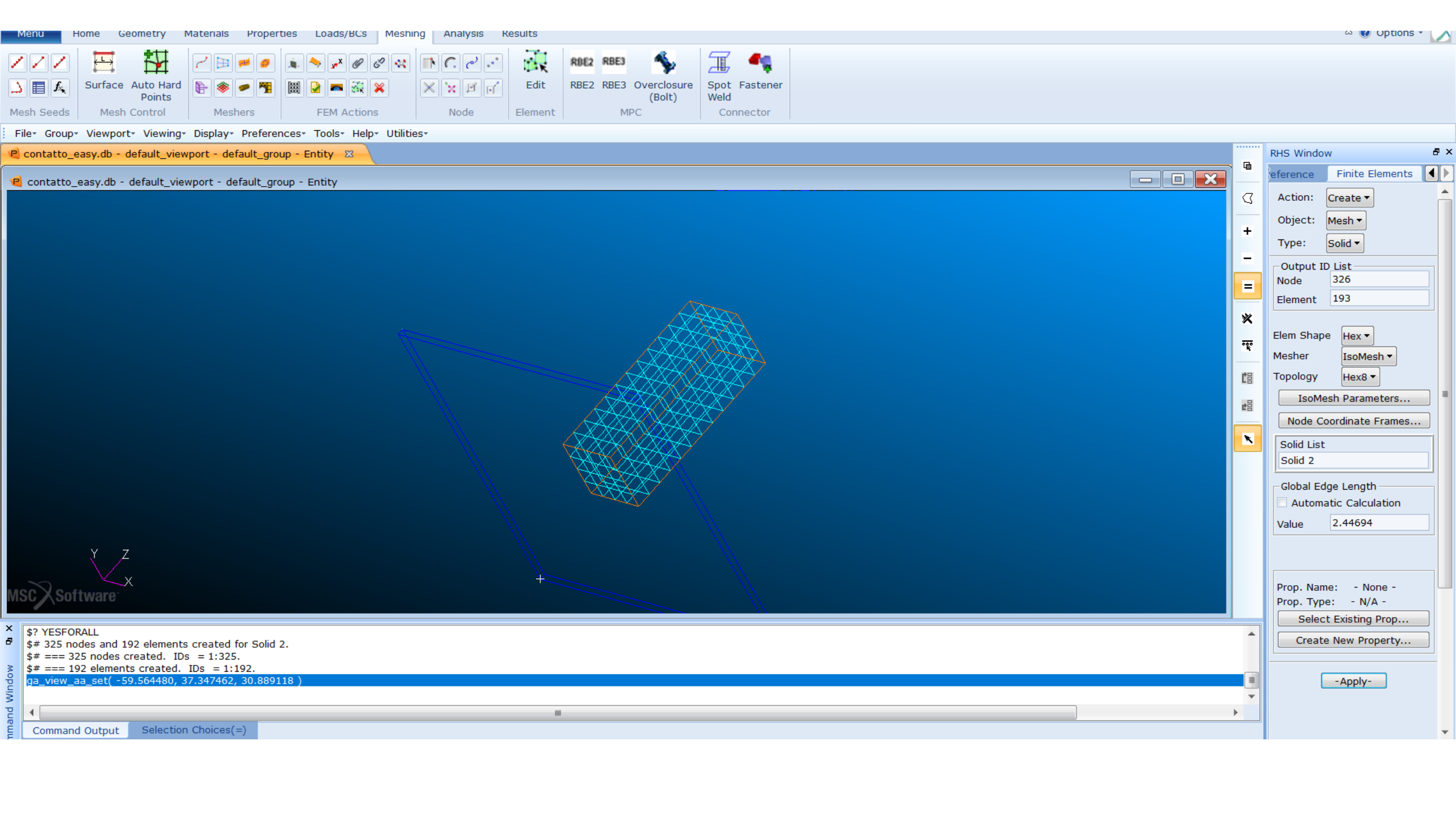
```
asm_delete_solid( "Solid 2", asm_delete_any_deleted_ids )
$# 1 Solid Deleted: Solid 2
STRING asm_create_hpat_xyz_created_ids[VIRTUAL]
asm_const_hpat_xyz( "2", "<10 10 30>", "[20 20 3]", "Coord 0", asm_create_hpat_xyz_created_ids )
$# 1 Hpat created: Hpat 2
ga_view_aa_set( -14.055161, -6.267991, -85.995384 )
ga_view_aa_set( -91.123787, 42.866337, 10.986722 )
```

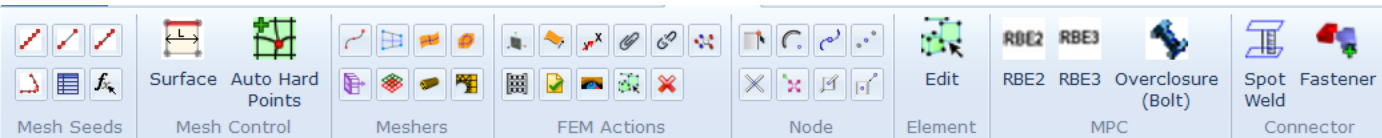
Command Output Selection Choices(=)

RHS Window

Analysis Preference Geometry

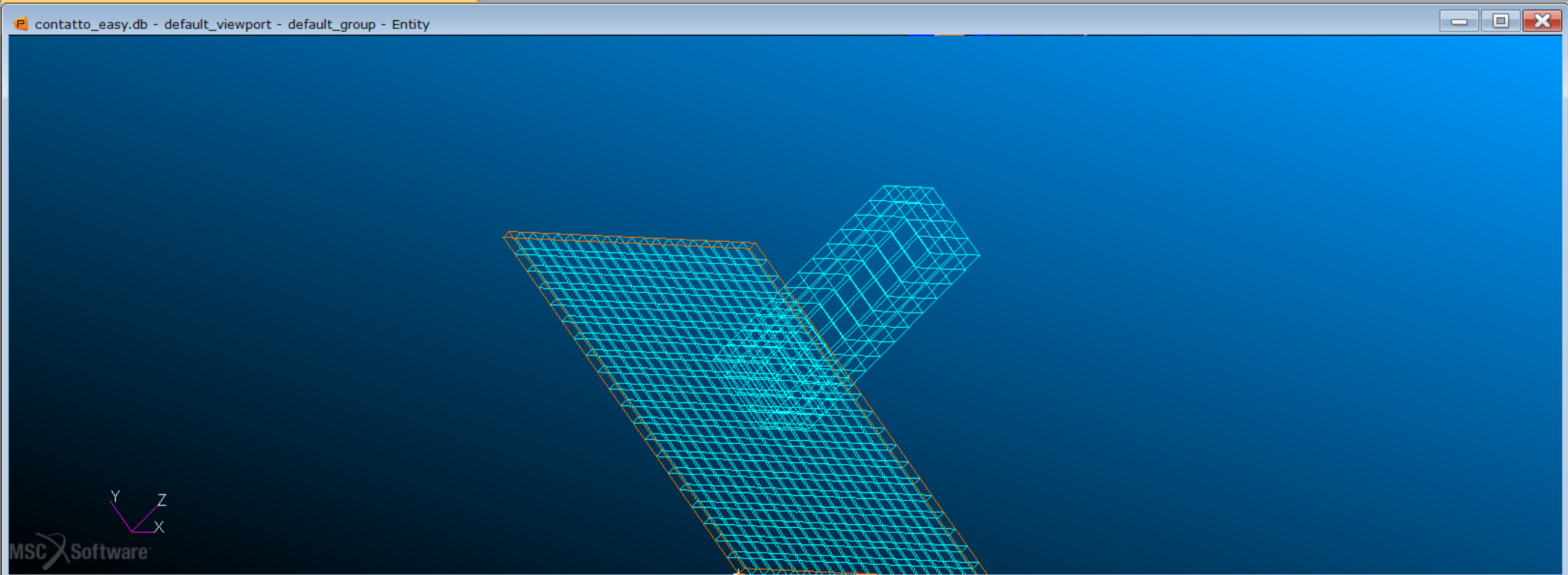
Action: Create
Object: Solid
Method: XYZ
Solid ID List: 3
Refer. Coordinate Frame: Coord 0
Vector Coordinates List: <10 10 30>
☒ Auto Execute
Origin Coordinates List: [20 20 3]
-Apply-





File Group Viewport Viewing Display Preferences Tools Help Utilities

contatto_easy.db - default_viewport - default_group - Entity



```
fem_create_mesh_sol_5( "Solid 1", "IsoMesh", "Hex8", 1, ["2.5028"], 49152, 0, 1, 0, 1, 0, "", "#", "#", "Coord 0", "Coord 0", fem_create_mesh_solid_num_nodes, fem_create_mesh_solid_num_elems, fem_create_mesh_s_nodes_created, fem_cr
$# 882 nodes and 400 elements created for Solid 1.
$# === 882 nodes created. IDs = 326:1207.
$# === 400 elements created. IDs = 193:592.
ga_view_aa_set( -57.941925, 39.789158, 43.703163 )
```

Command Output Selection Choices(=)

RHS Window

reference Finite Elements

Action: Create
Object: Mesh
Type: Solid
Output ID List
Node: 1208
Element: 593

Elem Shape: Hex
Mesher: IsoMesh
Topology: Hex8
IsoMesh Parameters...
Node Coordinate Frames...

Solid List
Solid 1
Global Edge Length
☒ Automatic Calculation
Value: 2.5028

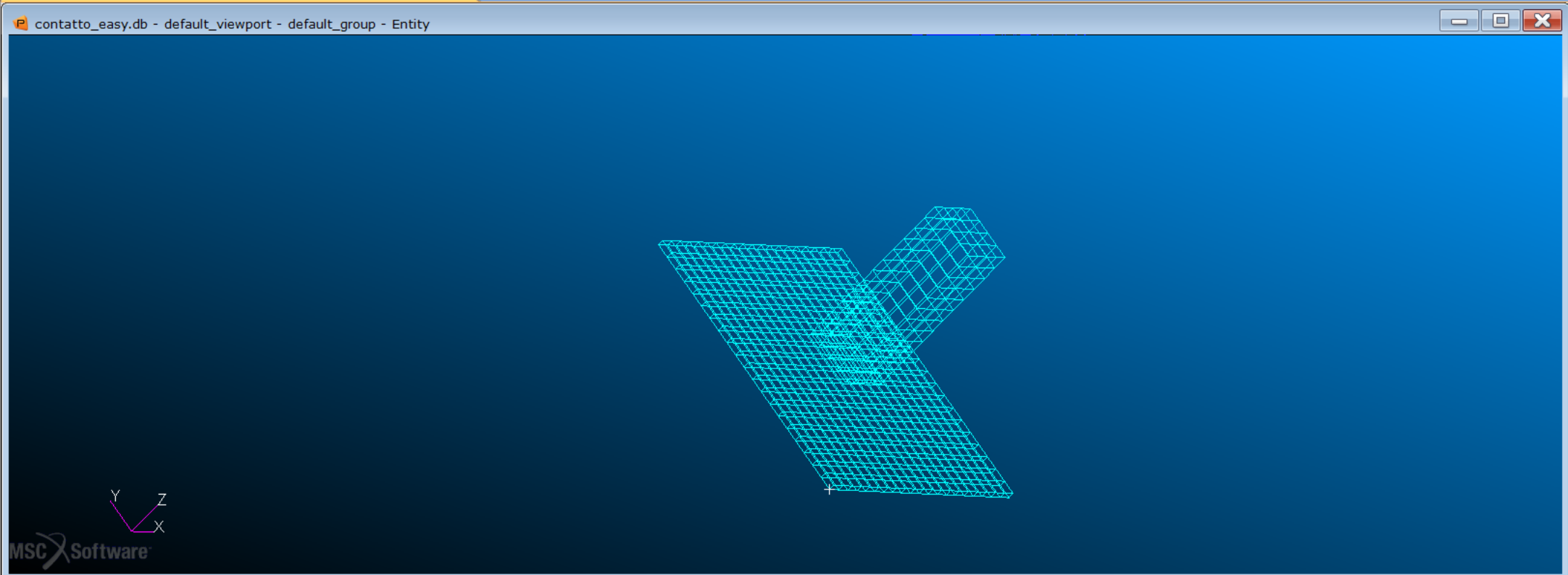
Prop. Name: - None -
Prop. Type: - N/A -
Select Existing Prop...
Create New Property...

-Apply-

Mesh Seeds Surface Auto Hard Points Meshers FEM Actions Node Element RBE2 RBE3 Overclosure (Bolt) Spot Weld Fastener Connector

File Group Viewport Viewing Display Preferences Tools Help Utilities

contatto_easy.db - default_viewport - default_group - Entity



Command Window

```
$# === 882 nodes created. IDs = 326:1207.  
$# === 400 elements created. IDs = 193:592.  
ga_view_aa_set( -57.941925, 39.789158, 43.703163 )  
ga_view_center_set( -18.508518, -0.841702 )  
ga_view_zoom_set( 41.786865 )
```

RHS Window

reference Finite Elements

Action: Create
Object: Mesh
Type: Solid

Output ID List
Node: 1208
Element: 593

Elem Shape: Hex
Mesher: IsoMesh
Topology: Hex8

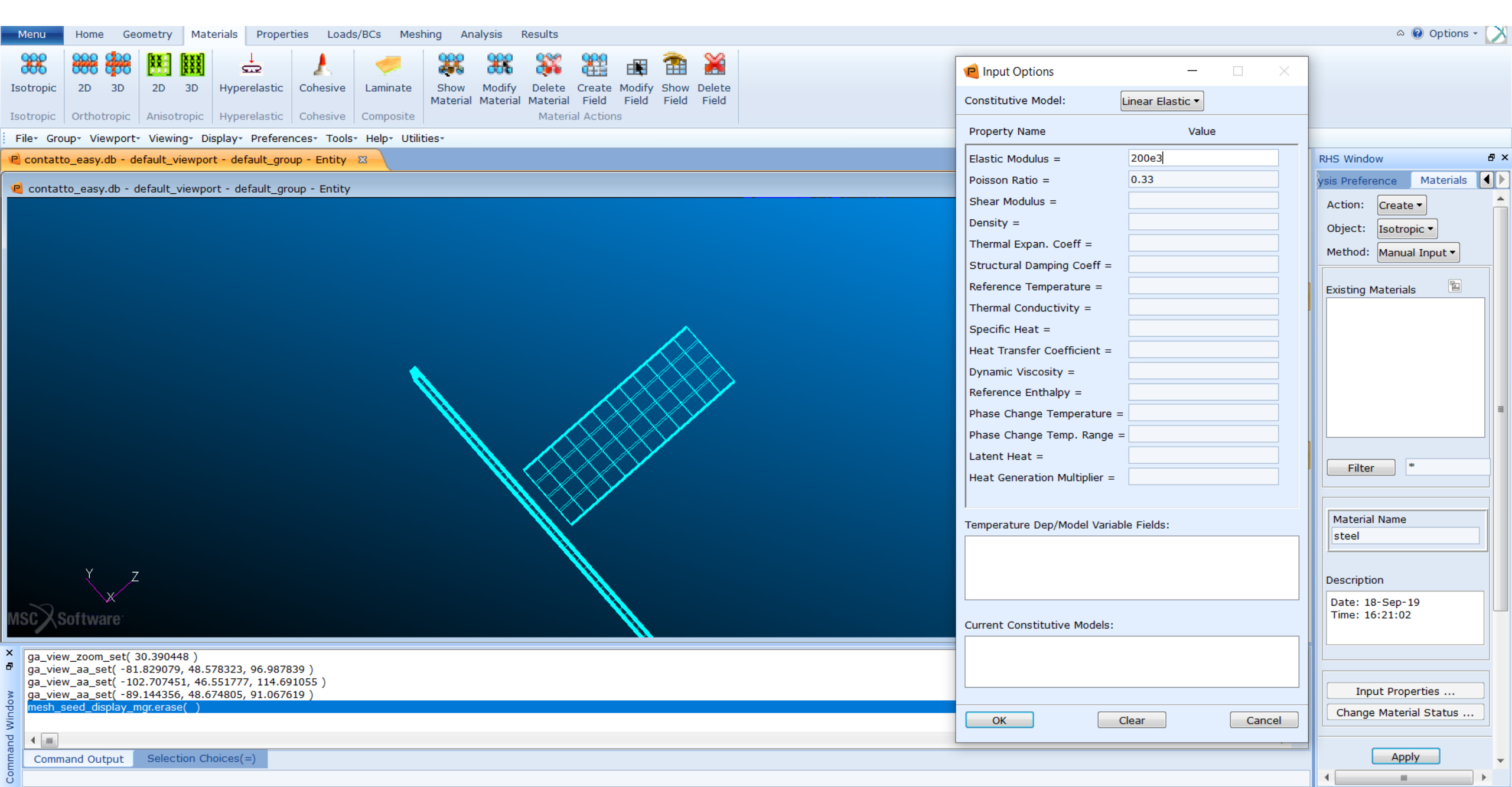
IsoMesh Parameters...
Node Coordinate Frames...

