## **FLUENT - Laminar Pipe Flow 2 Mesh Geometry in GAMBIT Content**

## Step 2: Mesh Geometry in GAMBIT

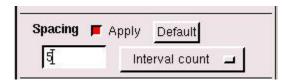
We'll now create a mesh on the rectangular face with 100 divisions in the axial direction and 5 divisions in the radial direction. We'll first mesh the four edges and then the face. The desired grid spacing is specified through the edge mesh.

## Mesh Edges



Shift-click or bring up the *Edge List* window and select both the vertical lines. If this is difficult, one can zoom in on an edge by holding down the Ctrl button, clicking and dragging the mouse to specify an area to zoom in on, and releasing the Ctrl button. To return to the main view, click on the Global Control Toolpad > Fit to Window Button again. You can also hold down Ctrl and double-click in the window to zoom out to a fitting window. To pan the view, hold down the middle mouse button and drag the mouse.

Once a vertical edge has been selected, select Interval Count from the drop down box that says Interval Size in the *Mesh Edges Window*. Then, in the box to the left of this combo box, enter 5 for the interval count.



Click Apply. Nodes appear on the edges showing that they are divided into 5.



fluent:Click here for larger image

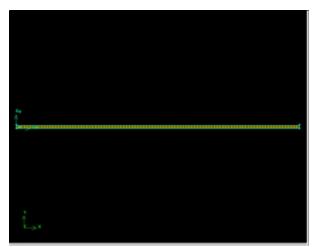
Repeat the same process for the horizontal edges, but with an interval count of 100.

Now that the edges are meshed, we are ready to create a 2-D mesh for the face.

## **Mesh Face**



Shift left-click on the face or use the up arrow next to Faces to select the face. Click Apply.



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