Problem info

Problem type: Transient Magnetics (integration time: 9.99999997475243E-07 s.)
Geometry model class: Axisymmetric
Problem database file names:

- Problem: *EMP.pbm*
- Geometry: *Emp.mod*
- Material Data: *Emp.dms*
- Material Data 2 (library): *none*
- Electric circuit: *none*

Results taken from other problems:

- *none*

Geometry model

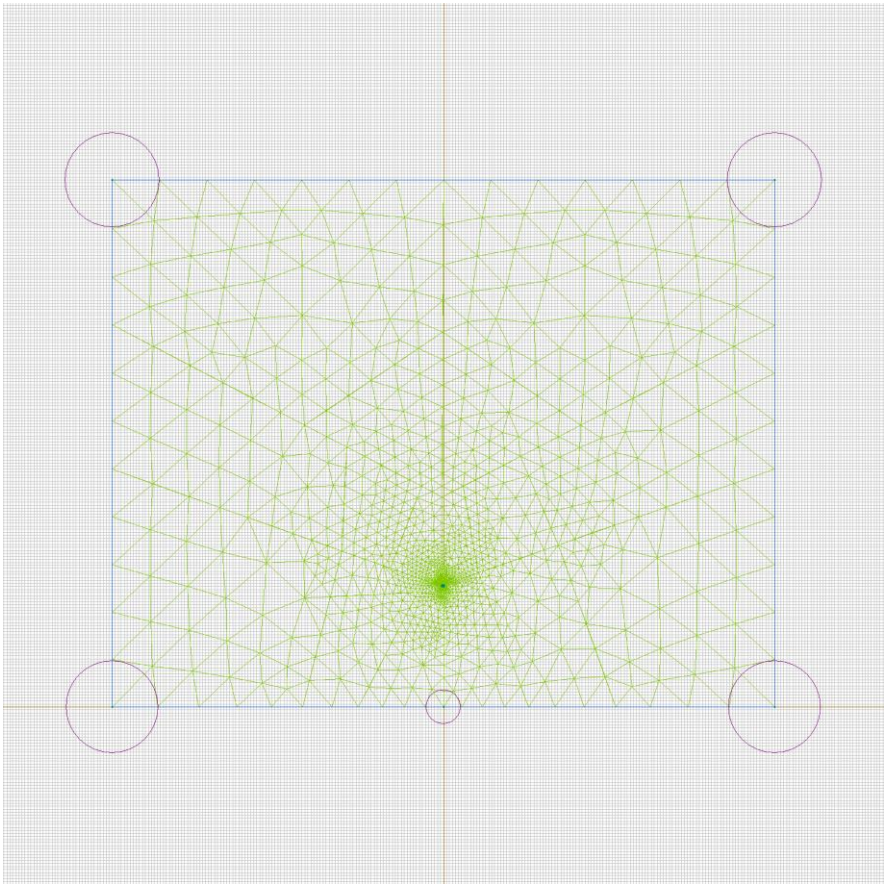


Table 1. Geometry model statistics

	With Label	Total
Blocks	2	2
Edges	3	9
Vertices	0	9

Number of nodes: 4499.

Labelled objects

There are following labelled objects in the geometry model (Material Data file could contain more labels, but only those labels that assigned to geometric objects are listed)