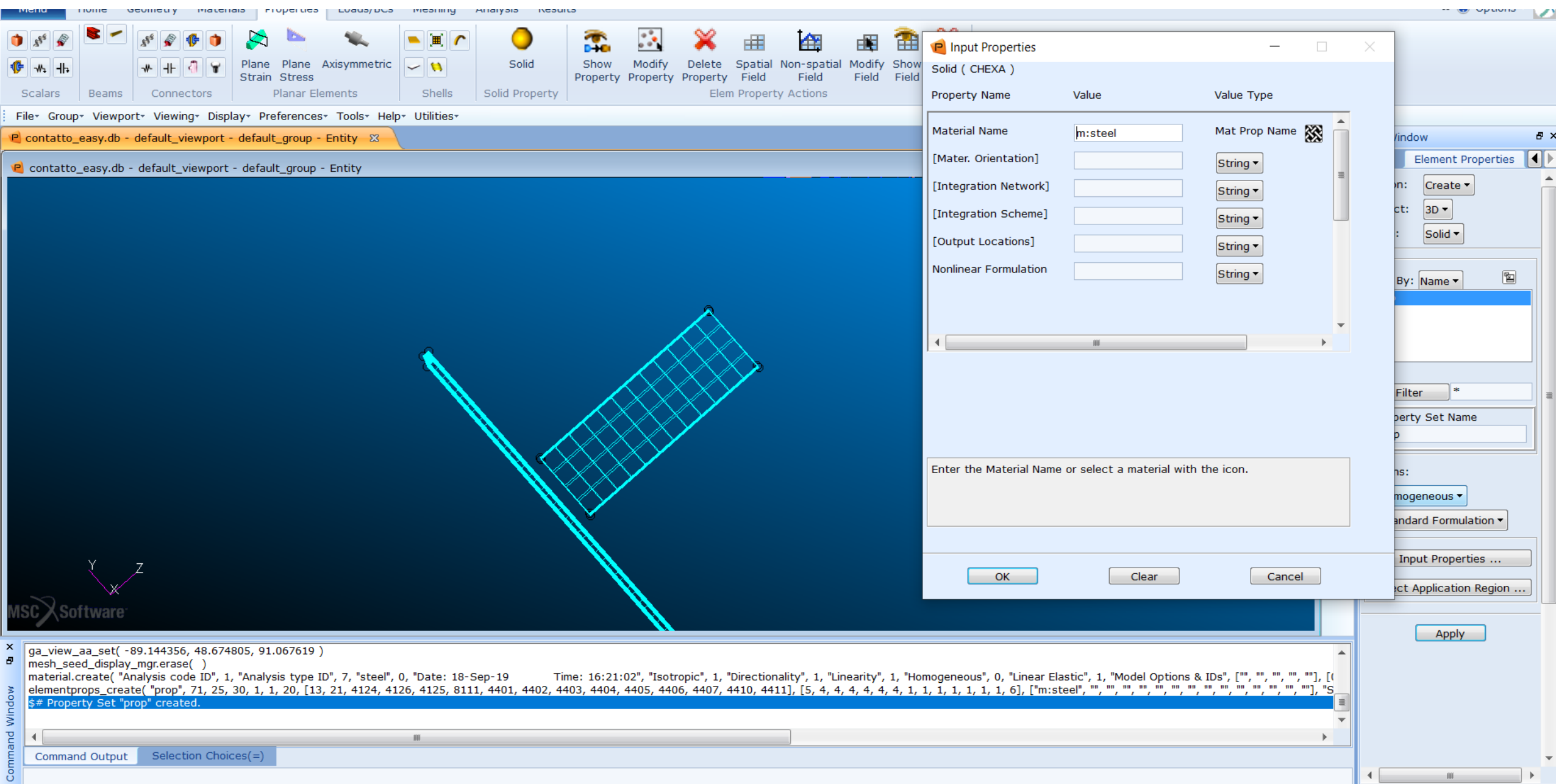
Solid List
Solid 1

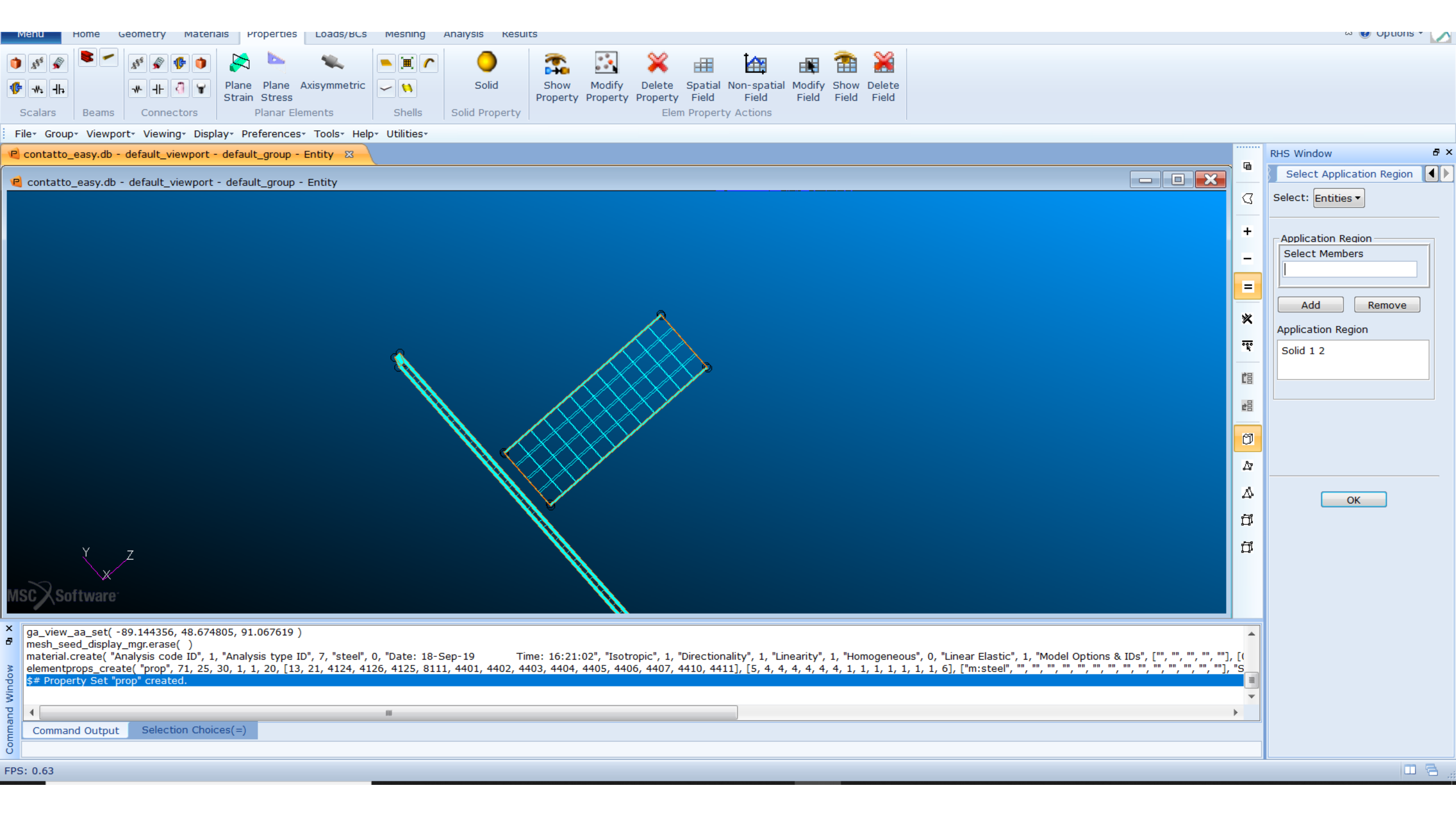
Global Edge Length
☒ Automatic Calculation
Value: 2.5028

Prop. Name: - None -
Prop. Type: - N/A -
Select Existing Prop...
Create New Property...

-Apply-







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Y

X

Z

MSC Software

Load/BC Set Scale Factor

1.

Translations <T1 T2 T3>

<0 0 0 >

Rotations <R1 R2 R3>

<0 0 0 | >

Trans Phase <Tp1 Tp2 Tp3>

< >

Rotation Phase <Rp1 Rp2 Rp3>

< >

Spatial Fields

FEM Dependent Data...

Analysis Coordinate Frame

Coord 0

OK

Reset

RHS Window

Load/Boundary Conditions

Action: Create

Object: Displacement

Type: Nodal

Option: Standard

Current Load Case:

Default...

Type: Static

Existing Sets

New Set Name

incastro

Input Data...

Select Application Region...

elementprops_create("prop", 71, 25, 30, 1, 1, 20, [13, 21, 4124, 4126, 4125, 8111, 4401, 4402, 4403, 4404, 4405, 4406, 4407, 4410, 4411], [5, 4, 4, 4, 4, 4, 4, 1, 1, 1, 1, 1, 1, 6], ["m:steel", "", "", "", "", "", "", "", "", "", "", "", "", "", "", "S"

\$# Critical Decision requested from application ELEM_PROPS

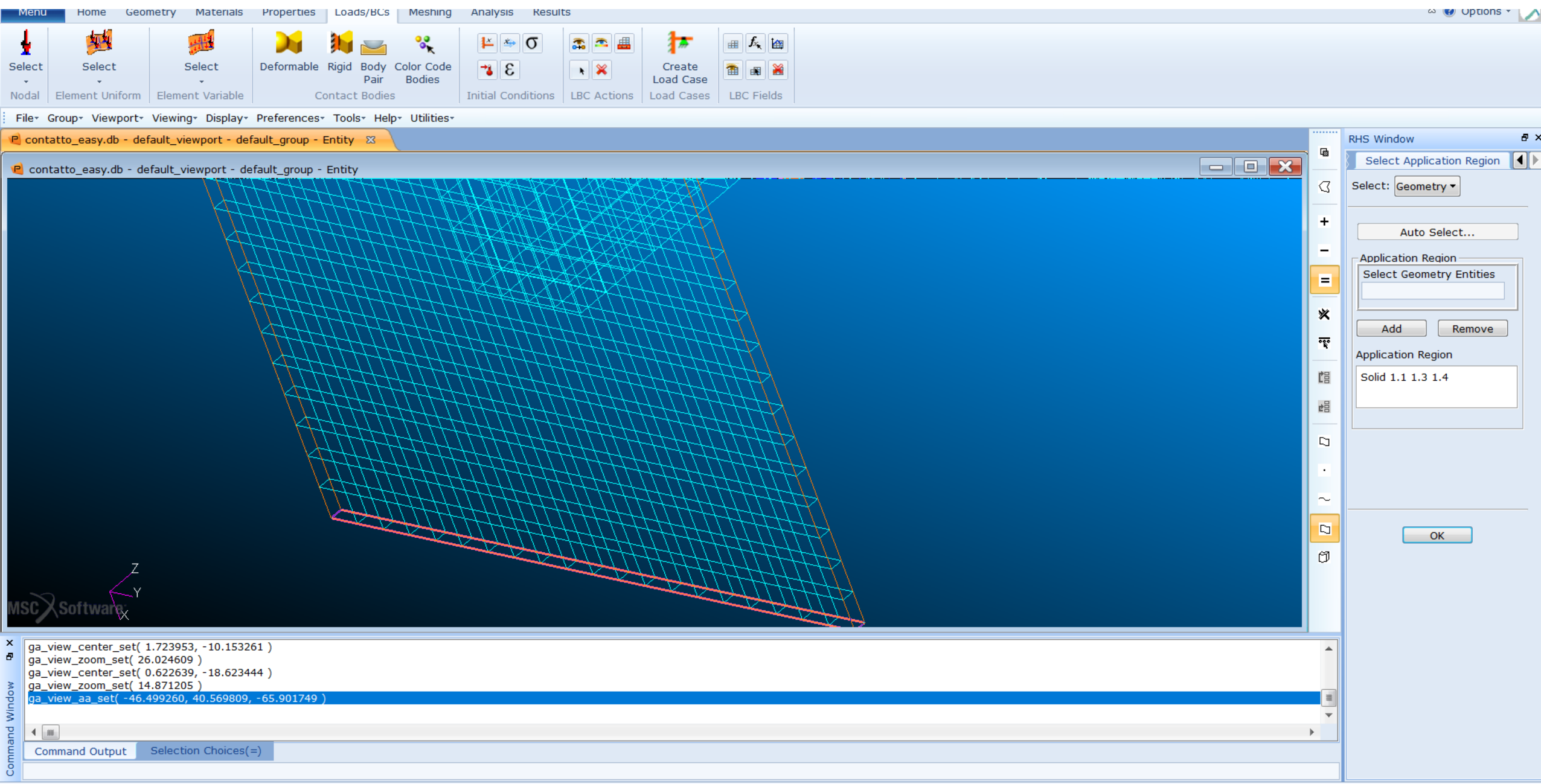
\$# Property Set "prop" Exists. Overwrite?

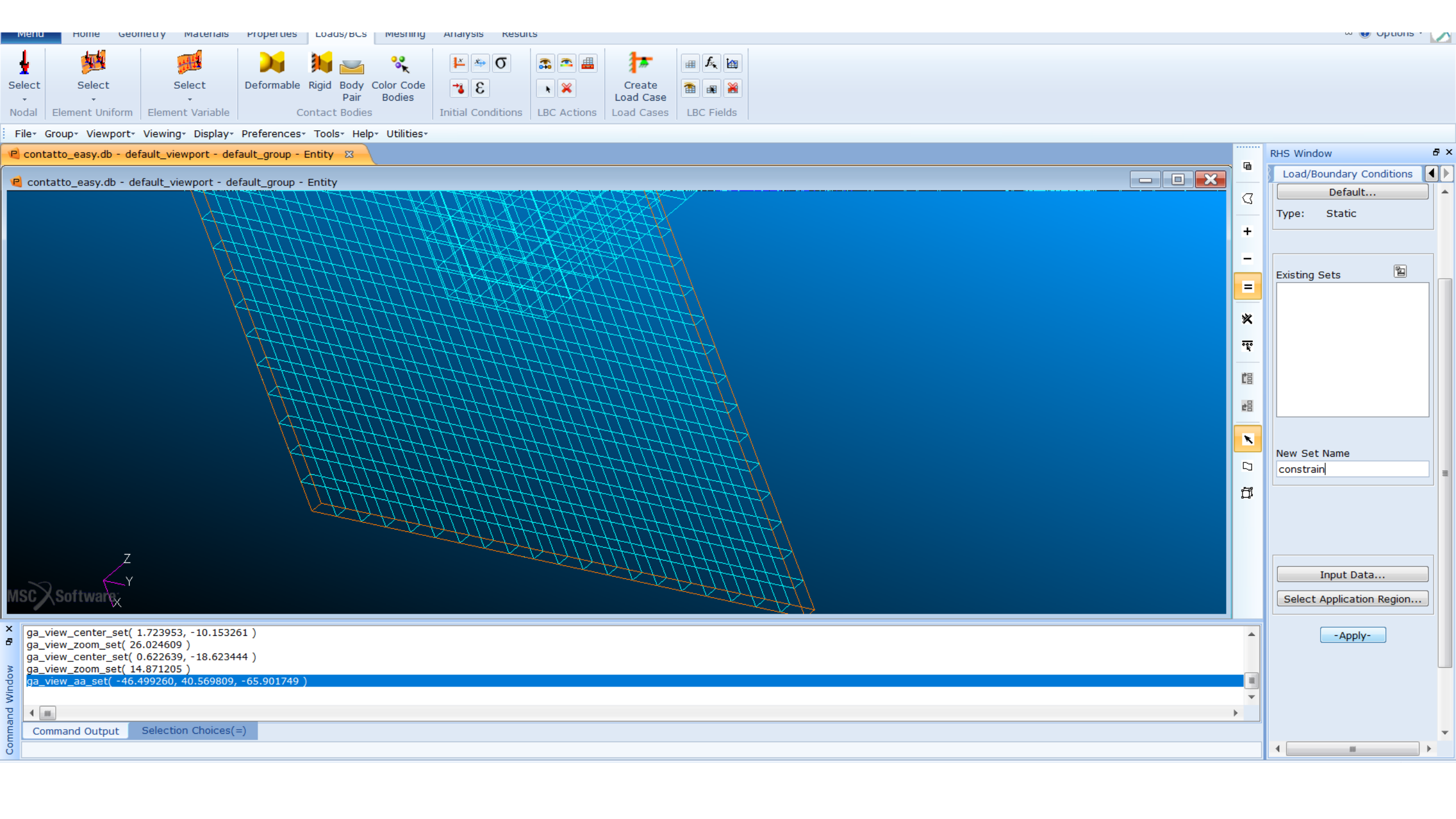
\$? YES

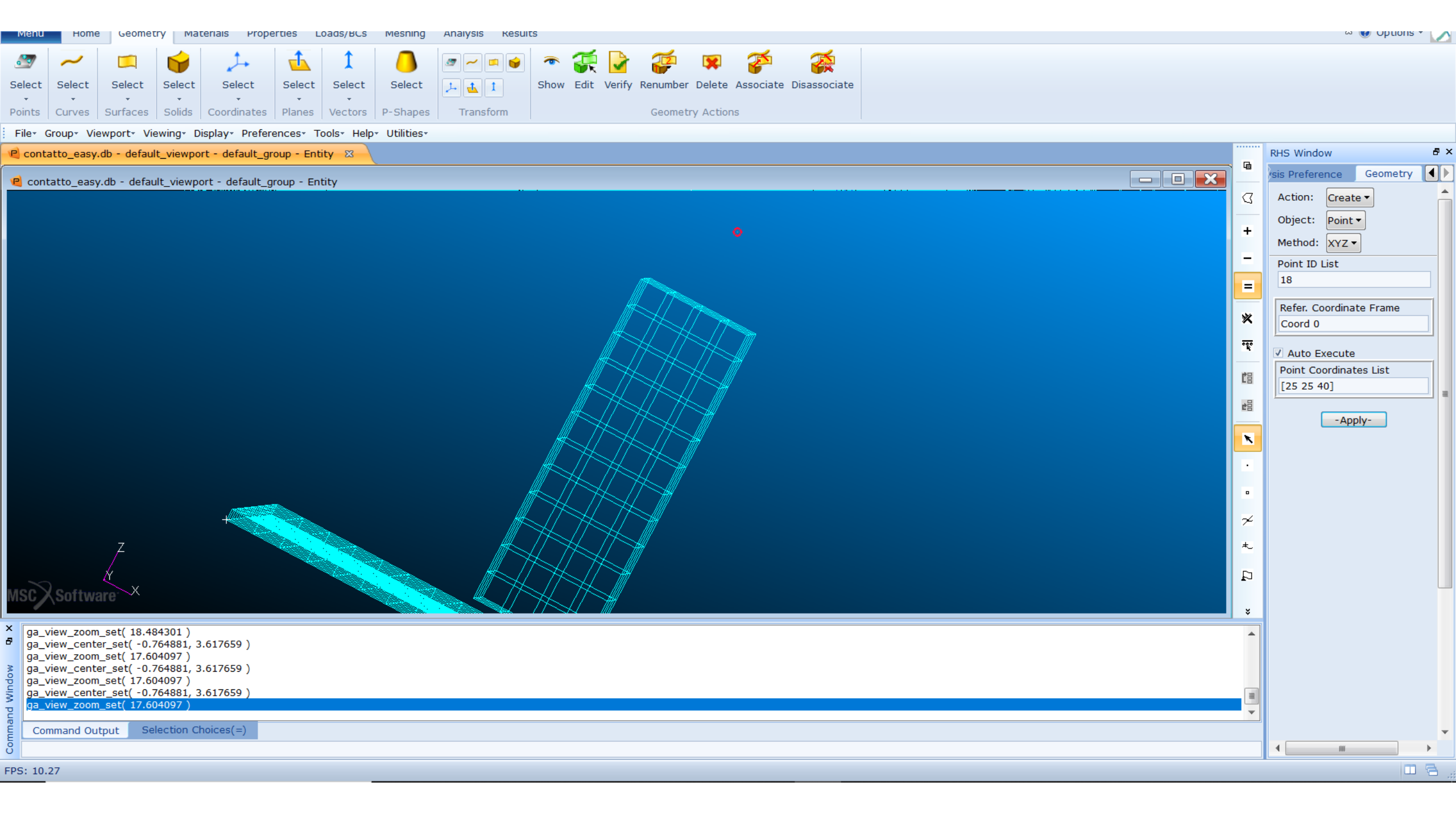
\$# Property Set "prop" created.

