

FLUENT - Compressible Flow in a Nozzle- Step 3

Author: Rajesh Bhaskaran & Yong Sheng Khoo, Cornell University

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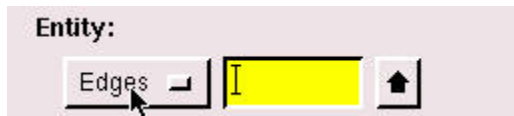
Step 3: Mesh

Specify Boundary Types

Now that we have the mesh, we would like to specify the boundary conditions here in *GAMBIT*.

Operation Toolpad > Zones Command Button  > Specify Boundary Types Command Button 

This will bring up the *Specify Boundary Types* window on the *Operation Panel*. We will first specify that the left edge is the inlet. Under *Entity*:, pick *Edges* so that *GAMBIT* knows we want to pick an edge (face is default).



Now select the left edge by *Shift-clicking* on it. The selected edge should appear in the yellow box next to the *Edges* box you just worked with as well as the *Label/Type* list right under the Edges box.

Next to *Name*:, enter inlet.

For *Type*:, select *WALL*.

Click *Apply*. You should see the new entry appear under *Name/Type* box near the top of the window.

Specify Boundary Types

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Action:

◆ Add
▼ Modify

▼ Delete
▼ Delete all

Name	Type

☐ Show labels

Name:

Type:

PRESSURE_INLET

Entity:

Edges

inlet

↑

Label	Type
inlet	Edge

Remove

Edit

Apply

Reset

Close

Repeat for the outlet, centerline, and wall edges.

You should have the following edges in the *Name/Type* list when finished:

Name	Type
inlet	PRESSURE_INL
outlet	PRESSURE_OU
wall	WALL
centerline	AXIS

Save and Export

Main Menu > File > Save

Main Menu > File > Export > Mesh...

Type in nozzle.msh for the *File Name:*. Select *Export 2d Mesh* since this is a 2 dimensional mesh. Click *Accept*.

Check nozzle.msh has been created in your working directory.

Go to [Step 4: Setup \(Physics\)](#)

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