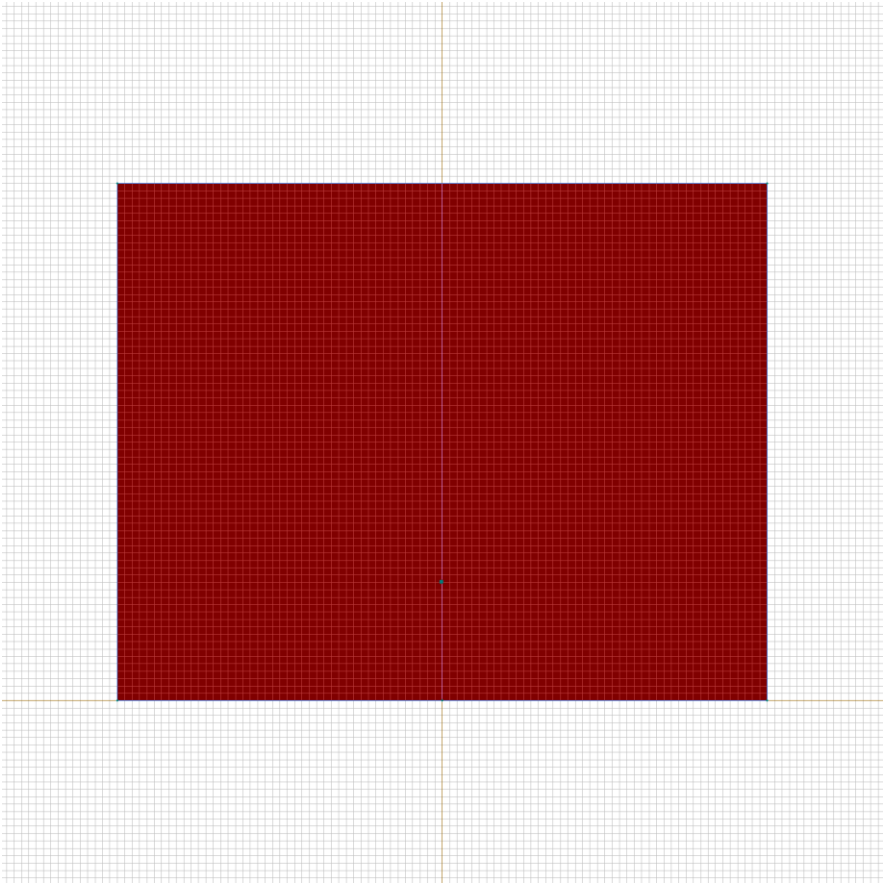
Blocks:	Edges:	Vertices:
• air • copper •	• side • bottom • top •	

Detailed information about each label is listed below.

Labelled objects: block "air"

There are (1) objects with this label

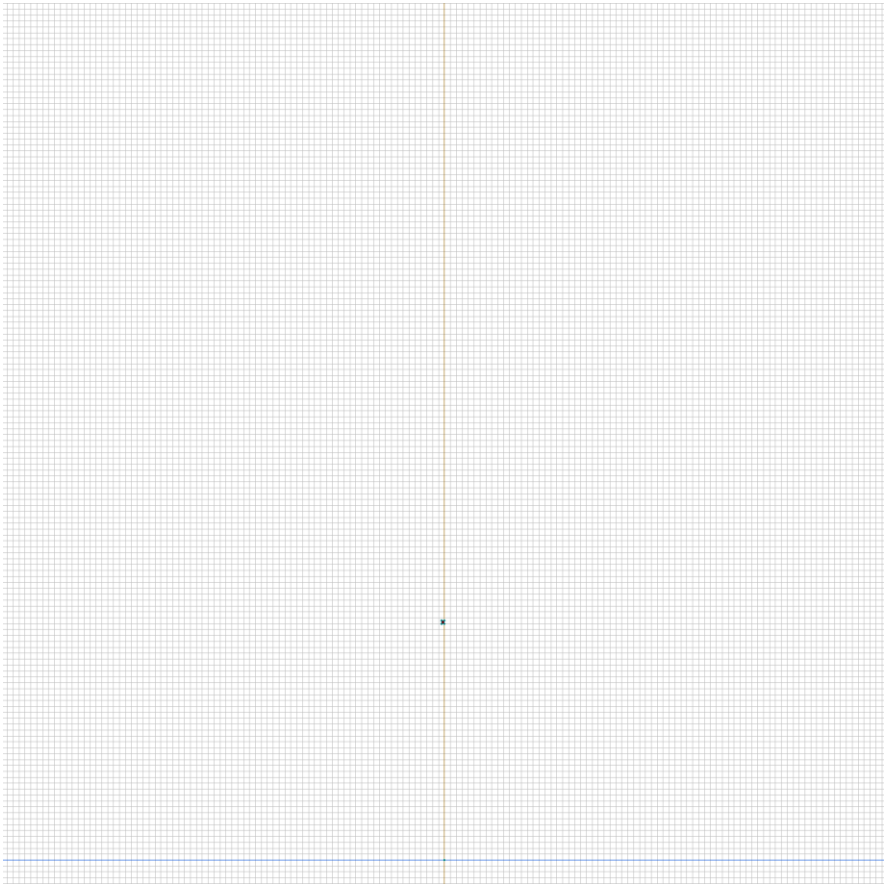
Relative magnetic permeability: mu_x=1, mu_y=1
Current density: j=0 [A/m2]
Conductor's connection: in parallel