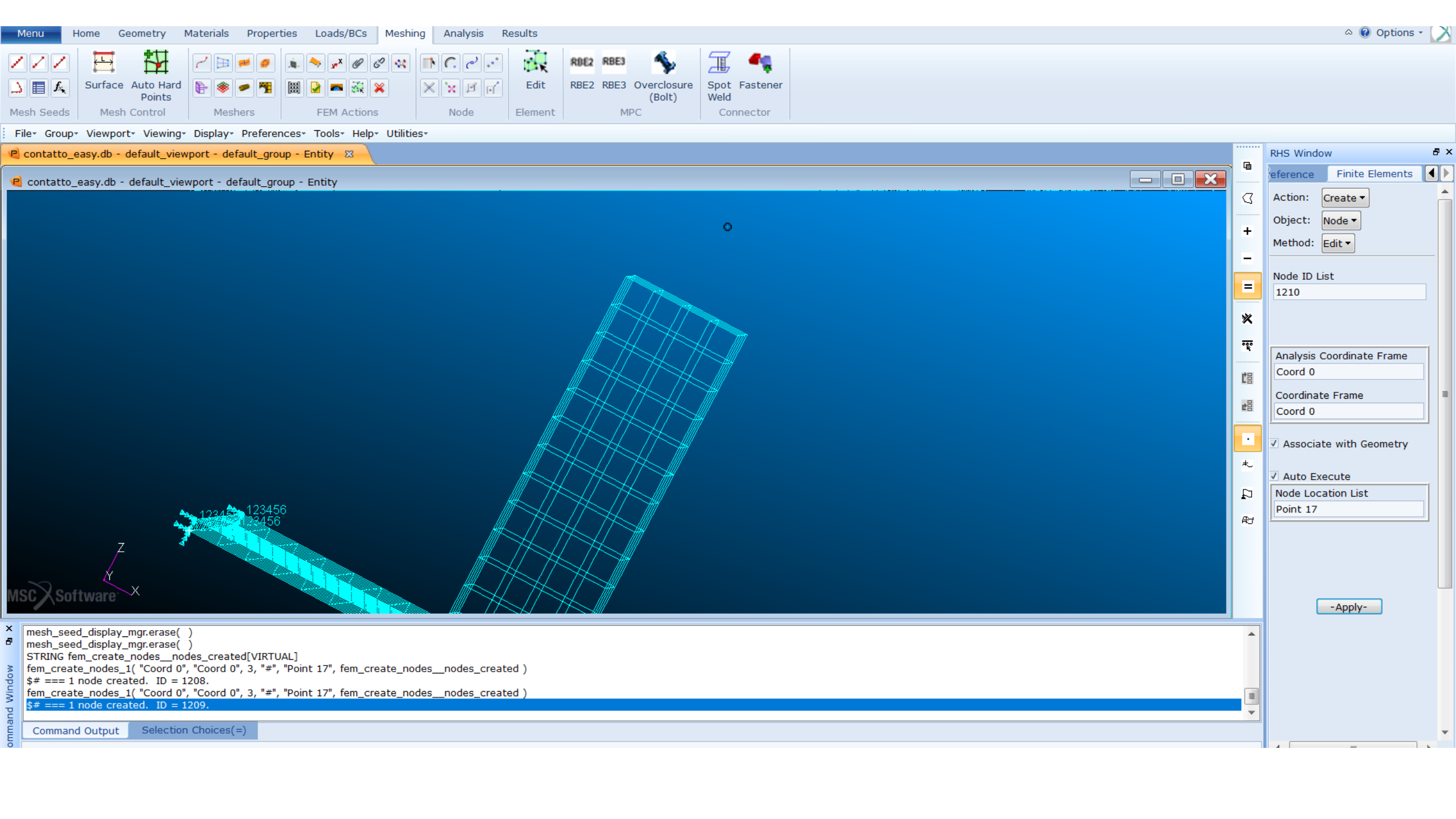
Command Output

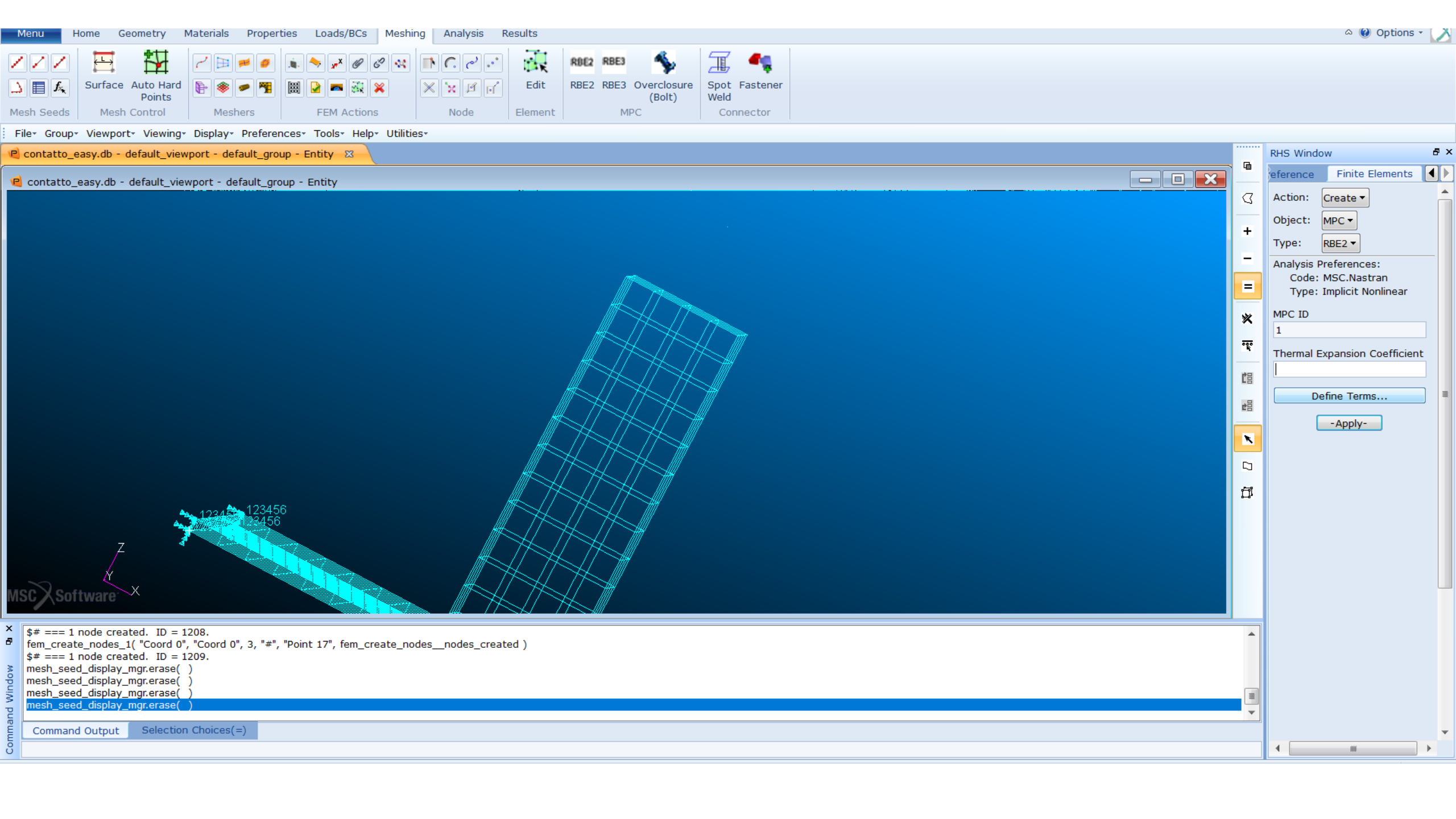
Selection Choices(=)

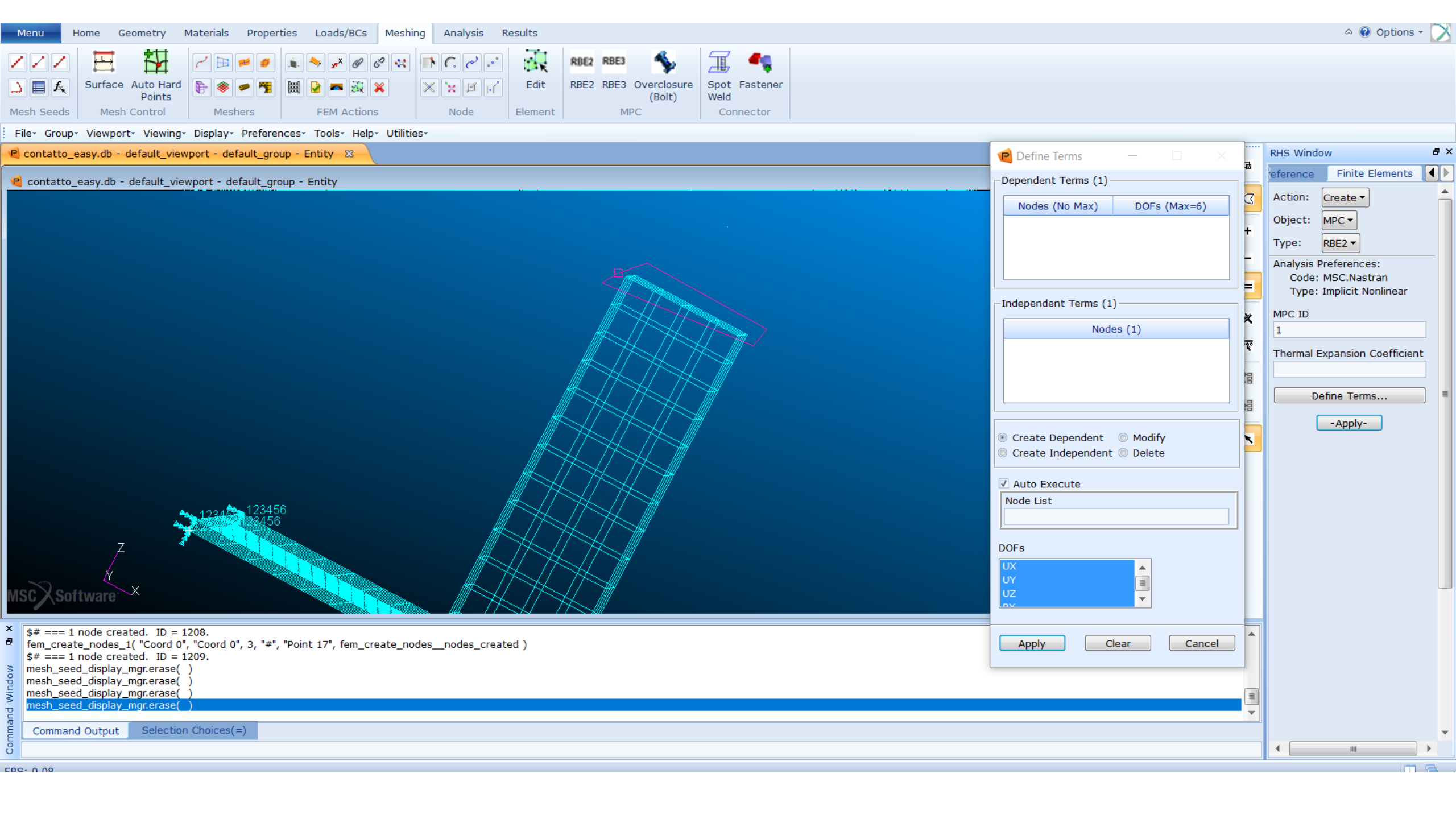












Menu

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RBE2

RBE3

Overclosure (Bolt)

Spot Weld

Fastener

MPC

Connector

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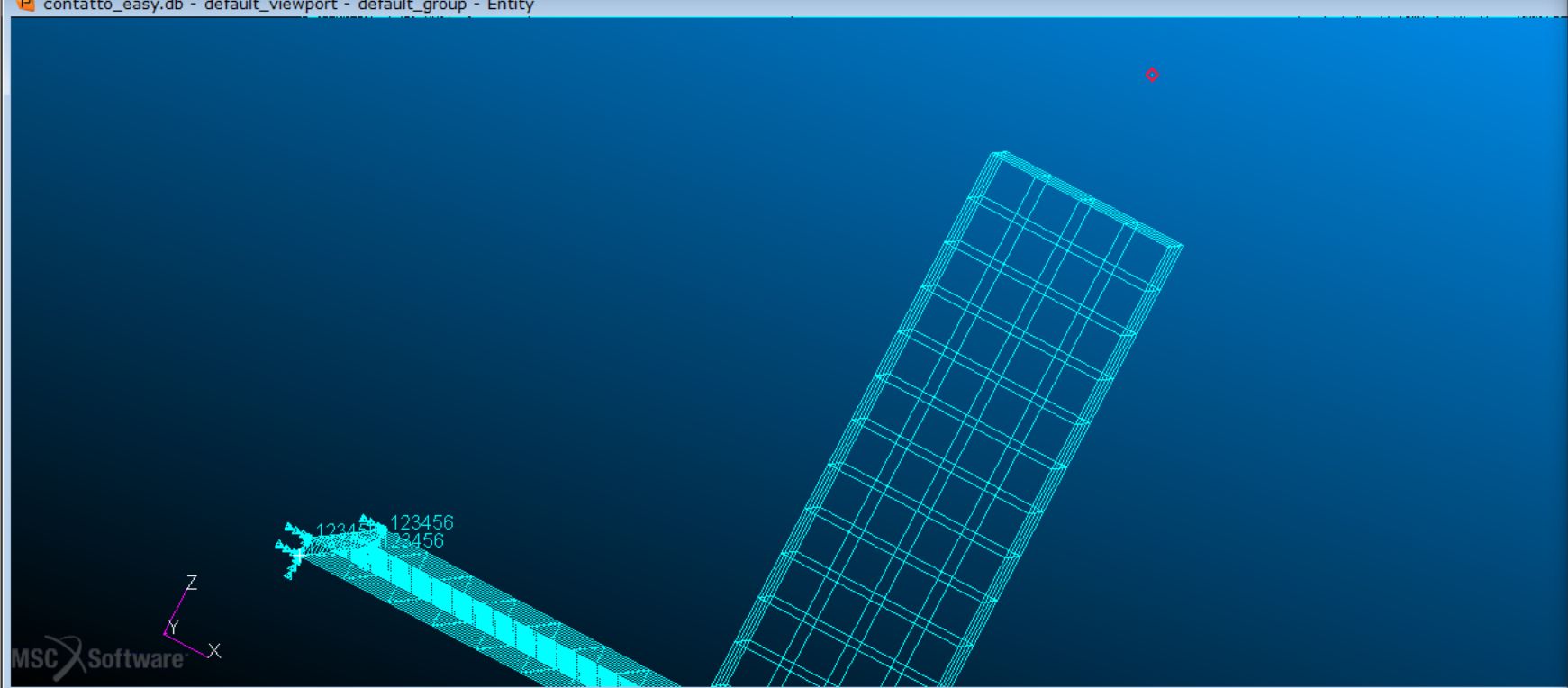
Tools

Help

Utilities

contatto_easy.db - default_viewport - default_group - Entity

contatto_easy.db - default_viewport - default_group - Entity



MSC Software

\$# === 1 node created. ID = 1208.
fem_create_nodes_1("Coord 0", "Coord 0", 3, "#", "Point 17", fem_create_nodes__nodes_created)
\$# === 1 node created. ID = 1209.
mesh_seed_display_mgr.erase()
mesh_seed_display_mgr.erase()
mesh_seed_display_mgr.erase()
mesh_seed_display_mgr.erase()

Command Output

Selection Choices(=)

Define Terms

Dependent Terms (1)

Nodes (No Max)	DOFs (Max=6)
301:325	UX,UY,UZ,RX,RY,RZ

Independent Terms (1)

Nodes (1)
1208

☐ Create Dependent

☒ Modify

☐ Create Independent

☒ Delete

Apply

Clear

Cancel

RHS Window

reference

Finite Elements

Action: Create

Object: MPC

Type: RBE2

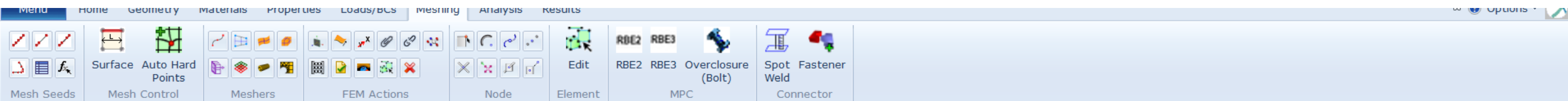
Analysis Preferences:
Code: MSC.Nastran
Type: Implicit Nonlinear

MPC ID
1

Thermal Expansion Coefficient

Define Terms...

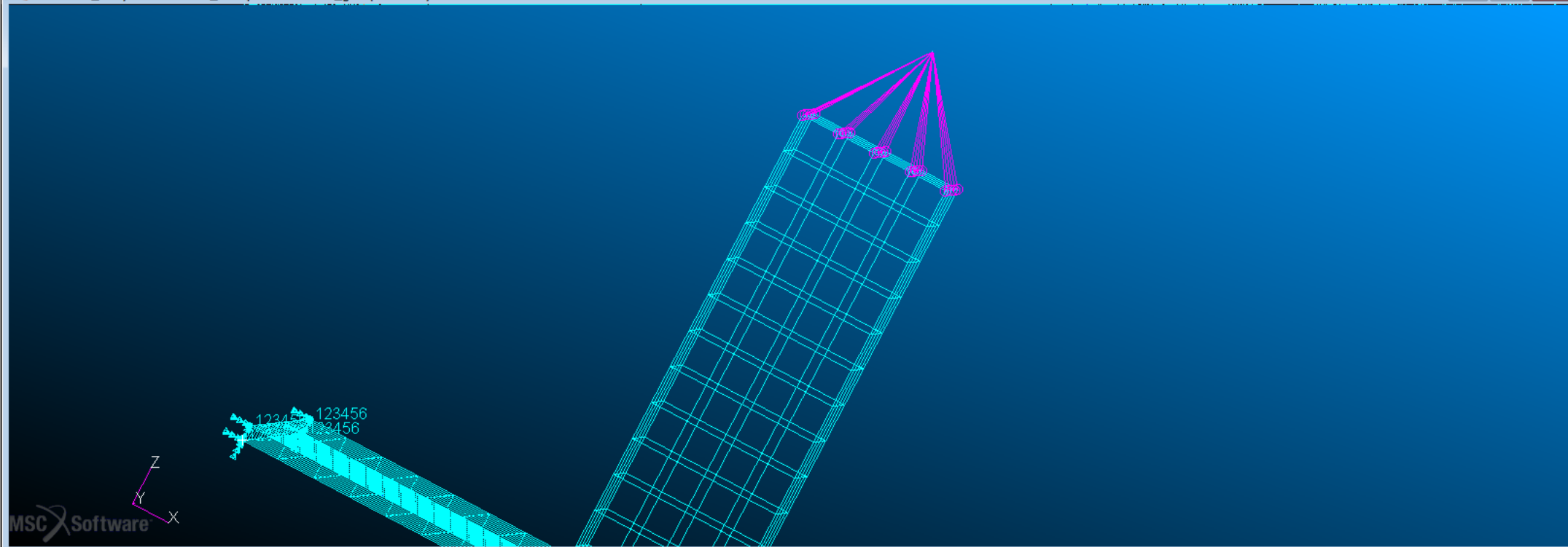
-Apply-



File Group Viewport Viewing Display Preferences Tools Help Utilities

contatto_easy.db - default_viewport - default_group - Entity

contatto_easy.db - default_viewport - default_group - Entity



```
$# === 1 node created. ID = 1209.  
mesh_seed_display_mgr.erase( )  
mesh_seed_display_mgr.erase( )  
mesh_seed_display_mgr.erase( )  
mesh_seed_display_mgr.erase( )  
fem_create_mpc_nodal2( 1, "RBE2", 0., 2, [TRUE, FALSE], ["0", "0"], ["Node 301:325", "Node 1208"], ["UX,UY,UZ,RX,RY,RZ", ""])  
$# MPC 1 created.
```

Command Output Selection Choices(=)

RHS Window

reference Finite Elements

Action: Create

Object: MPC

Type: RBE2

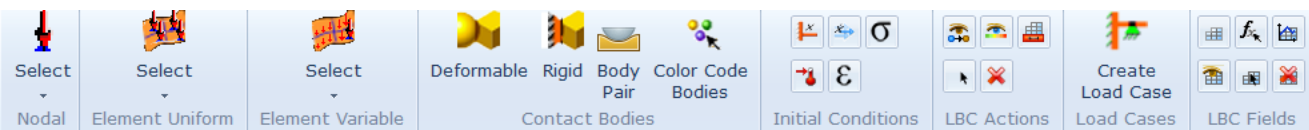
Analysis Preferences:
Code: MSC.Nastran
Type: Implicit Nonlinear

MPC ID
2

Thermal Expansion Coefficient

Define Terms...

