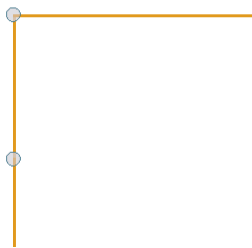


Editing Shapefiles

Some of you might be interested in knowing how to perform editing to the shapefiles as it will be important in most of the modeling exercise you will perform within PIHMgis. Pertaining to V-Catchment modeling exercise, in the tutorial it has been identified that we need to perform three editing for better decomposition. Two of them are related to stream segment and one to the catchment boundary.

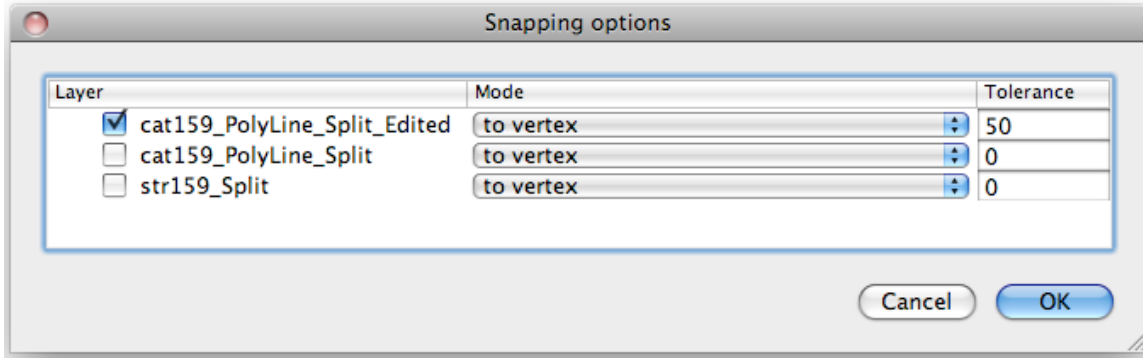
Editing Catchment Boundary Shapefile

After first iteration of domain decomposition we found that there is a very small segment is present in the catchment boundary at the northwest corner, which leads to more number of triangles around it. It is an artifact, which is inherited from the DEM (resolution 10 meters) used for generating the feature.

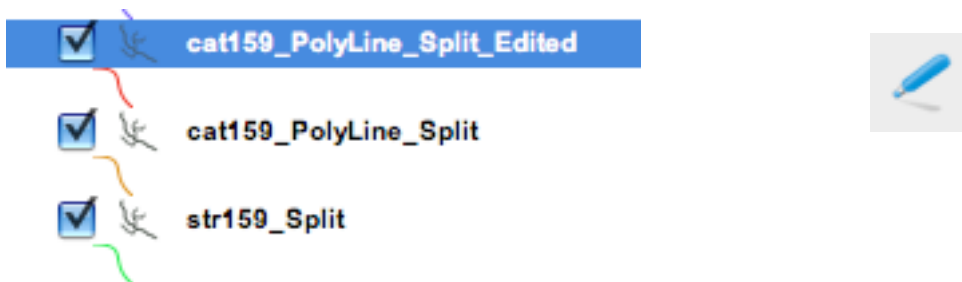


Our task is to delete this small segment (one with length of 10 meters). To achieve this it is advised that you make a copy of the catchment boundary shape file (we are editing the catchment boundary file obtained after Vector Split module). To create a copy, right click on the legend of the layer you want to export. Select Save as Shapefile. You will be asked to provide a name (In this example my file name is `cat159_Polyline_Split.shp` and I will save it as `cat159_Polyline_Split_Edited.shp`). Leave the projection selector to default. Add this new layer to the view. This is the layer we want to edit.

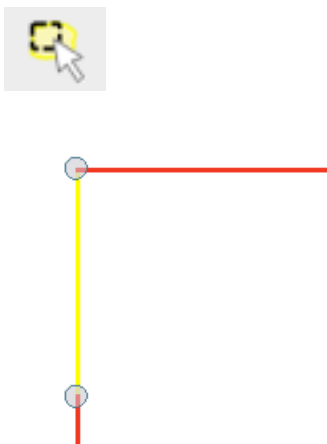
Before performing any edits you need to set snapping properties. While editing, “snapping” helps in accurate placement of one node with respect to another node or edge. To set snapping properties, select Project Properties from Files menu. Click the “snapping options”. On the new dialog select the file you want to use for snapping and set a tolerance and click OK.



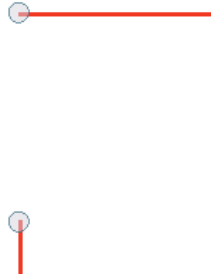
At this point, make sure the layer you want to edit is the layer selected in the legend pan. Now toggle editing by clicking on the icon:



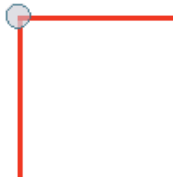
To delete the line you will have to first select it. In order to do this first click on the select features icon and click on the line you want to select:



Click on delete selected icon to delete the selected line



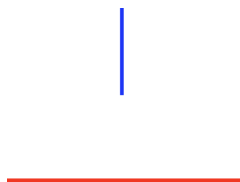
Now we need to snap the node on the bottom to the node above so that boundary will be complete. To do this click on the move vertex icon and move the node close to the other. You will notice it will automatically snap to the node.



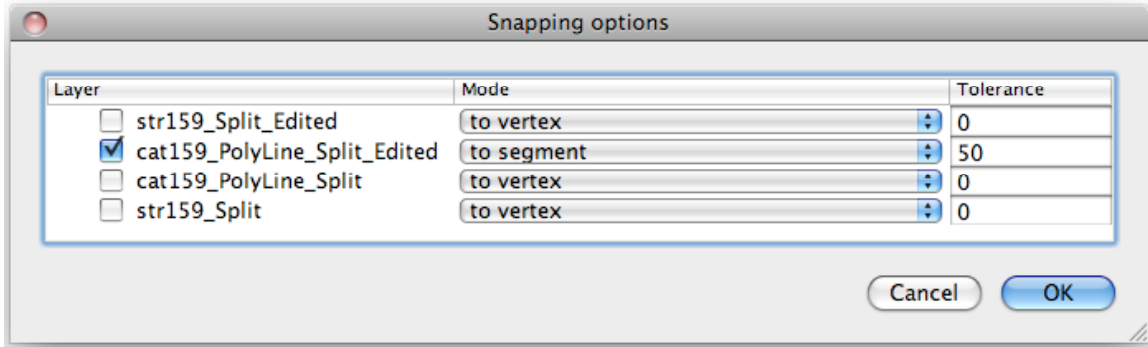
Click on the toggle edit icon and it will ask if you want to save the edits. If you are satisfied with your editing you can accept changes or discard them and start afresh.

Editing Stream Shapefile

Very similar situation is noticed at both the corner (upstream and downstream) of the stream segment. The stream is starting and ending very close to the catchment boundary but not merging together.



First make a copy of stream following the steps discussed earlier (save as str159_Split_Edited.shp). Before starting edit we need to setup snapping properties. This time we want to snap nodes on the river segment to edge of catchment boundary.



Notice that Mode has been changed to segment.

Now select the stream (copy) file that we want to edit and click on toggle edit icon. Carefully move the node towards the edge and it will automatically adhere to the edge of the catchment boundary. Be careful to move the node only in vertical direction.



Repeat the same for the other end of the stream. After you are done editing click on the toggle editing again. It will ask if you want to save the edits. If you are satisfied with the edits may save them or reject and repeat the process again.

Note that editing outlet end of stream segment is only common step and rest of edits performed is specific to this modeling exercise only.