Labelled objects: block "copper"

There are (1) objects with this label

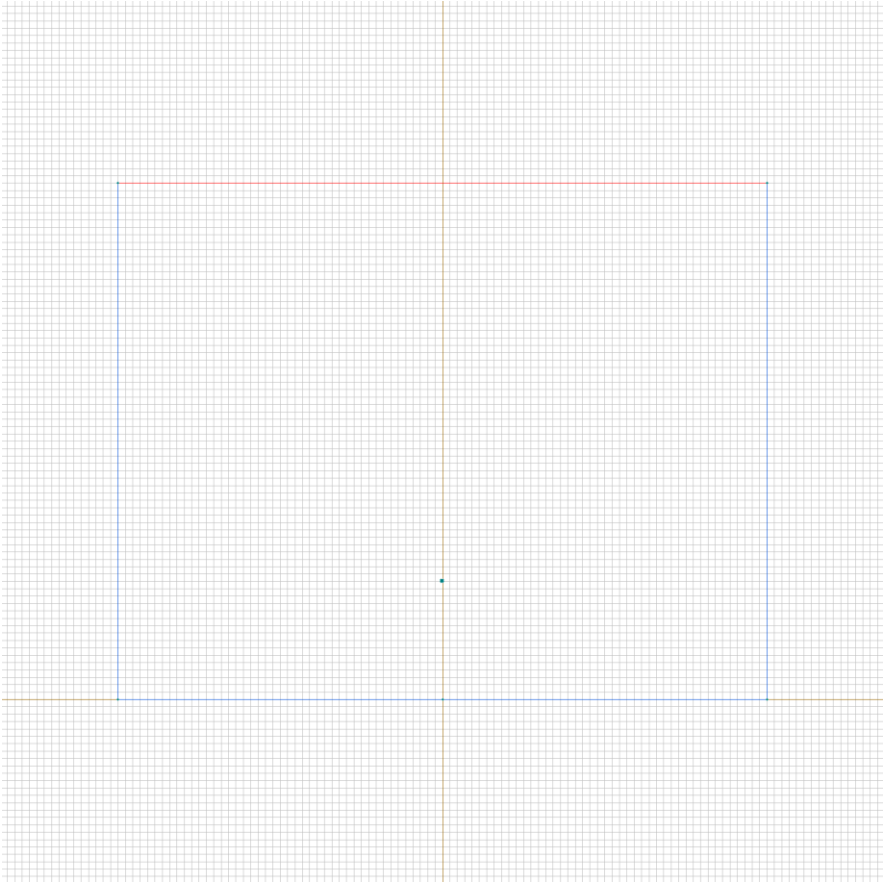
Relative magnetic permeability: mu_x=1, mu_y=1
Electric conductivity: sigma(T)=100000000 [S/m]
Voltage: U=0 [V]
Conductor's connection: in parallel



Labelled objects: edge "side"