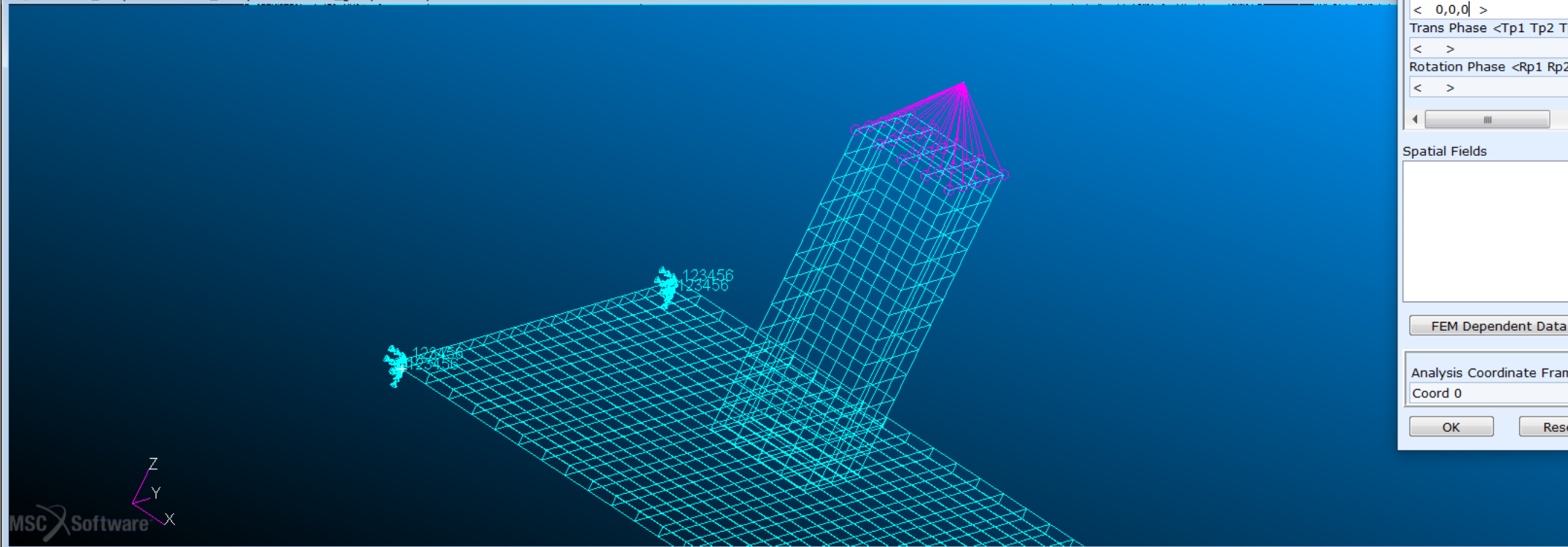
-Apply-



File Group Viewport Viewing Display Preferences Tools Help Utilities

contatto_easy.db - default_viewport - default_group - Entity

contatto_easy.db - default_viewport - default_group - Entity



Command Window

```
ga_view_zoom_set( 22.954704 )
ga_view_center_set( -1.585905, -6.303479 )
ga_view_zoom_set( 31.562717 )
ga_view_center_set( -6.484905, 0.604560 )
ga_view_zoom_set( 22.954704 )
ga_view_aa_set( -68.019730, 24.188387, -30.148556 )
mesh_seed_display_mgr.erase( )
```

Command Output Selection Choices(=)

Load/BC Set Scale Factor
1.

Translations <T1 T2 T3>
<0,0, >

Rotations <R1 R2 R3>
< 0,0,0 >

Trans Phase <Tp1 Tp2 Tp3>
< >

Rotation Phase <Rp1 Rp2 Rp3>
< >

Spatial Fields

FEM Dependent Data...

Analysis Coordinate Frame
Coord 0

OK Reset

RHS Window

Load/Boundary Conditions

Action: Create

Object: Displacement

Type: Nodal

Option: Standard

Current Load Case:
Default...

Type: Static

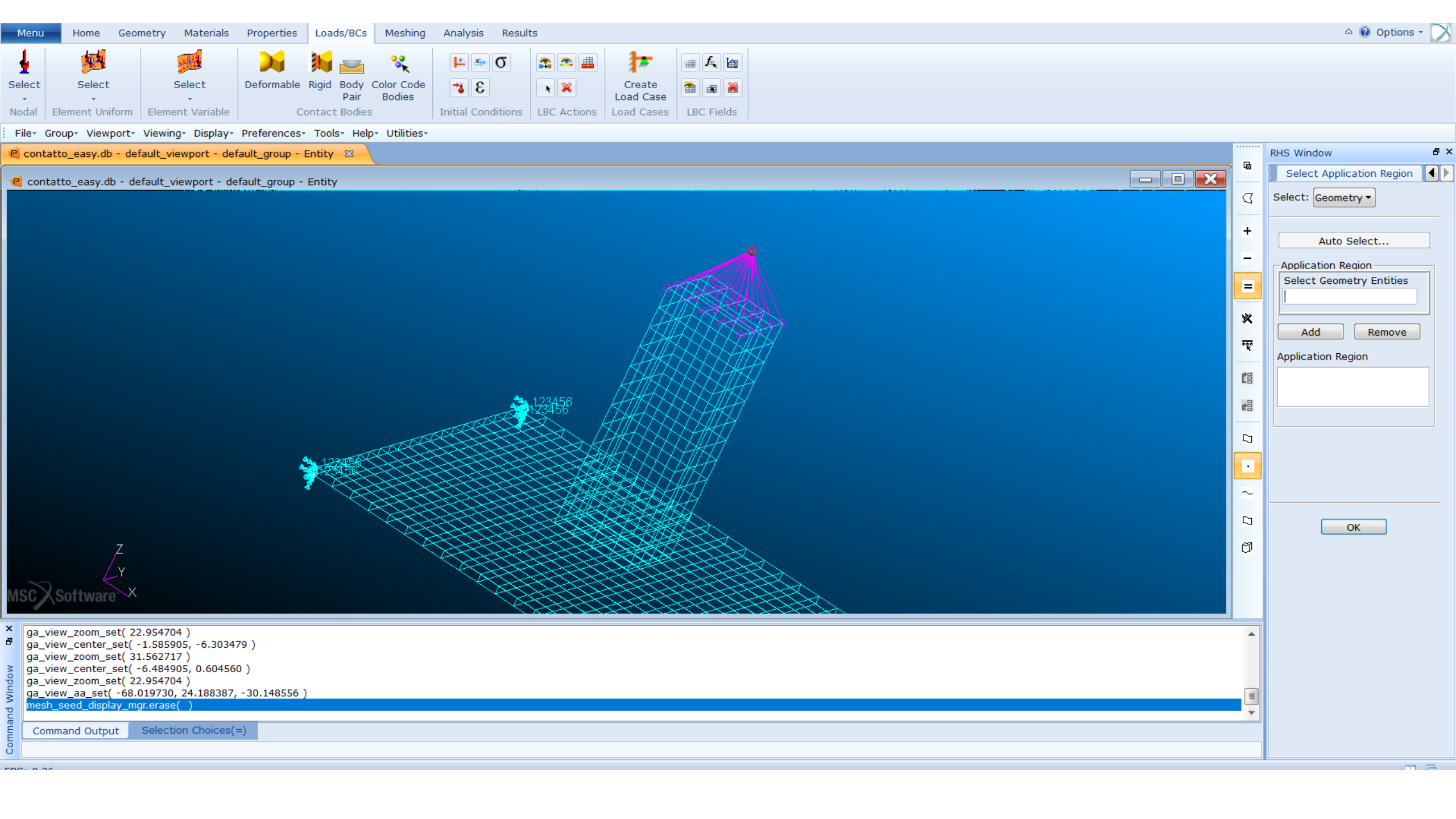
Existing Sets
constrain

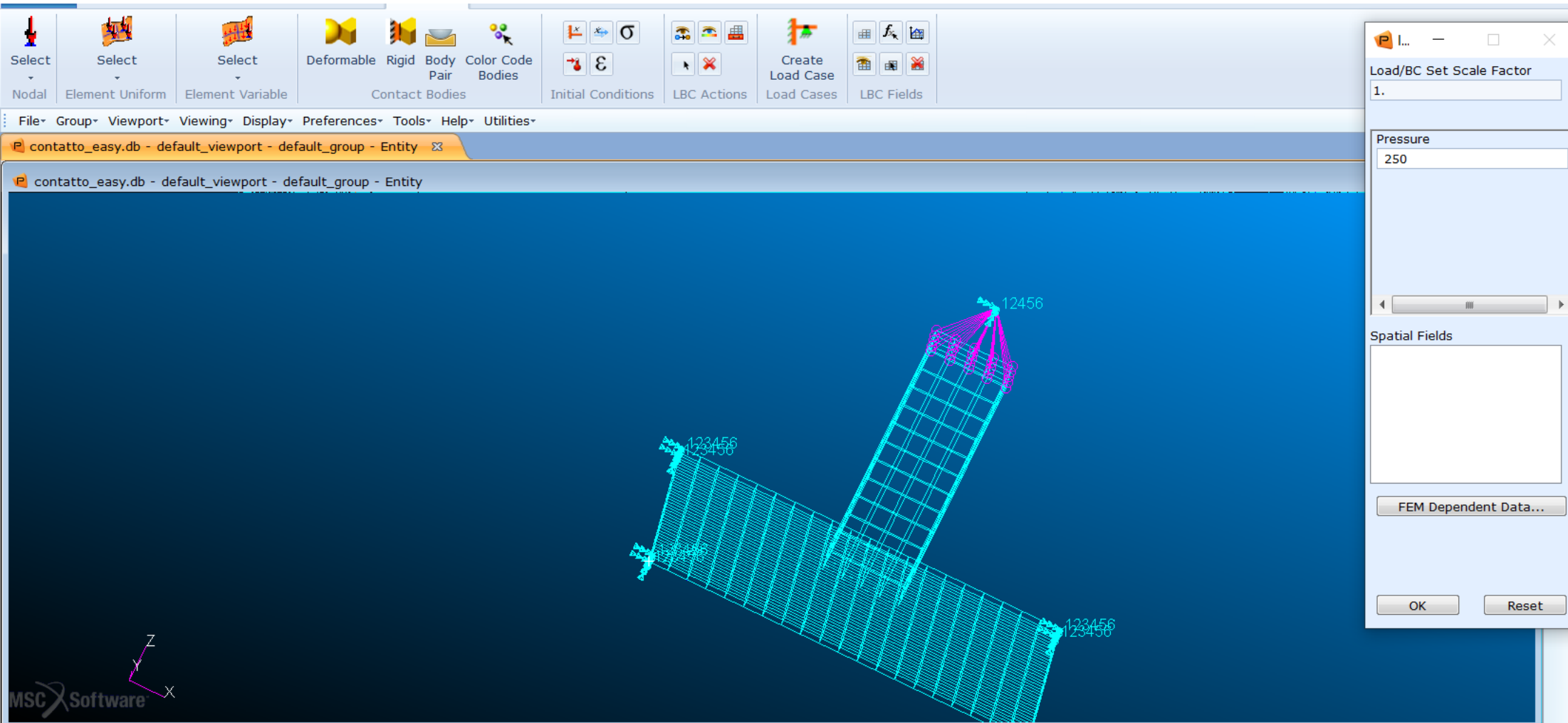
New Set Name
free_z

Input Data...

Select Application Region...

-Apply-





Load/BC Set Scale Factor
1.

Pressure
250

Spatial Fields

FEM Dependent Data...

OK Reset

RHS Window

Load/Boundary Conditions

Action: Create
Object: Pressure
Type: Element Uniform

Current Load Case: Default...
Type: Static

Existing Sets

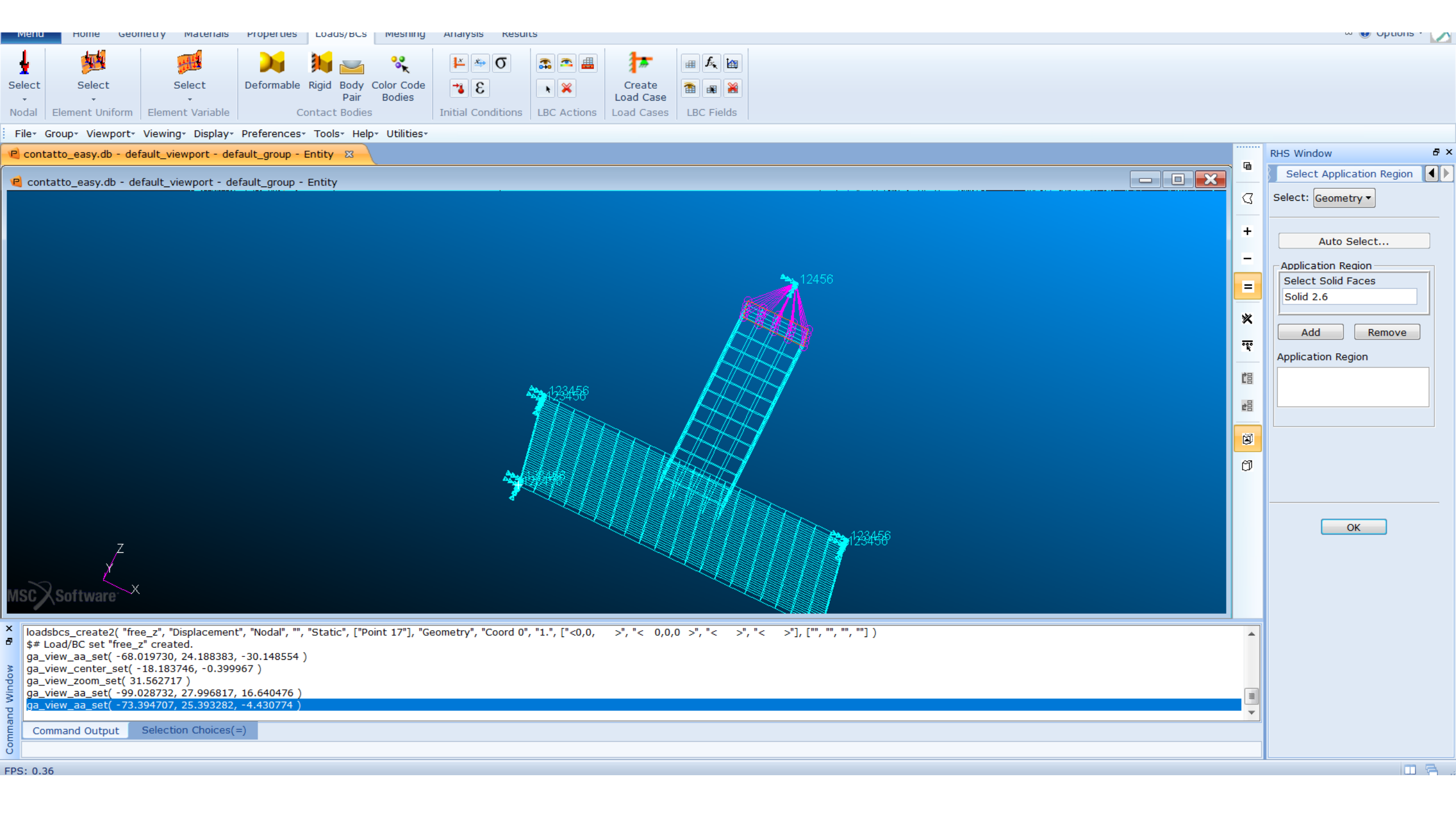
New Set Name
prex

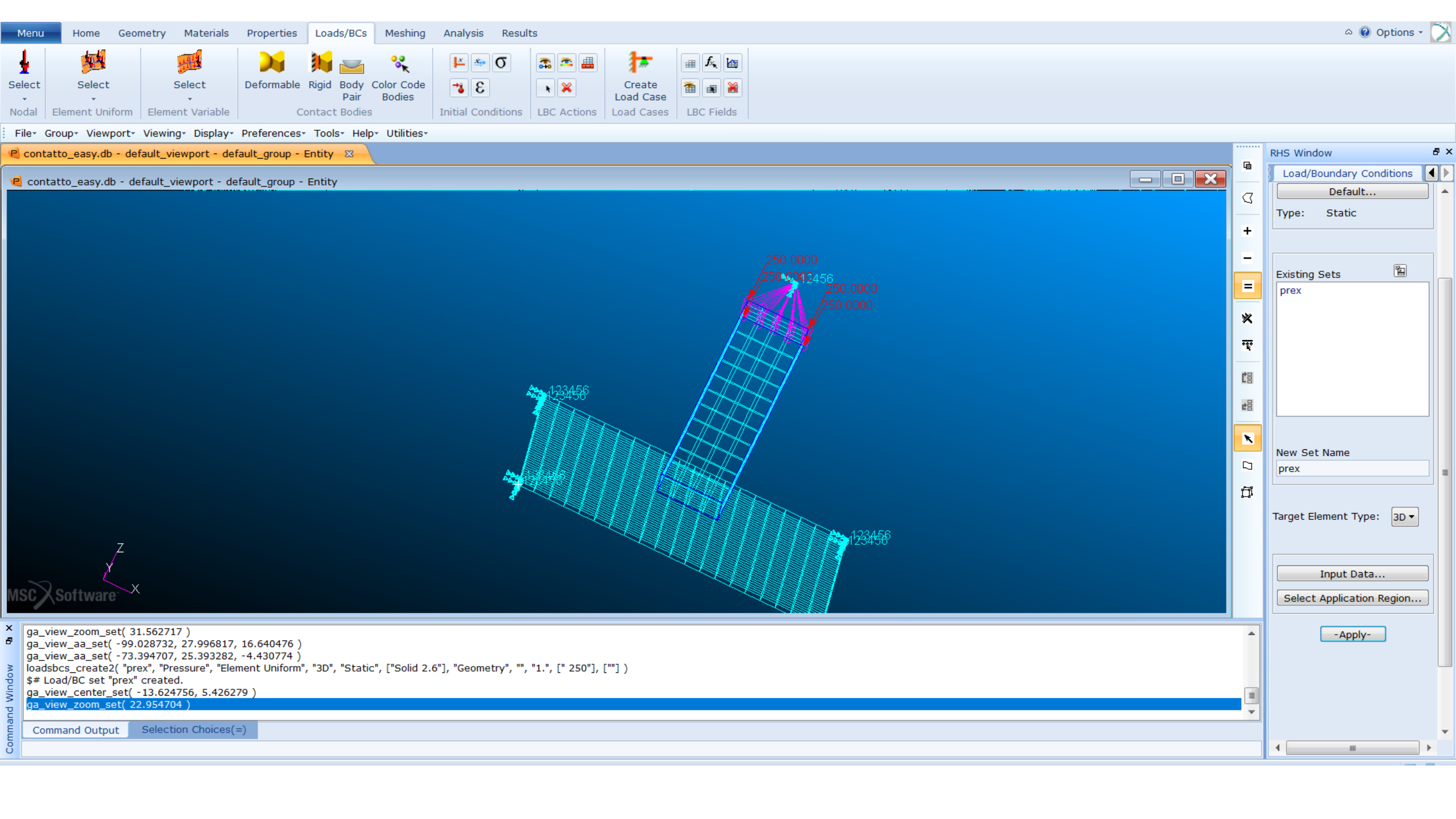
Target Element Type: 3D

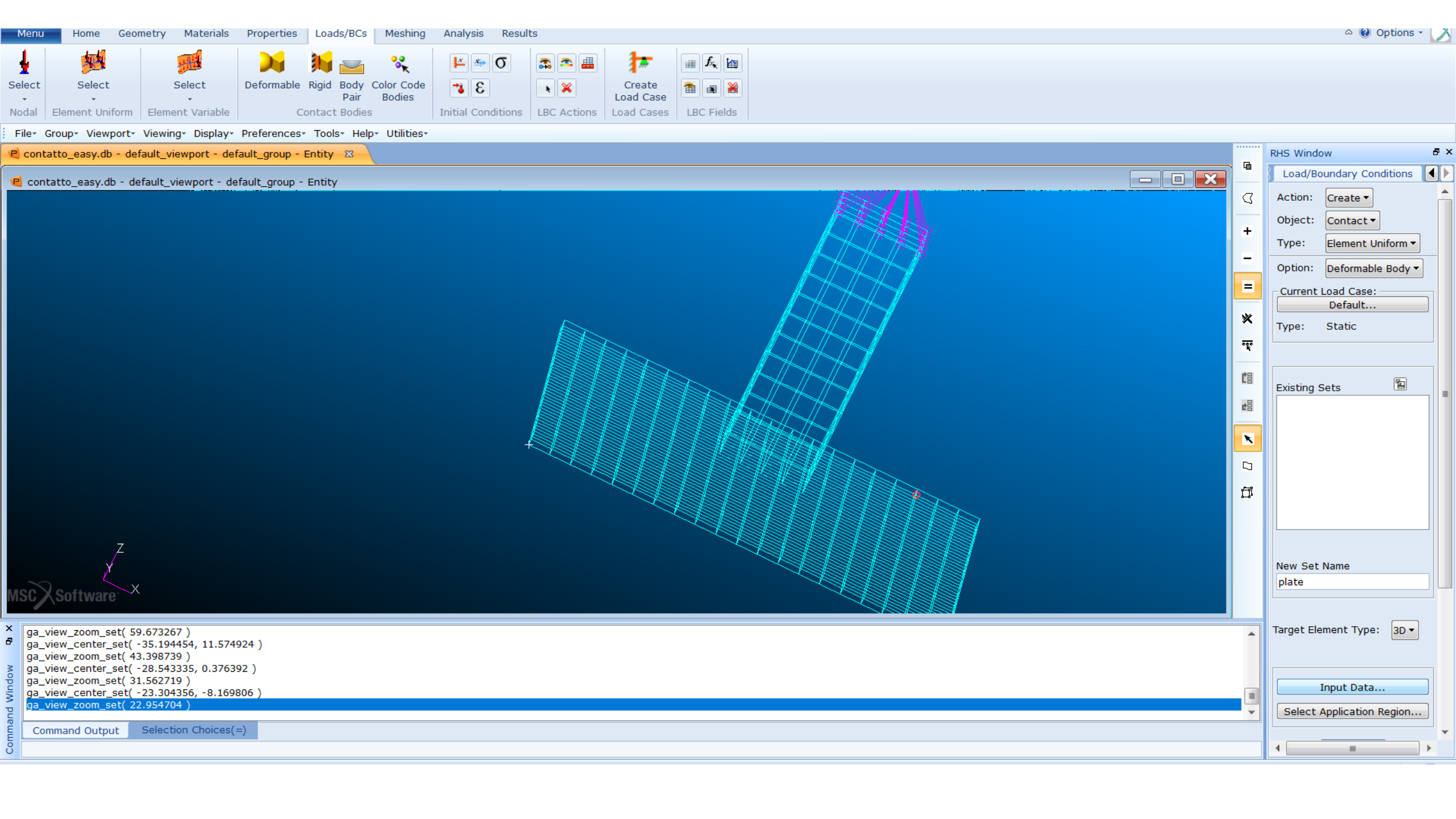
Input Data...
Select Application Region...

