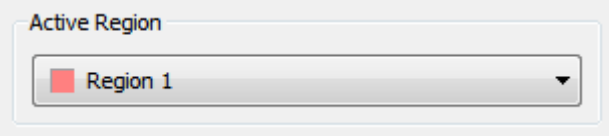
Plugin enables a user controlled creation of a 3D model based on the current segmentation data. Press ***Run All*** to perform all the steps described below at once.

Active Region

Selects a region within the segmentation data which will be used as a source for the model creation.



Marching Cubes

Marching cubes is a traditional method for creation of polygonal surfaces from a segmentation data.

Flow reduction – enables reduction of surface complexity in flat areas (recommended).
Eliminate near vertices – when checked, it creates a smaller and smoother model. When unchecked, it preserves edges more.
Run Marching Cubes – creates a basic 3D model from the active segmentation region.

Small Areas Reduction

This function erases all isolated pieces of geometry which are smaller than a given small area threshold.

Small area threshold – minimum number of triangles that a submesh has to have to be preserved.
Reduce Small Areas – runs the reduction.

Smoothing

It performs surface smoothing of the 3D model.

Iterations – prescribes how many times repeat the smoothing process.
Run Smoothing – runs the smoothing process.

Decimation

This reduces surface complexity by eliminating surface primitives like edges and vertices until a given number of triangles remains.

End triangles count – desired number of triangles of the final model.
Run Decimation – performs the decimation (this operation might take some time).

Model

Triangles count – current number of triangles of the model.
Nodes count – current num. of vertices.
Save Model – allows you to save the model to disk in STL format.