There are (1) objects with this label

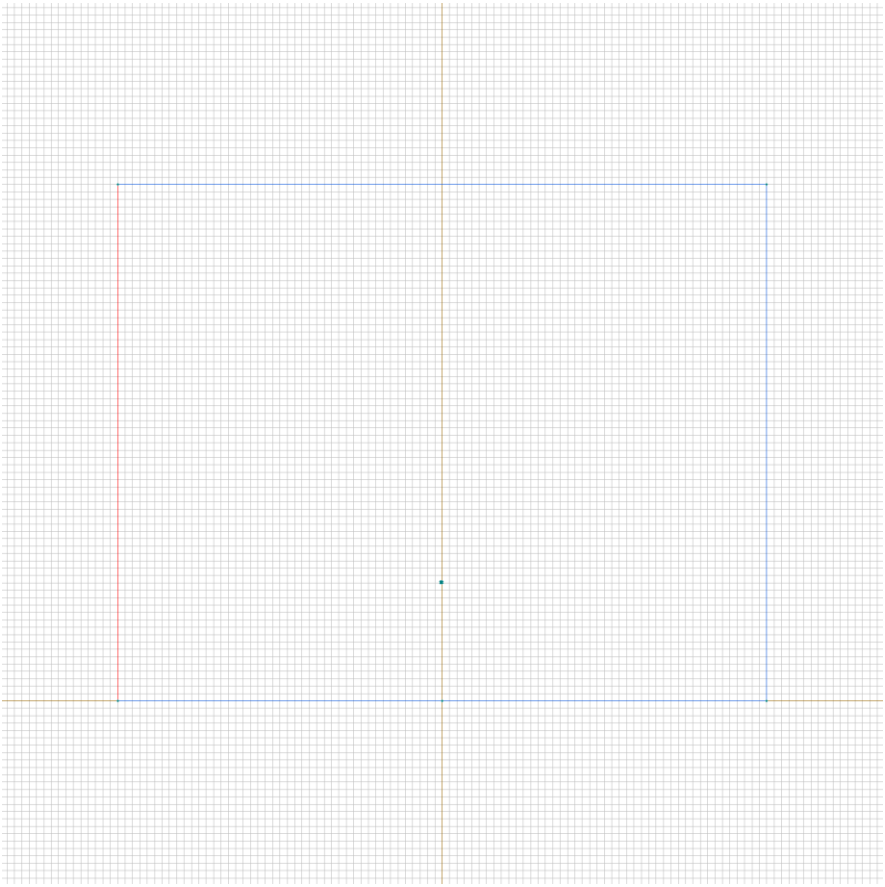
Magnetic potential: A=1.0e-5*impulse(t,0,0.2e-6) [Wb/m]



Labelled objects: edge "bottom"

There are (1) objects with this label

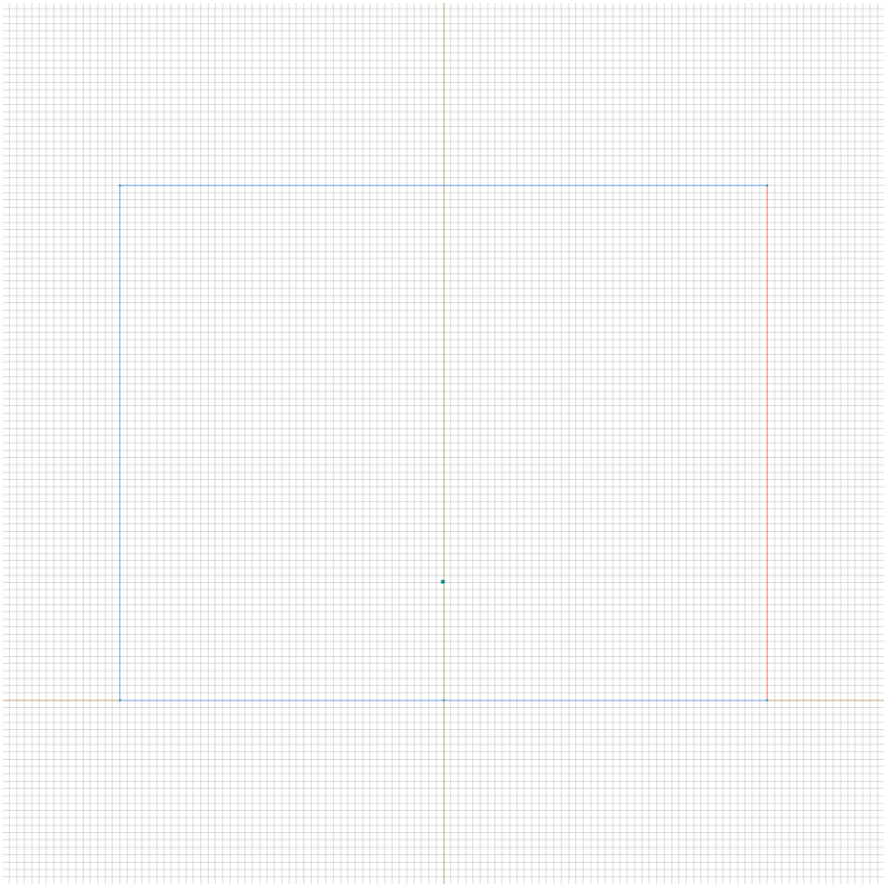
Tangential field: H_t=0 [A/m]