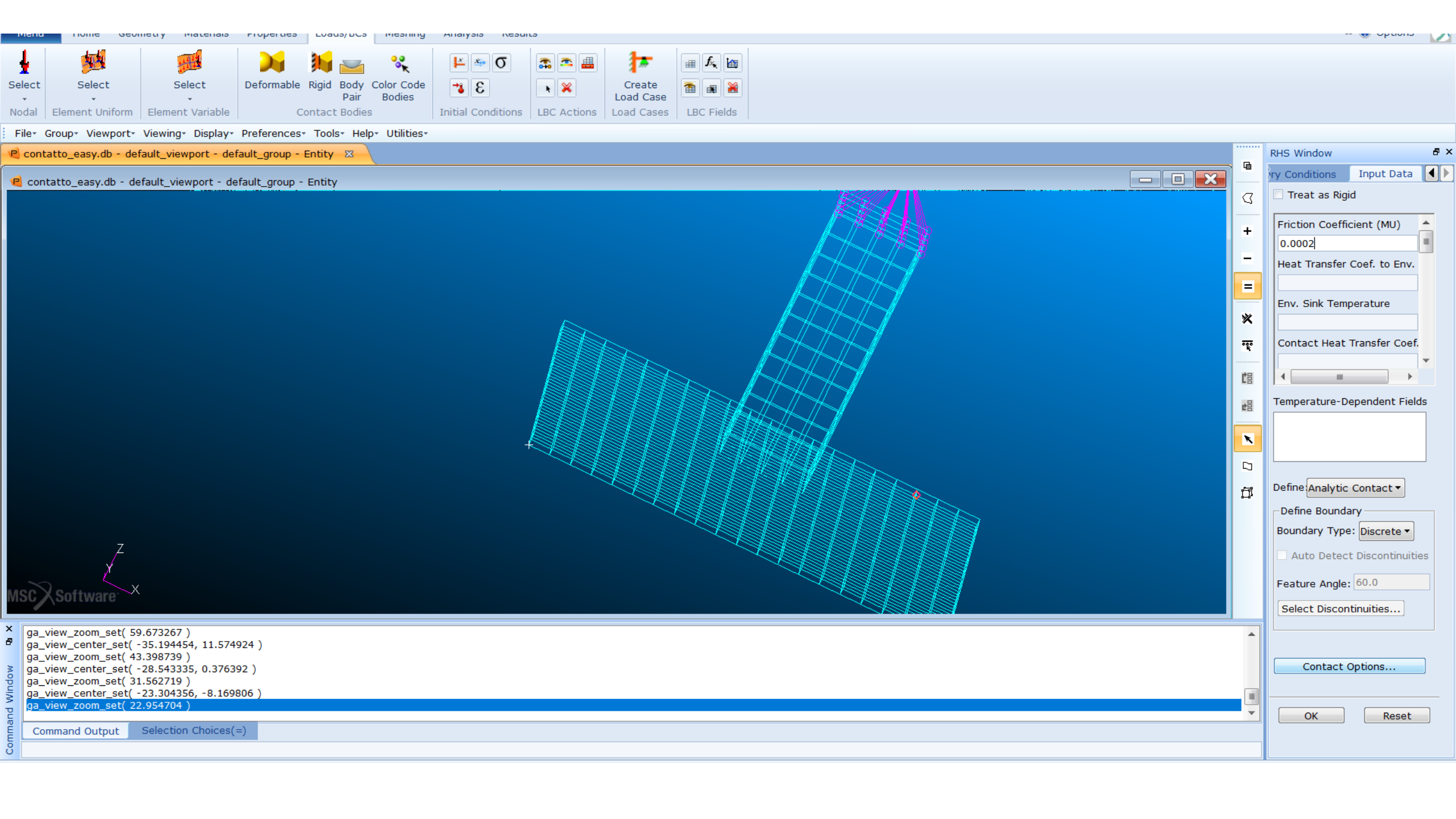
loadsbc_create2("free_z", "Displacement", "Nodal", "", "Static", ["Point 17"], "Geometry", "Coord 0", "1.", ["<0,0, >", "< 0,0,0 >", "< >", "< >"], ["", "", "", ""])
\$# Load/BC set "free_z" created.
ga_view_aa_set(-68.019730, 24.188383, -30.148554)
ga_view_center_set(-18.183746, -0.399967)
ga_view_zoom_set(31.562717)
ga_view_aa_set(-99.028732, 27.996817, 16.640476)
ga_view_aa_set(-73.394707, 25.393282, -4.430774)

Command Output Selection Choices(=)









MSC Software

File Group Viewport Viewing Display Preferences Tools Help Utilities

contactto_easy.db - default_viewport - default_group - Entity

contactto_easy.db - default_viewport - default_group - Entity

Select Nodal Element Uniform Element Variable Deformable Rigid Body Pair Color Code Bodies Initial Conditions LBC Actions Create Load Case Load Cases LBC Fields

RHS Window

Boundary Conditions Input Data

☐ Treat as Rigid

Friction Coefficient (MU)

0.0002

Heat Transfer Coef. to Env.

Env. Sink Temperature

Contact Heat Transfer Coef.

Temperature-Dependent Fields

Define: Analytic Contact

Define Boundary

Boundary Type: Discrete

☐ Auto Detect Discontinuities

Feature Angle: 60.0

Select Discontinuities...

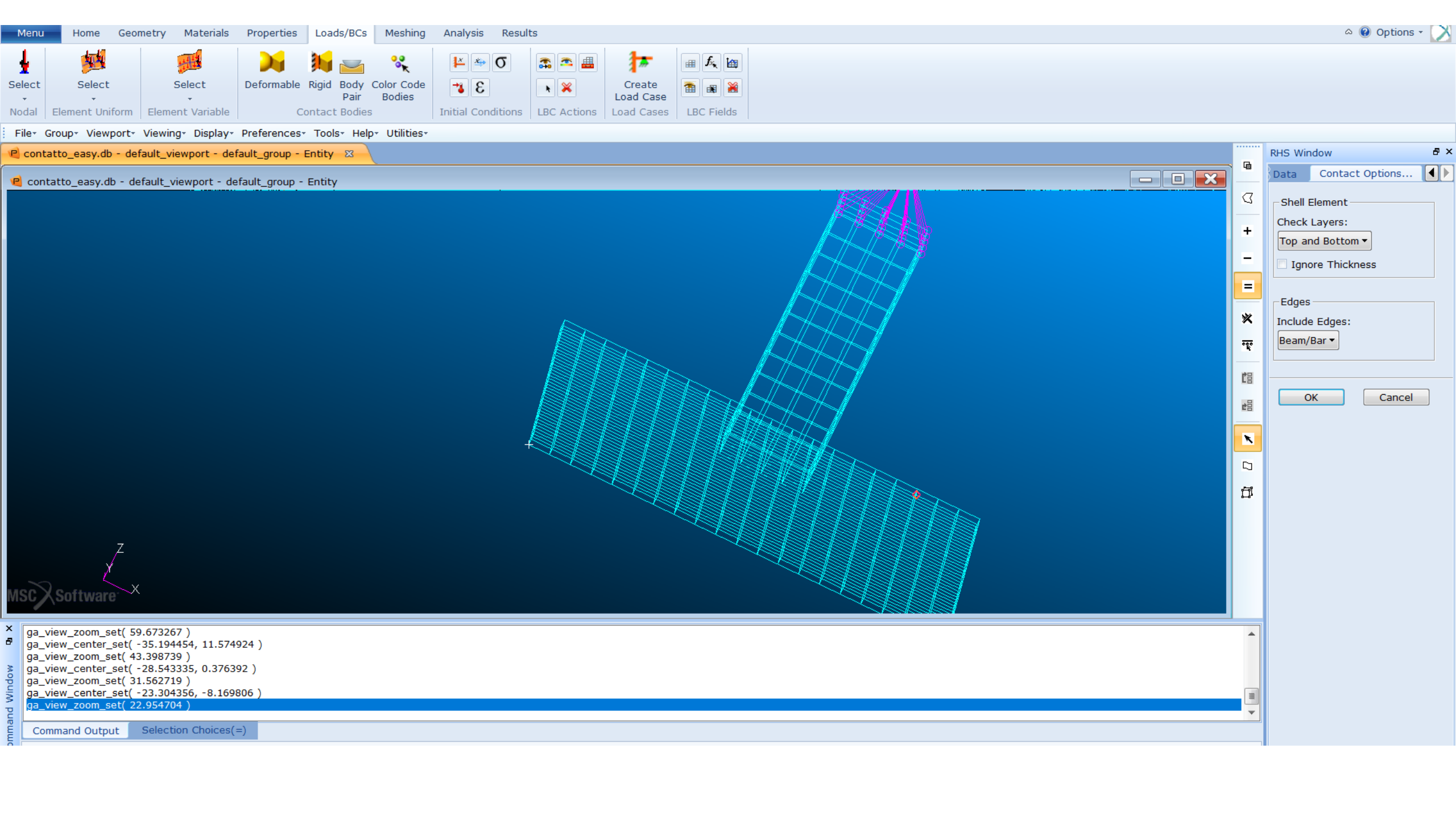
Contact Options...

OK Reset

Command Window

ga_view_zoom_set(59.673267)
ga_view_center_set(-35.194454, 11.574924)
ga_view_zoom_set(43.398739)
ga_view_center_set(-28.543335, 0.376392)
ga_view_zoom_set(31.562719)
ga_view_center_set(-23.304356, -8.169806)
ga_view_zoom_set(22.954704)

Command Output Selection Choices(=)



Menu Home Geometry Materials Properties Loads/BCs Meshing Analysis Results Options

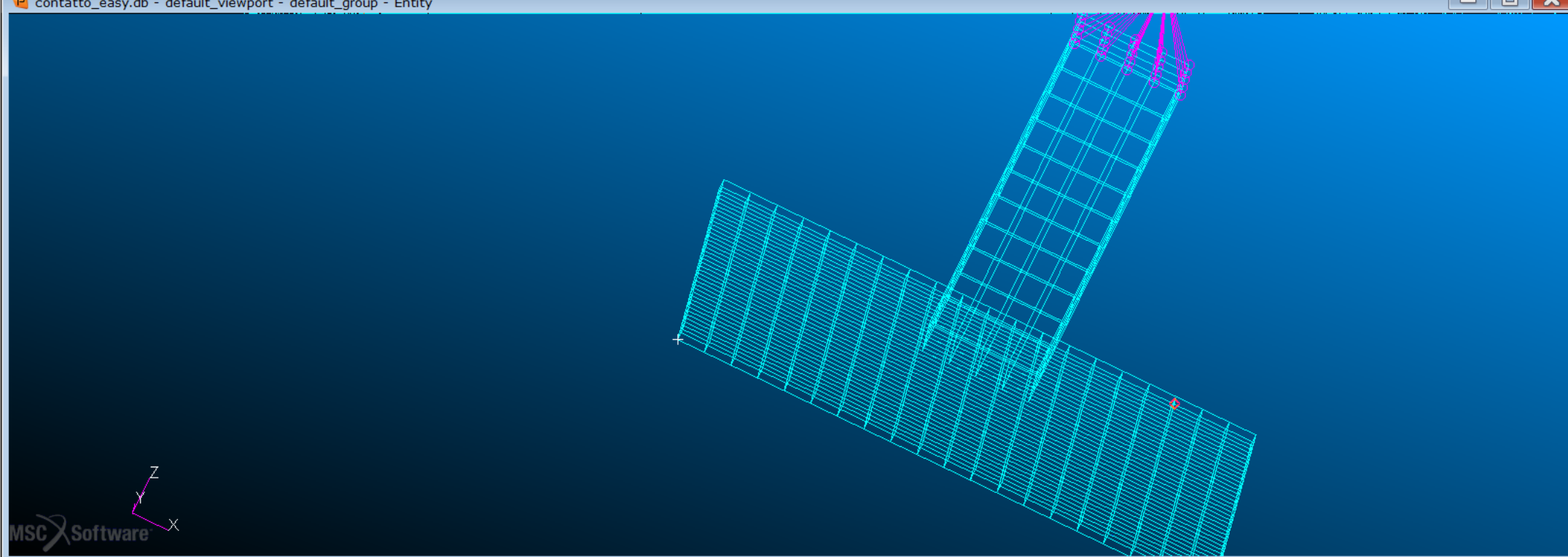
Select Select Select Deformable Rigid Body Color Code Initial Conditions LBC Actions Create Load Case Load Cases LBC Fields

Nodal Element Uniform Element Variable Contact Bodies

File Group Viewport Viewing Display Preferences Tools Help Utilities

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RHS Window

Data Contact Options...

Shell Element

Check Layers:

Top and Bottom

Ignore Thickness

Edges

Include Edges:

Beam/Bar

OK Cancel

Command Window

ga_view_zoom_set(59.673267)

ga_view_center_set(-35.194454, 11.574924)

ga_view_zoom_set(43.398739)

ga_view_center_set(-28.543335, 0.376392)

ga_view_zoom_set(31.562719)

ga_view_center_set(-23.304356, -8.169806)

ga_view_zoom_set(22.954704)

Command Output Selection Choices(=)

Select

Nodal

Select

Element Uniform

Select

Element Variable

Deformable

Rigid

Body Pair

Color Code Bodies

Initial Conditions

LBC Actions

Create Load Case

Load Cases

LBC Fields

File> Group> Viewport> Viewing> Display> Preferences> Tools> Help> Utilities>

contatto_easy.db - default_viewport - default_group - Entity

contatto_easy.db - default_viewport - default_group - Entity

MSC Software

X

Command Window

Command Output

Selection Choices(=)

FPS: 0.25

250.0000

123456

123456

123456

123456

123456

123456

123456

123456

RHS Window

Select Application Region

Select: Geometry

Auto Select...

