Segmentation Processing

Initial steps:

1. If frame average is enabled, the frame is averaged the reuired times.
2. If frame composite is enabled, a composite frame is created.
3. A threshold is used or generated to binarize the frame.
4. The frame is labled and objects less than the min area are removed.
5. Large objects may be resegmented at succesively lower thresholds.

SegCluster Process:

1. If the area is less than the area process size:
    1. if relocation is enabled, the cell will be relocated.
    2. If distance is enabled, the results will be processed by distance.
    3. If inflection is enabled ,the results will be inflected.
2. Otherwise:
    1. If the first threshold is enabled:
        1. If composite cell is enabled, a composite cell is created.
        2. If average is enabled, the cell image will be averaged the given times.
        3. The threshold will be used to generate seeds in the mask
        4. The seeds are labled with a min size of 5 and then grown
        5. Objects less than the merge size are merged to the object with the most common border.
        6. New objects are relabled and new Cells created.
        7. Cell mask borders are cleaned (chain code pixels that boder less than 3 inside pixels are removed.
        8. New Cells are given extracted image data.
        9. If cells have area > min
            1. if relocation is enabled, cells are relocated.
            2. If distance is enabled, distance is performed.
            3. if relocation is enabled, cells are relocated.
            4. If inflection is enabled, inflections are performed.
        10. Small cells are removed.
        11. Cell mask borders are cleaned.
    2. If the second threshold is enabled:
        1. The above sequence is repeated.
    3. If the cluster min size is < zero:
        1. The above sequence is repeated for cells with area > the min size
3. Voronoi is created from the cell centroids and cells are then regenerated to encompass the voronoi polygons with the addition of a second mask.
4. Feature calculations are then performeed.