Labelled objects: edge "top"

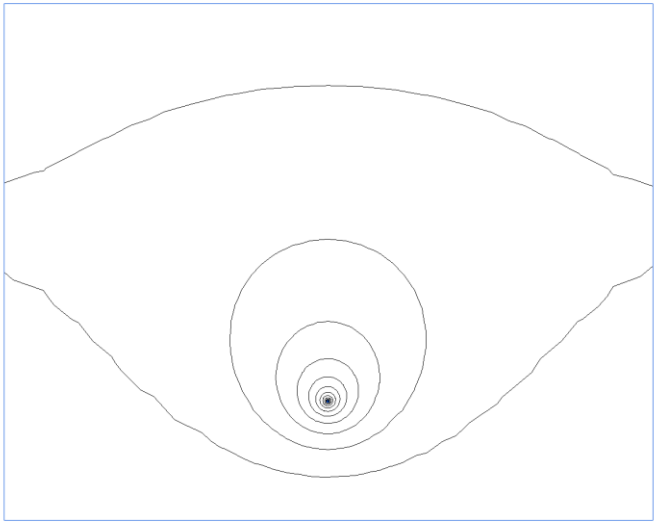
There are (1) objects with this label

Tangential field: H_t=0 [A/m]



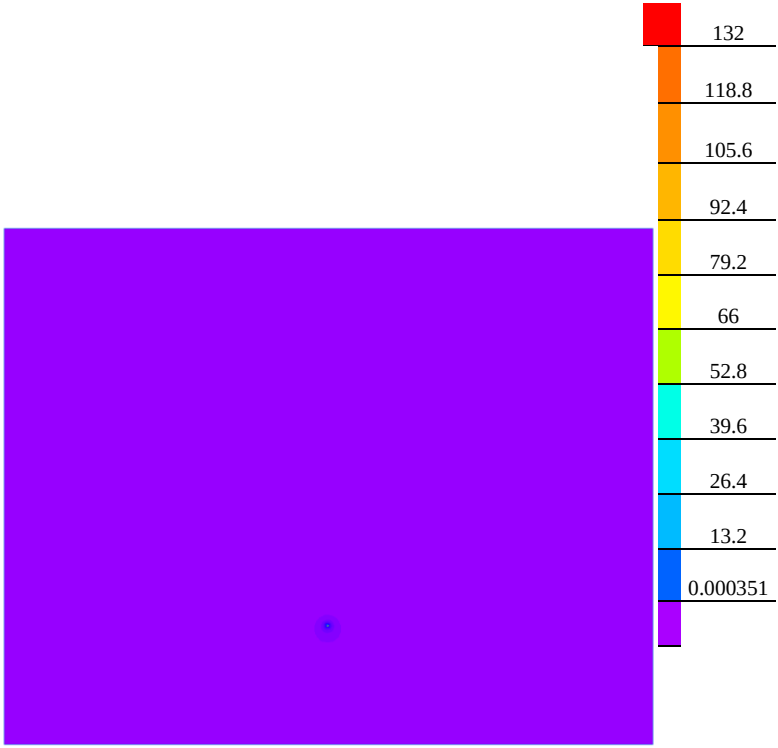
Results

Field lines



Results

Color map of Strength |H| [A/m]



Nonlinear dependencies

No non-linear dependencies are used in this problem data