Application Region

Select Solids

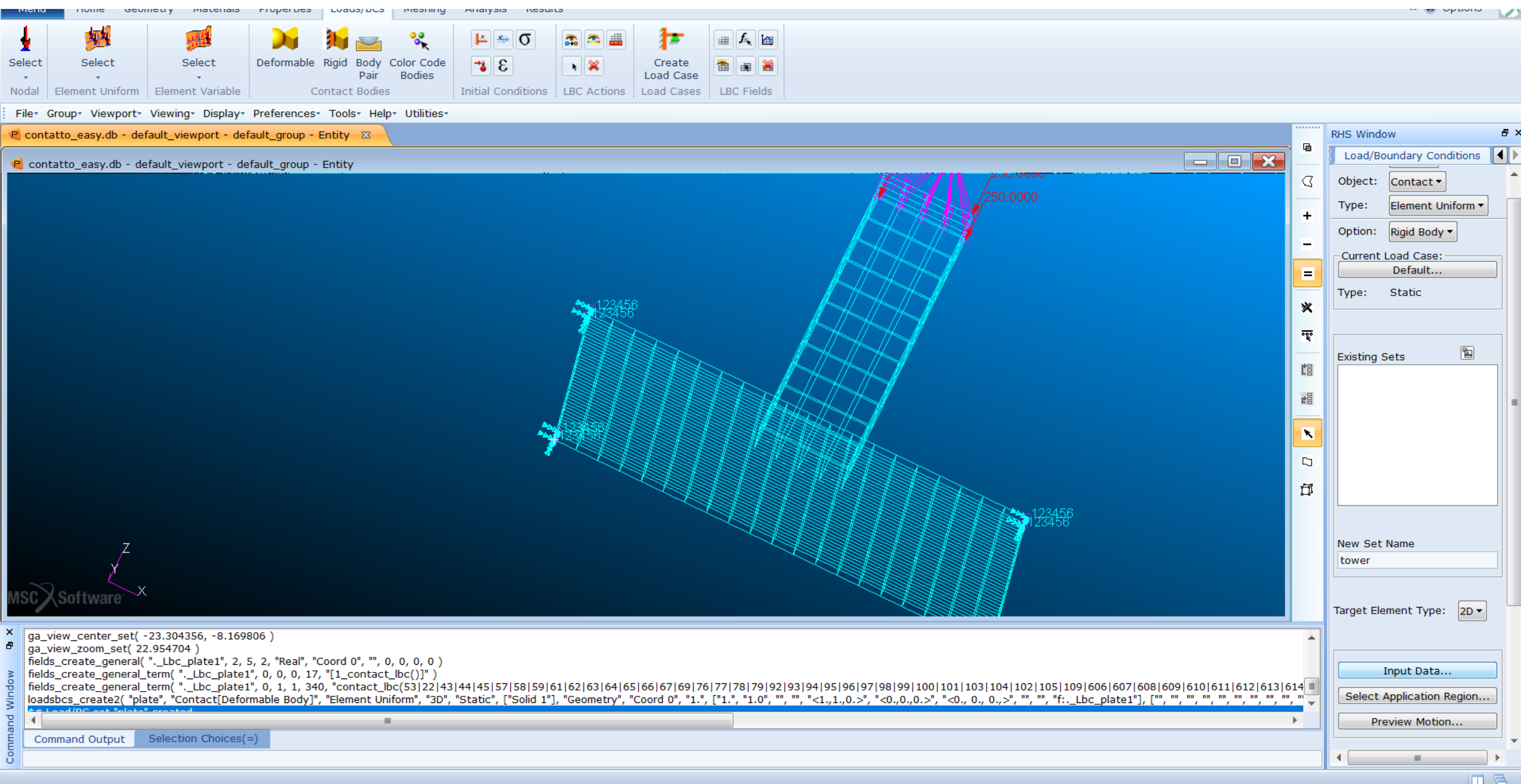
Solid 1

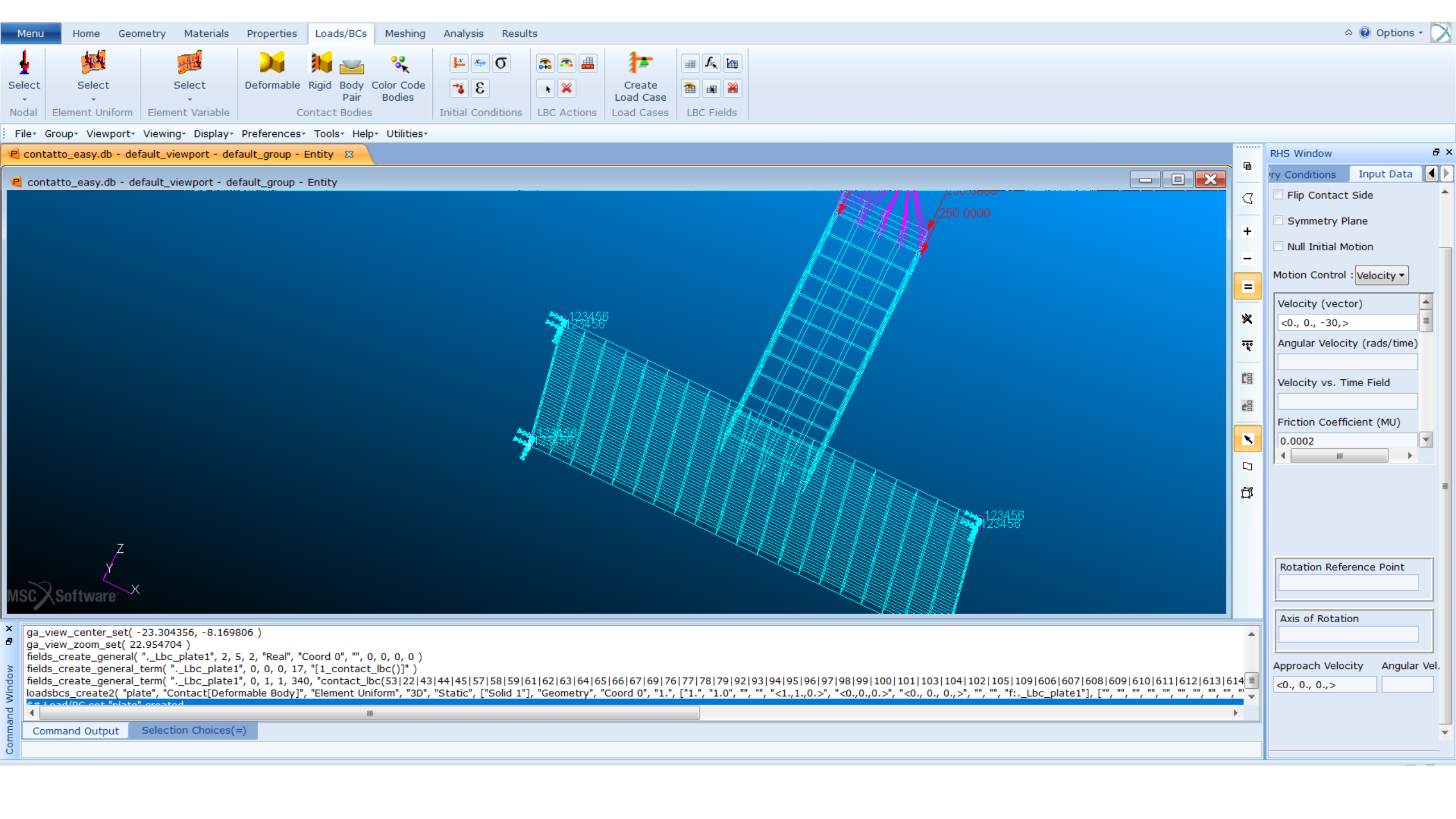
Add

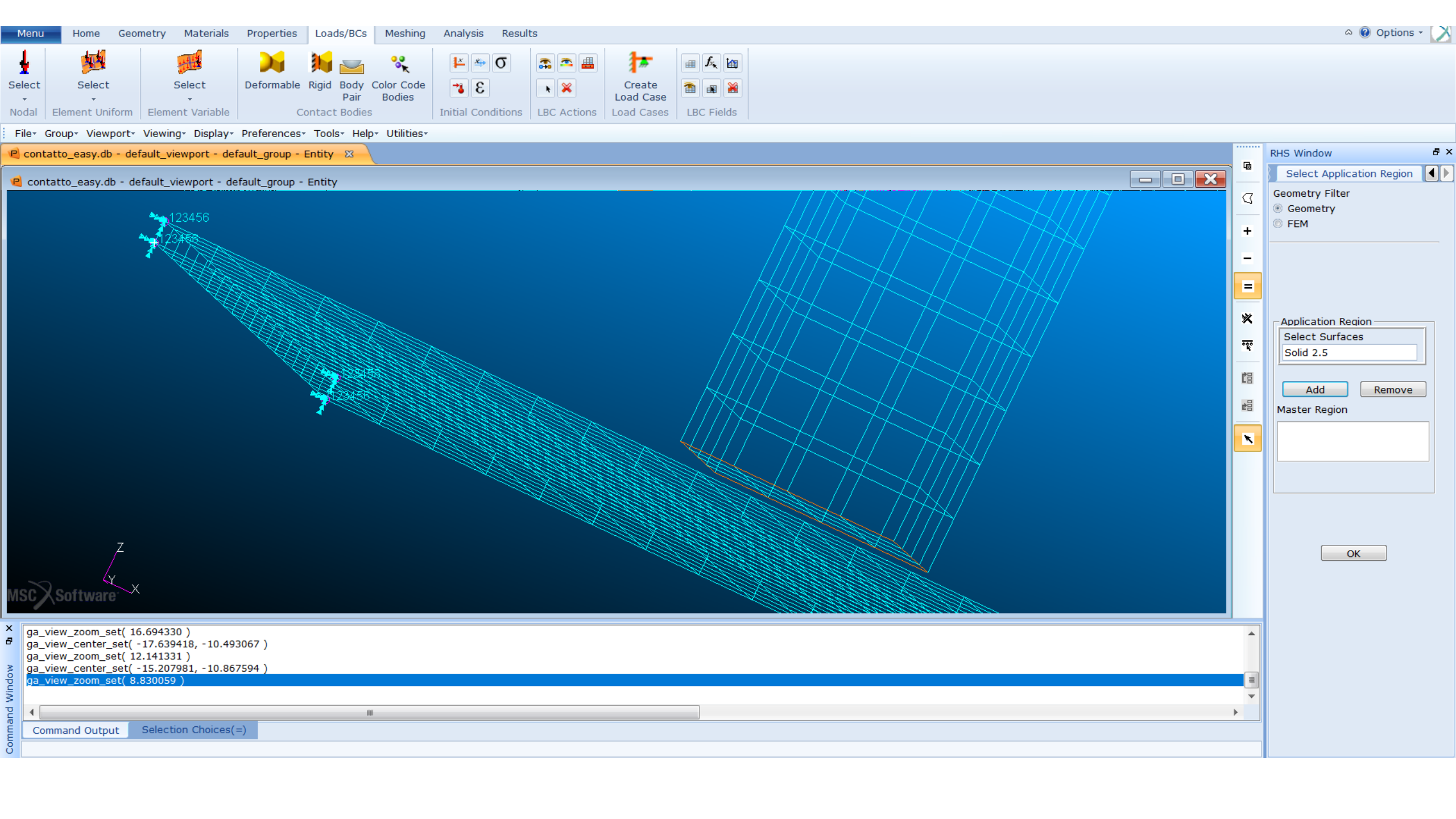
Remove

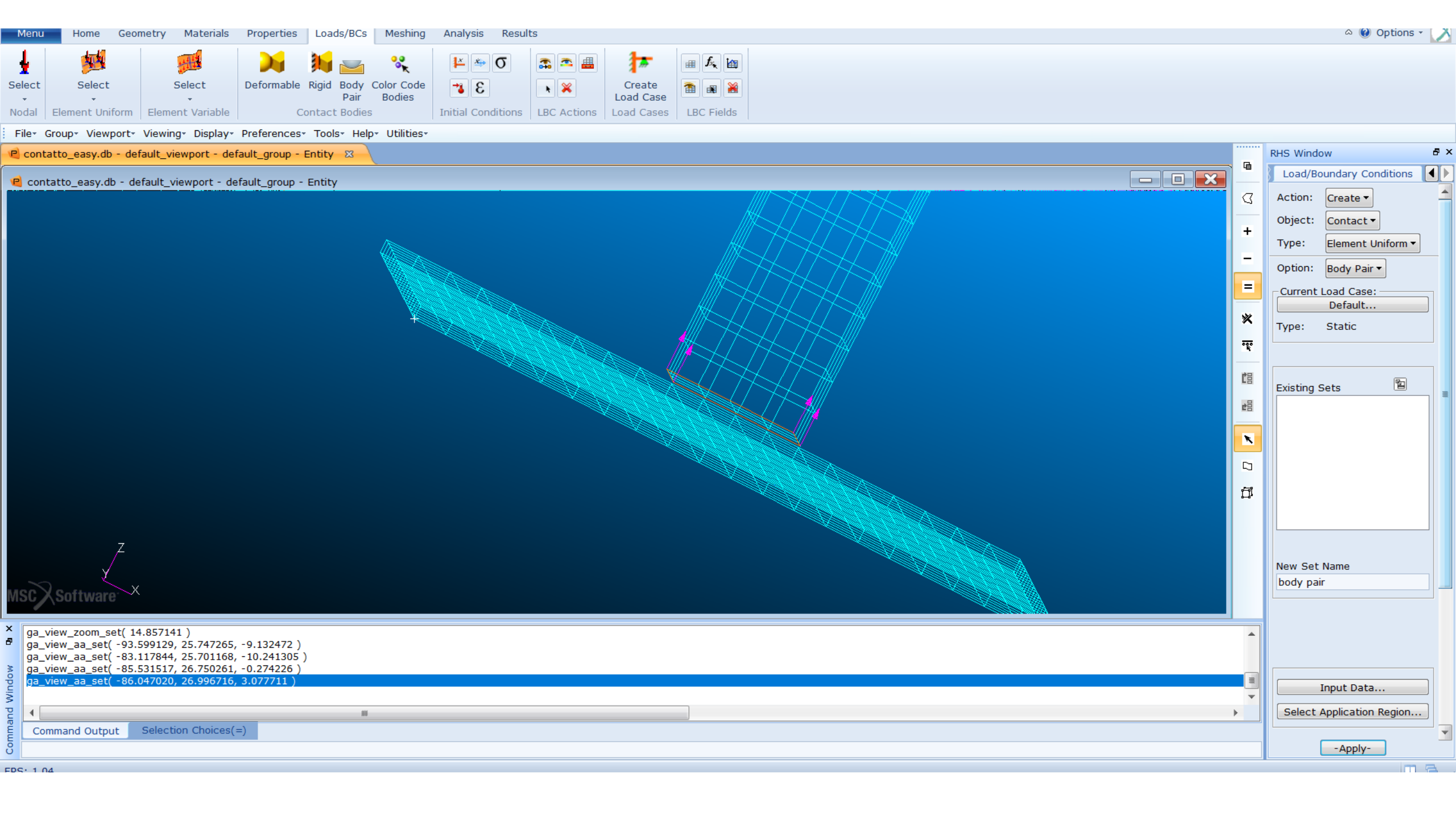
Master Region

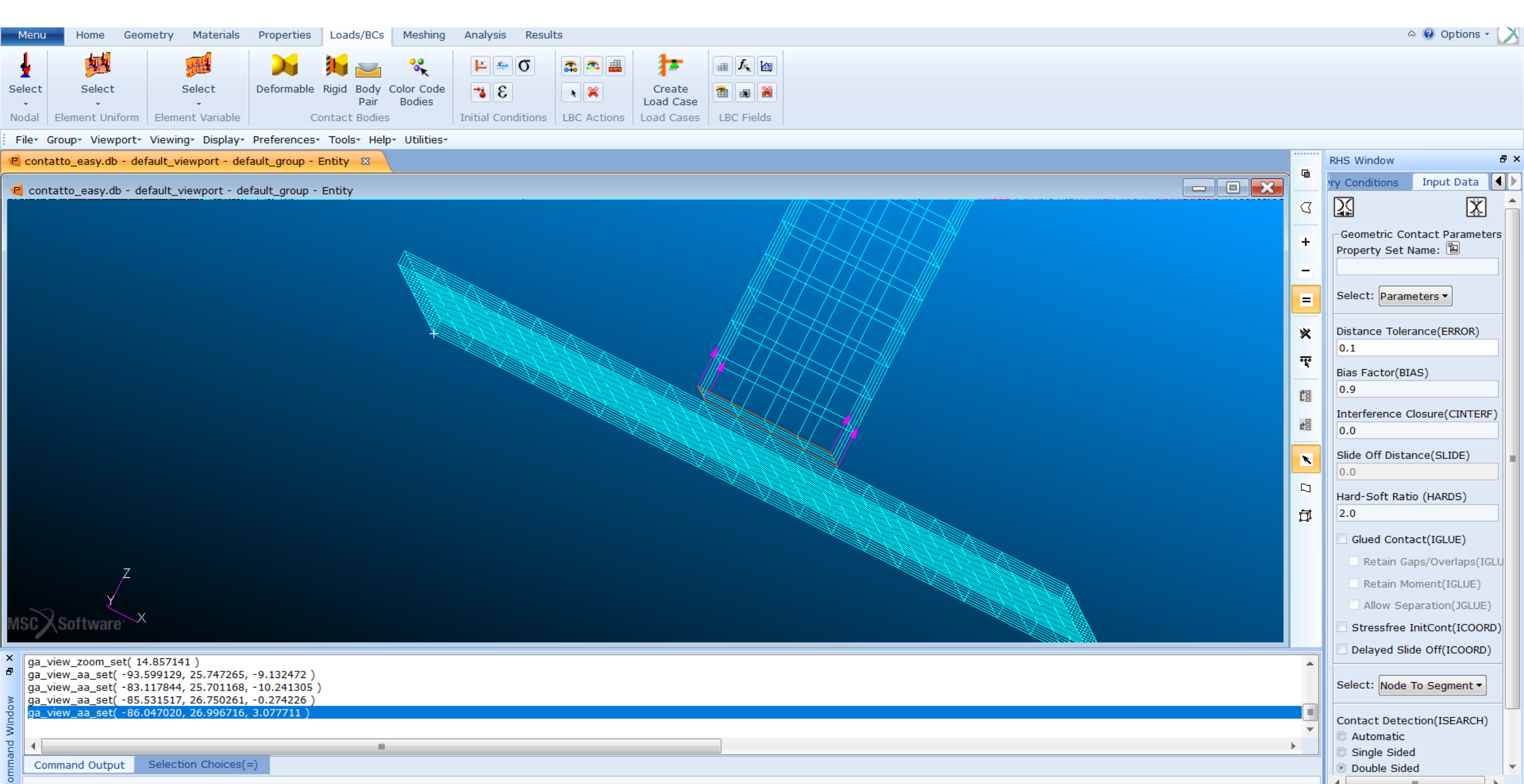
OK











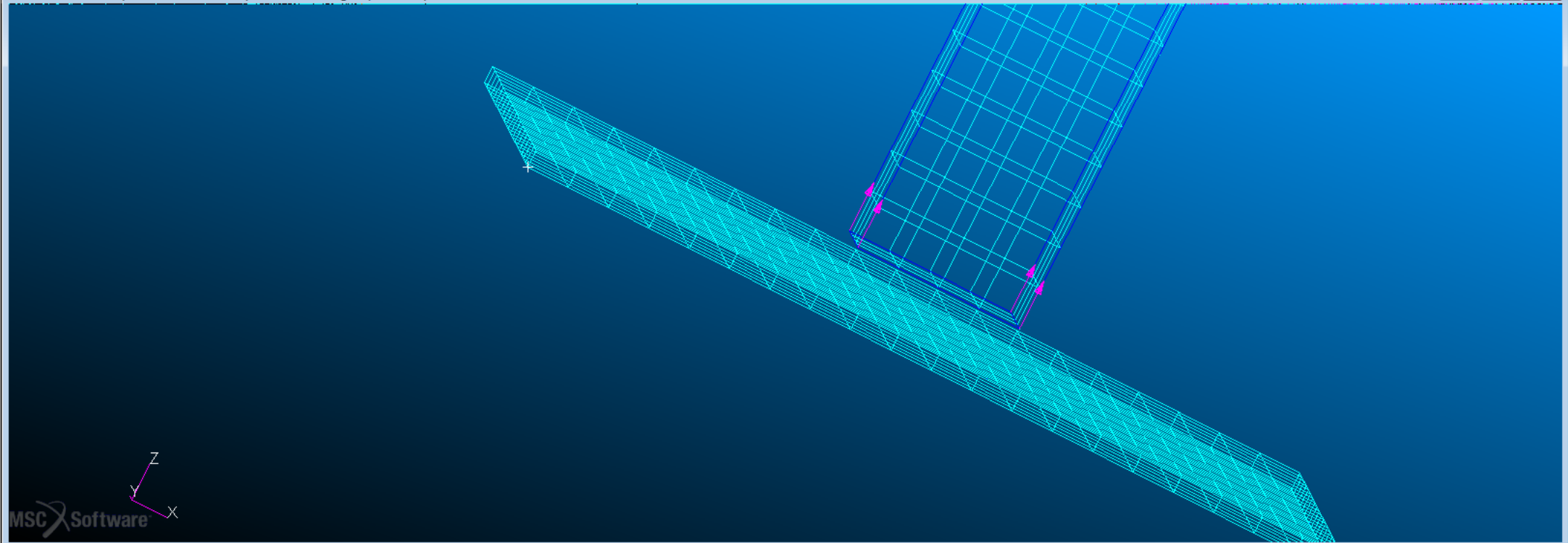
Menu Home Geometry Materials Properties Loads/BCs Meshing Analysis Results Options

Select Select Select Deformable Rigid Body Color Code
Nodal Element Uniform Element Variable Contact Bodies
Initial Conditions LBC Actions Create Load Case Load Cases LBC Fields

File Group Viewport Viewing Display Preferences Tools Help Utilities

contatto_easy.db - default_viewport - default_group - Entity

contatto_easy.db - default_viewport - default_group - Entity



Command Window

```
ga_view_zoom_set( 14.857141 )
ga_view_aa_set( -93.599129, 25.747265, -9.132472 )
ga_view_aa_set( -83.117844, 25.701168, -10.241305 )
ga_view_aa_set( -85.531517, 26.750261, -0.274226 )
ga_view_aa_set( -86.047020, 26.996716, 3.077711 )
```

Command Output Selection Choices(=)

RHS Window

Body Pair Application Region

Mode: Existing Bodies

Body1/Master/Touched

Body1 Name: tower

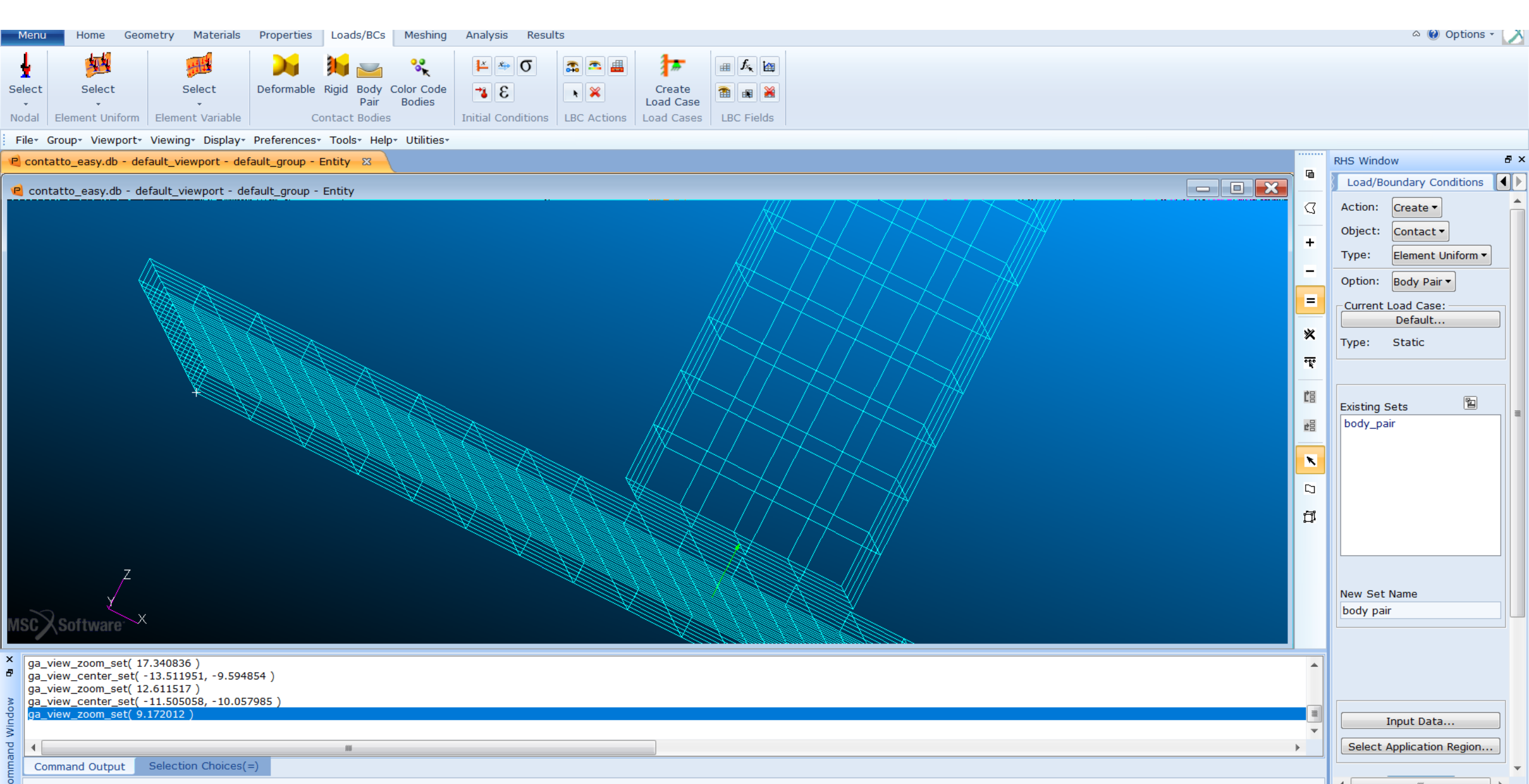
☐ Self Contact

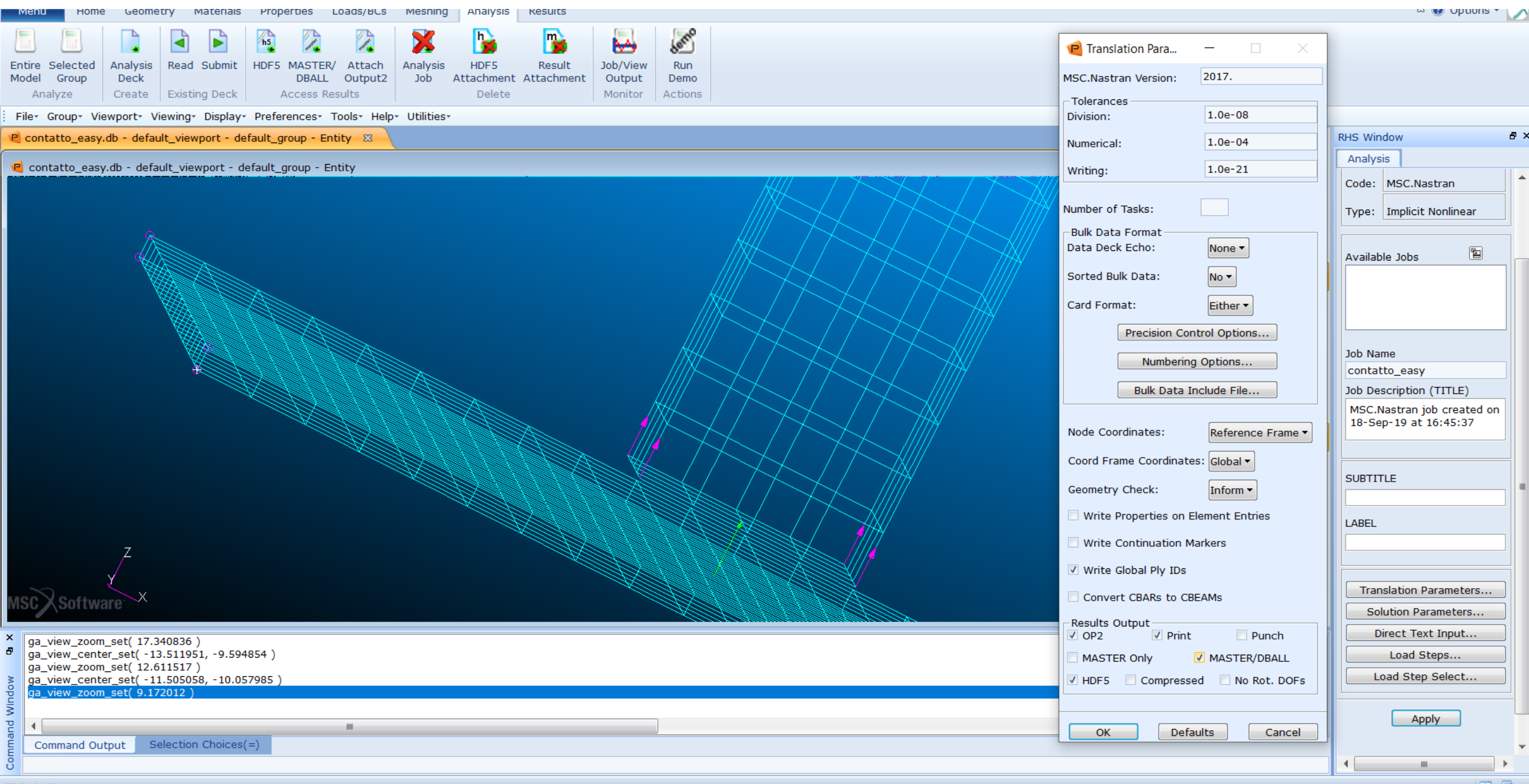
Reverse Bodies

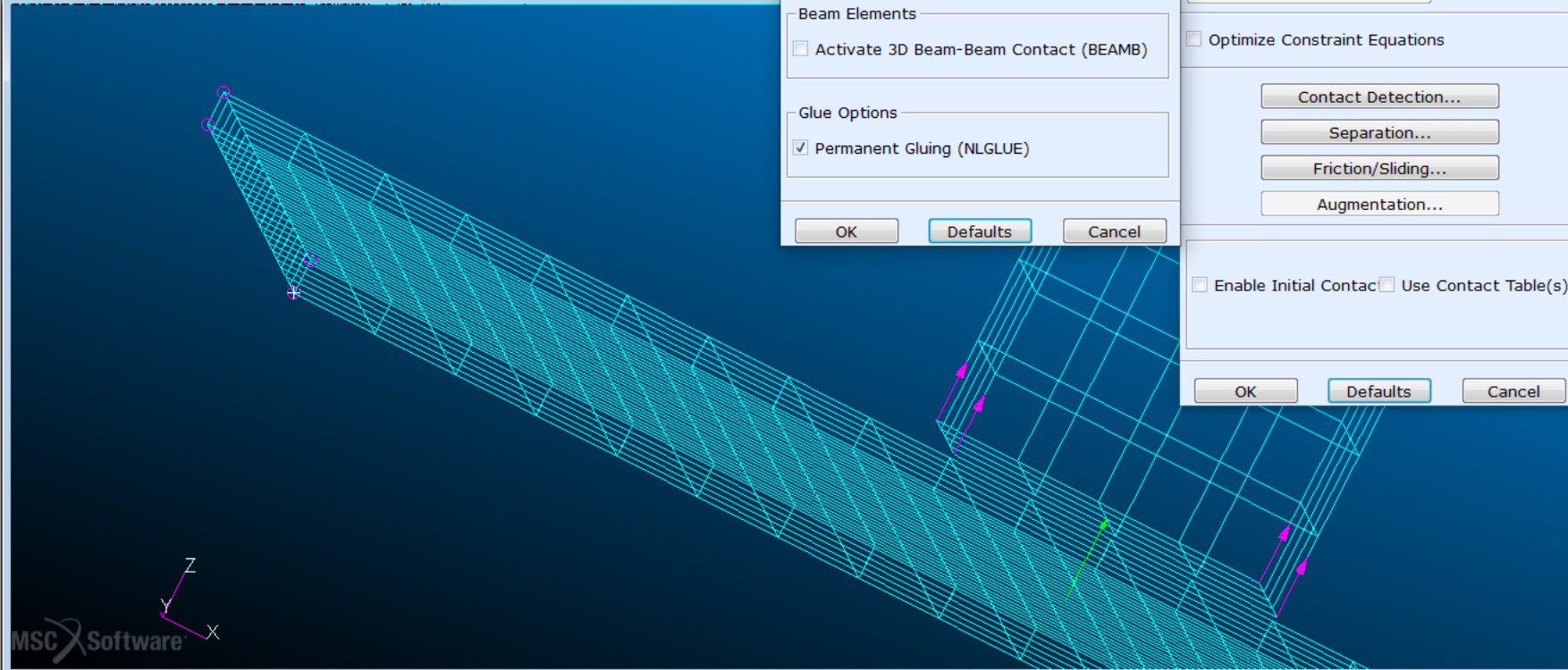
Body2/Slave/Touching

Body2 Name: plate

OK







Contact Detection

Contact Detection Parameters (BCPARA)

Distance Tolerance (ERROR): 0.1

Bias on Tolerance (BIAS): 0.9

Beam Elements

☐ Activate 3D Beam-Beam Contact (BEAMB)

Glue Options

☒ Permanent Gluing (NLGLUE)

OK Defaults Cancel

Contact Control ...

CONTACT Control Parameters

Control Method: Node to Segment

Default Penalty Factor Calculation: Softer Material/Edge Length

☐ Optimize Constraint Equations

Contact Detection... Separation... Friction/Sliding... Augmentation...

☐ Enable Initial Contac ☐ Use Contact Table(s)

OK Defaults Cancel

Solution Paramet...

☐ Automatic Constraints

☒ Assumed Strain ☐ Shell Shear Corr.

☐ Creep

Creep Formulation

☒ Implicit Creep

Implicit Creep Method

Secant Tangent

Nonlinear Geometric Effects:

Large Displacement

Follower Loads:

Loads Follow Deformations

Residual Vectors: Default

Mass Calculation: Default

Struct. Damping Coef

W3, Damping Factor:

W4, Damping Factor:

Wt.-Mass Conversion 1.0

Node i.d. for Wt. Gen

Default Initial Temperatur

Default Load Temperatur

Contact Parameters...

OK Defaults Cancel

Analysis

Action: Analyze

Object: Entire Model

Method: Full Run

Code: MSC.Nastran

Type: Implicit Nonlinear

Available Jobs

Job Name

contatto_easy

Job Description (TITLE)

MSC.Nastran job created on 18-Sep-19 at 16:45:37

SUBTITLE

LABEL

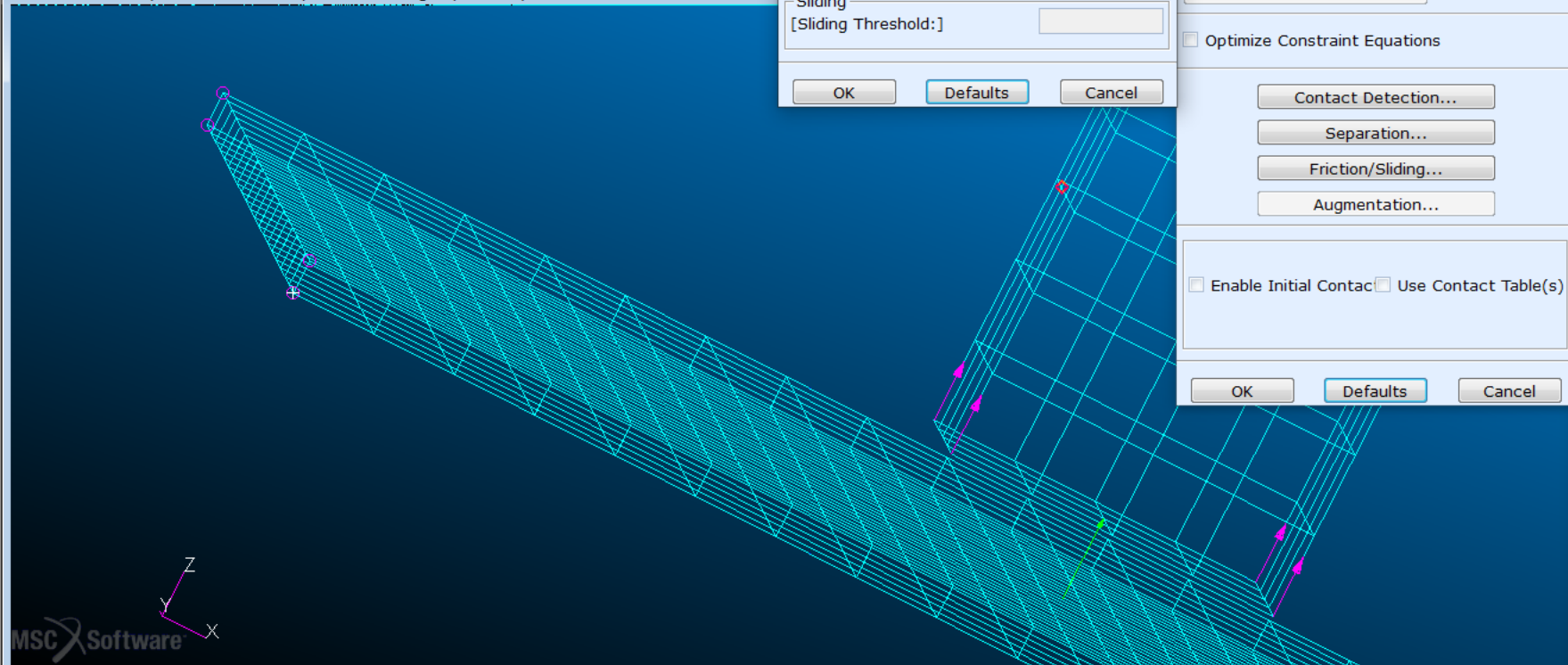
Translation Parameters...

Solution Parameters...

Direct Text Input...

Load Steps...

ga_view_zoom_set(17.340836)
ga_view_center_set(-13.511951, -9.594854)
ga_view_zoom_set(12.611517)
ga_view_center_set(-11.505058, -10.057985)
ga_view_zoom_set(9.172012)



```
ga_view_zoom_set( 17.340836 )
ga_view_center_set( -13.511951, -9.594854 )
ga_view_zoom_set( 12.611517 )
ga_view_center_set( -11.505058, -10.057985 )
ga_view_zoom_set( 9.172012 )
```

Command Window

Command Output Selection Choices(=)

Friction/Sliding P...

Friction/Sliding Parameters for Contact Analysis

Type: Bilinear Coulomb

☐ Non-Symmetric Matrix

☐ Sliding
[Sliding Threshold:]

OK Defaults Cancel

Contact Control ...

CONTACT Control Parameters

Control Method: Node to Segment

Default Penalty Factor Calculation:
Softer Material/Edge Length

☐ Optimize Constraint Equations

Contact Detection...
Separation...
Friction/Sliding...
Augmentation...

☐ Enable Initial Contact ☐ Use Contact Table(s)

OK Defaults Cancel

Solution Paramet...

☐ Automatic Constraints

☒ Assumed Strain ☐ Shell Shear Corr.

☐ Creep

Creep Formulation
☒ Implicit Creep

Implicit Creep Method
Secant Tangent

Nonlinear Geometric Effects:
Large Displacement

Follower Loads:
Loads Follow Deformations

Residual Vectors: Default

Mass Calculation: Default

Struct. Damping Coef

W3, Damping Factor:

W4, Damping Factor:

Wt.-Mass Conversion 1.0

Node i.d. for Wt. Gen

Default Initial Temperatur

Default Load Temperatur

Contact Parameters...

OK Defaults Cancel

Analysis

Action: Analyze

Object: Entire Model

Method: Full Run

Code: MSC.Nastran

Type: Implicit Nonlinear

Available Jobs

Job Name
contatto_easy

Job Description (TITLE)
MSC.Nastran job created on 18-Sep-19 at 16:45:37

SUBTITLE

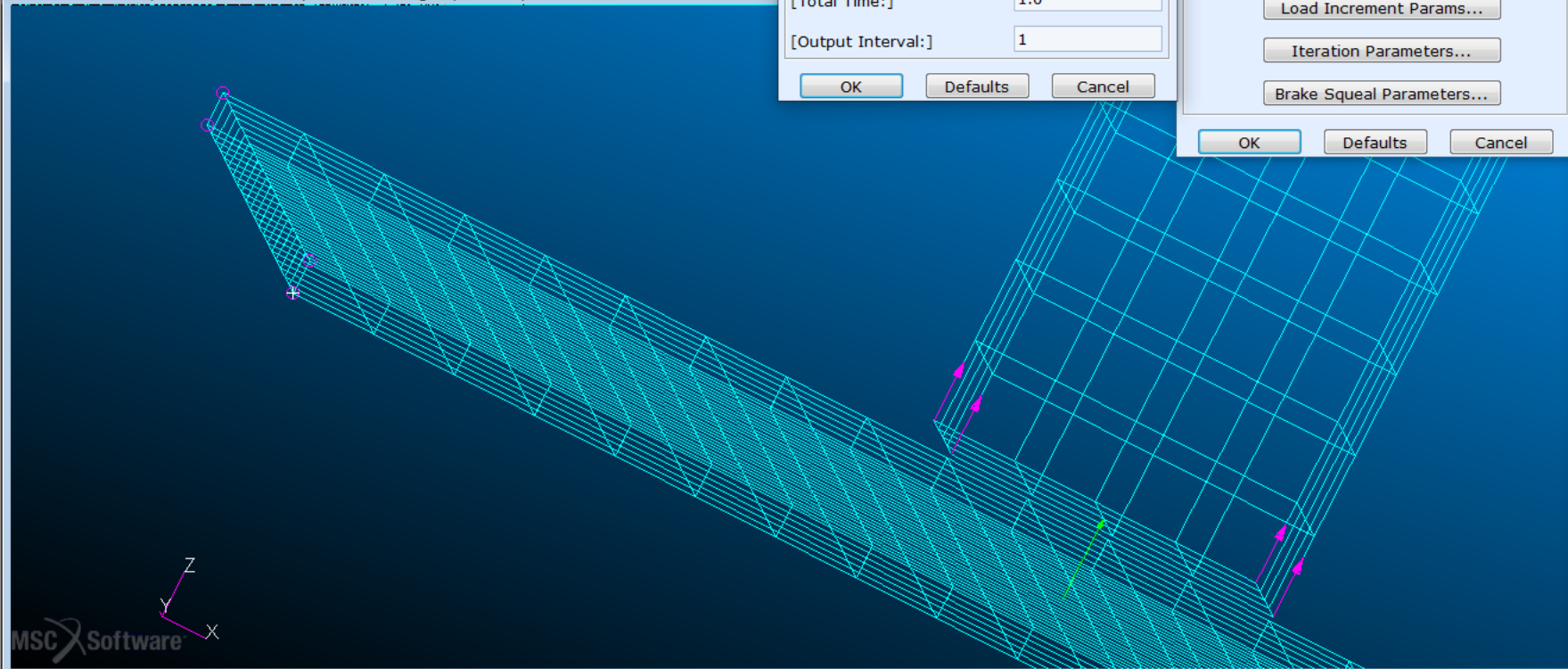
LABEL

Translation Parameters...

Solution Parameters...

Direct Text Input...

Load Steps...



Load Increment ...

Increment Type: Fixed

Analysis Pref. (CTRLDEF) Default (Blank)

Fixed Increment Parameters

[Number of Increments:] 10

[Total Time:] 1.0

[Output Interval:] 1

OK Defaults Cancel

Static Step Para...

Linearity: NonLinear

☐ Creep

Solvers / Options...

Load Increment Params...

Iteration Parameters...

Brake Squeal Parameters...

OK Defaults Cancel

Load Steps

Solution Sequence: 400

Action: Create

Available Steps

Default

Step Name

Default

Available Load Cases

Default

Analysis Type: Static

Load Step Options

Step Parameters...

Output Requests...

Direct Text Input...

Apply Cancel

Analysis

Action: Analyze

Object: Entire Model

Method: Full Run

Code: MSC.Nastran

Type: Implicit Nonlinear

Available Jobs

Job Name

contatto_easy

Job Description (TITLE)

MSC.Nastran job created on 18-Sep-19 at 16:45:37

SUBTITLE

LABEL

Translation Parameters...

Solution Parameters...

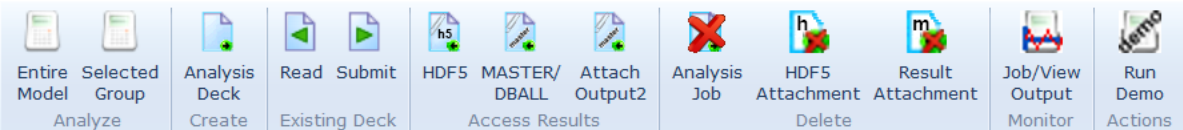
Direct Text Input...

Load Steps...

Command Window

```
ga_view_zoom_set( 17.340836 )
ga_view_center_set( -13.511951, -9.594854 )
ga_view_zoom_set( 12.611517 )
ga_view_center_set( -11.505058, -10.057985 )
ga_view_zoom_set( 9.172012 )
```

Command Output Selection Choices(=)



File Group Viewport Viewing Display Preferences Tools Help Utilities

contatto_easy.db - default

MSC Nastran V2016.0 (contatto_easy)

contatto_easy.db - default

```
NumMachines =
Scratchdir =
Nfsdir = D:\Users\Riccardo
Acommand = D:\MSC.Software\MSC_Nastran\20160\bin\nast20160.exe
ModelSuffix = bdf
RestartName =
IterSolver =
NumMachinesCmd =
CommandInputs =
WaitFlag = 0
Job submitted to local host with:
D:\MSC.Software\MSC_Nastran\20160\bin\nast20160.exe contatto_easy.bdf bat=no

*** USER WARNING MESSAGE (pgm: nastran, fn: decode_keyword)
batch=no (command line[2])

This keyword is not available on this platform.
MSC Nastran V2016.0 (Intel Windows 10 Home 6.2 9200) Wed Sep 18 16:47:08 2019

*** SYSTEM INFORMATION MESSAGE (pgm: nastran, fn: estimate_job_requirements)
Starting ESTIMATE, please wait...

*** USER INFORMATION MESSAGE (pgm: nastran, fn: estimate_job_requirements)
Estimated bpool=7835.1MB
Estimated DOF=3067
Estimated memory=8134.0MB
Estimated disk=16.7MB
MSC Nastran beginning job contatto_easy.
MSC Nastran started Wed Sep 18 16:47:09 01Eo 2019
```

```
$# End of NASTRAN input file translation.
$# Patran Nastran Preference Patran 2017.0.1 has released 1 license(s) to FLEXlm at 18-Sep-19 16:47:08.
$# The translation has completed successfully.
$# Executing /bin/sh -c D:\Users\Riccardo\AppData\Roaming\MSC.Software\Patran_x64\2
$# 0170\bin\MscNastranExecute.exe -j contatto_easy -m bdf -x 2017 -v
```

Command Output Selection Choices(=)

RHS Window

Analysis

Action: Analyze
Object: Entire Model
Method: Full Run

Code: MSC.Nastran
Type: Implicit Nonlinear

Available Jobs
contatto_easy

Job Name
contatto_easy
Job Description (TITLE)
MSC.Nastran job created on
18-Sep-19 at 16:45:37

SUBTITLE

LABEL

Translation Parameters...

Solution Parameters...

Direct Text Input...

Load Steps...

Menu

Home

Geometry

Materials

Properties

Loads/BCs

Meshing

Analysis

Results

Entire Model

Analyze

Selected Group

Create

Analysis Deck

Create

Read

Existing Deck

Submit

Existing Deck

HDF5

Access Results

MASTER/DBALL

Access Results

Attach Output2

Access Results

Analysis Job

Delete

HDF5 Attachment

Delete

Result Attachment

Job/View Output Monitor

Run Demo

Actions

File> Group> Viewport> Viewing> Display> Preferences> Tools> Help> Utilities>

contatto_easy.db - default_viewport - default_group - Entity

contatto_easy.db - default_viewport - default_group - Entity

Command Window

\$# End of NASTRAN input file translation.
\$# Patran Nastran Preference Patran 2017.0.1 has released 1 license(s) to FLEXlm at 18-Sep-19 16:47:08.
\$# The translation has completed successfully.
\$# Executing /bin/sh -c D:\Users\Riccardo\AppData\Roaming\MSC.Software\Patran_x64\2
\$# 0170\bin\MscNastranExecute.exe -j contatto_easy -m bdf -x 2017 -v

Command Output

Selection Choices(=)

RHS Window

Analysis

Action: Access Results

Object: Attach MASTER

Method: Result Entities

Code: MSC.Nastran

Type: Implicit Nonlinear

Available Jobs

contatto_easy

Job Name

contatto_easy

Job Description (TITLE)

MSC.Nastran job created on 18-Sep-19 at 16:45:37

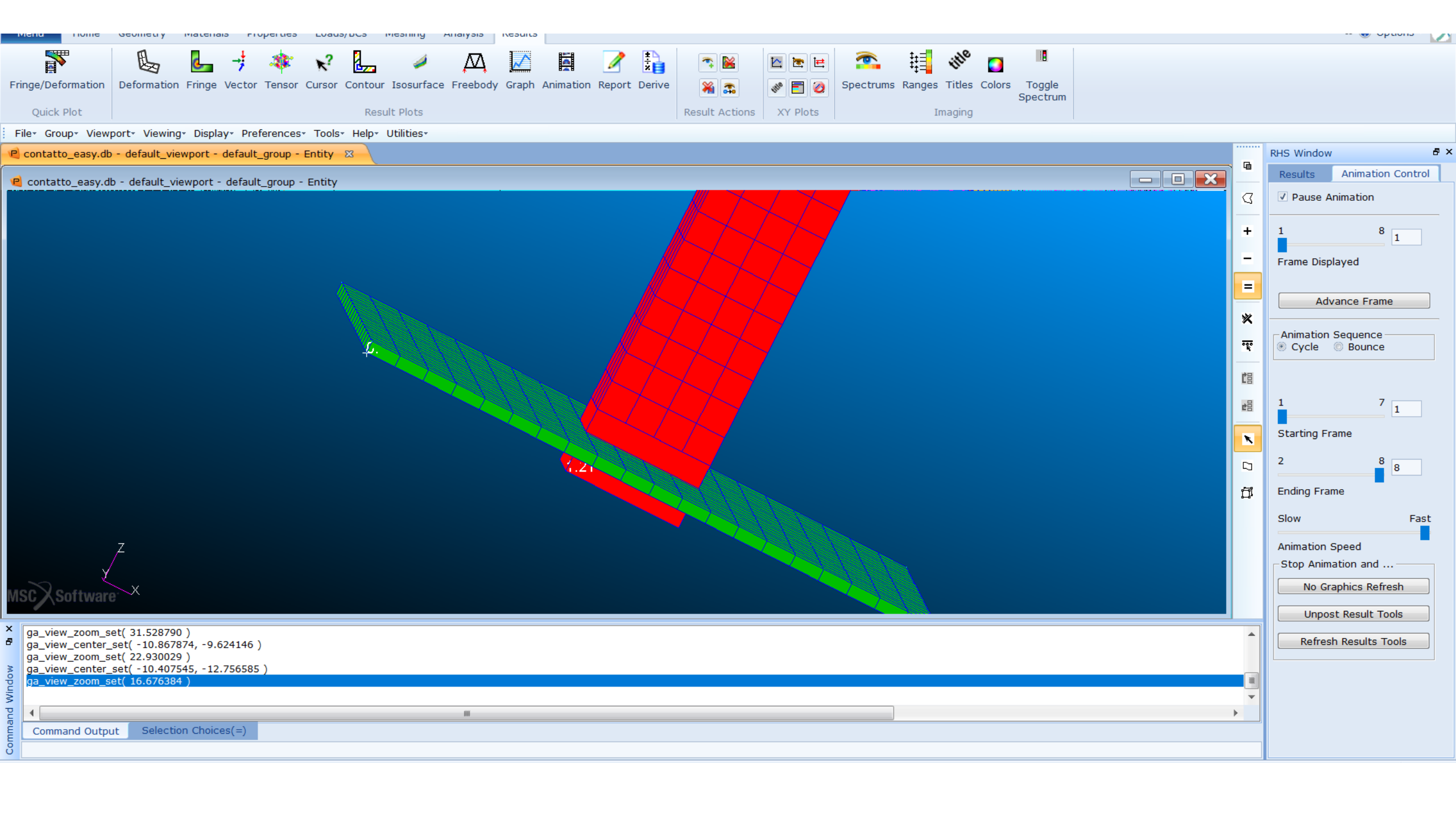
SUBTITLE

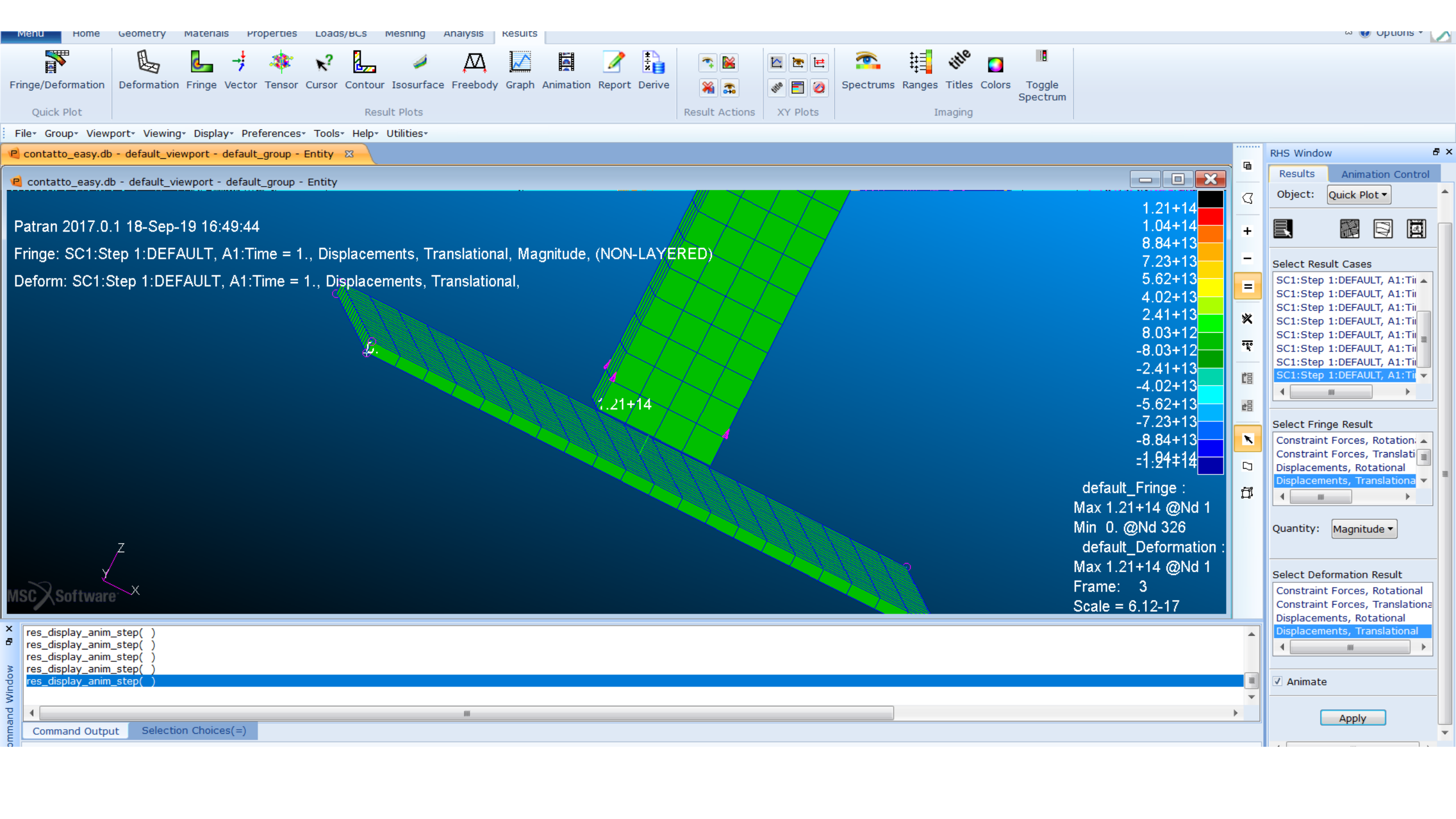
LABEL

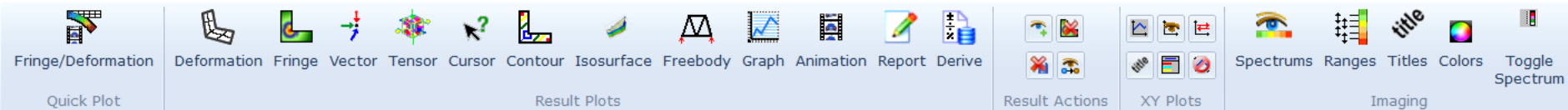
Select Results File...

Translation Parameters...

Entity Selection...







File Group Viewport Viewing Display Preferences Tools Help Utilities

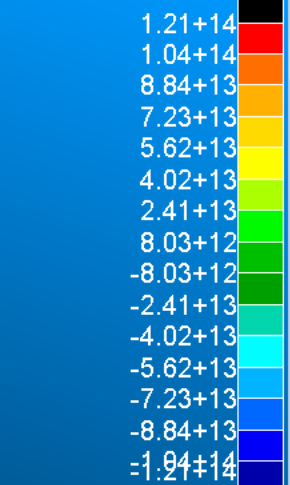
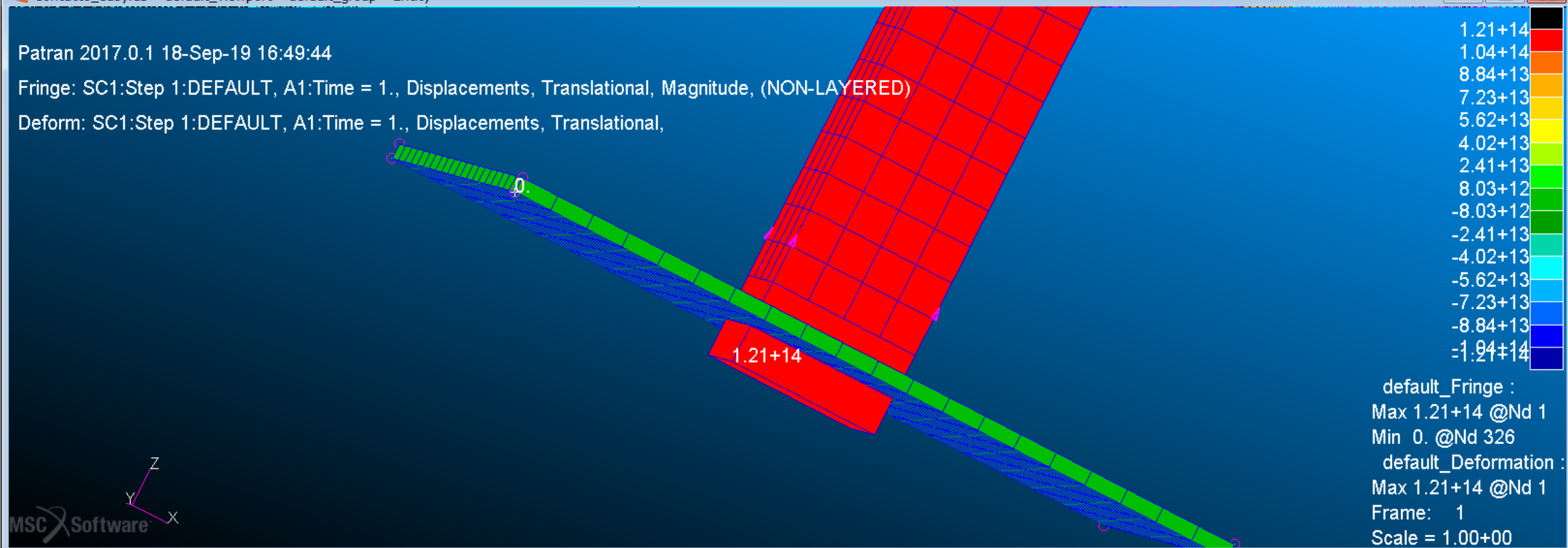
contatto_easy.db - default_viewport - default_group - Entity

contatto_easy.db - default_viewport - default_group - Entity

Patran 2017.0.1 18-Sep-19 16:49:44

Fringe: SC1:Step 1:DEFAULT, A1:Time = 1., Displacements, Translational, Magnitude, (NON-LAYERED)

Deform: SC1:Step 1:DEFAULT, A1:Time = 1., Displacements, Translational,



default_Fringe :
Max 1.21+14 @Nd 1
Min 0. @Nd 326
default_Deformation :
Max 1.21+14 @Nd 1
Frame: 1
Scale = 1.00+00

```
res_display_anim_step( )  
res_display_anim_step( )  
res_display_anim_step( )  
res_display_anim_step( )  
ga_view_aa_set( -92.079941, 26.938467, 9.791739 )
```

Command Window

Command Output Selection Choices(=)

RHS Window

Results Animation Control

☒ Pause Animation

1 8 1
Frame Displayed

Advance Frame

Animation Sequence
☒ Cycle ☐ Bounce

1 7 1
Starting Frame

2 8 8
Ending Frame

Slow Fast

Animation Speed

Stop Animation and ...

No Graphics Refresh

Unpost Result Tools

Refresh Results Tools