

Histo-cloud / Export Annotation to Aperio

This tool helps in exporting a zipped folder containing Aperio XML annotations for all the slides in a folder. We will walk you through the steps to export annotation to Aperio.

Go to devathena.rc.ufl.edu to access the Digital Slide Archive and click on 'Register' if you are a new user or 'Log In' if you have an existing account.

Upload / Access a Whole Slide Image

- Click 'Collections' on the menu to the left to access collections of whole slide images a whole slide image.
- To create a new collection of whole slide images go to 'Collections' and click on 'Create collection', for this you need authorization / admin access.


Export annotations

- On the Whole slide image to export annotated image click on 'Open in HistomicsUI' and it opens a new tab with the selected whole slide image in HistomicsUI.
- Click on Analyses dropdown, select 'suhaskc/histocloud' -> latest -> 'ExportAperioXML'.
- This will open a new popup on the left-hand side of the screen, where you can input the necessary parameters for the segmentation job.


Parameters

IO


- Data Folder: Select the folder containing the slides with annotations to be exported to XML.
- Output Folder Name: Select the name of the zip file produced containing XML (NOTE: By default all this will be saved in your Private folder which can be located from the user section on home page).
- Training Layers: A comma separated list of the annotation layer names to be exported. Layers will be built up from the annotations in order. (NOTE: The name needs to match exactly)
- Example: You can use "Gloms" in the training layer.

IO 

Data Folder
Select the folder containing the slides with annotations to be exported to XMLs

Kaggle_test_DeepLabV3 

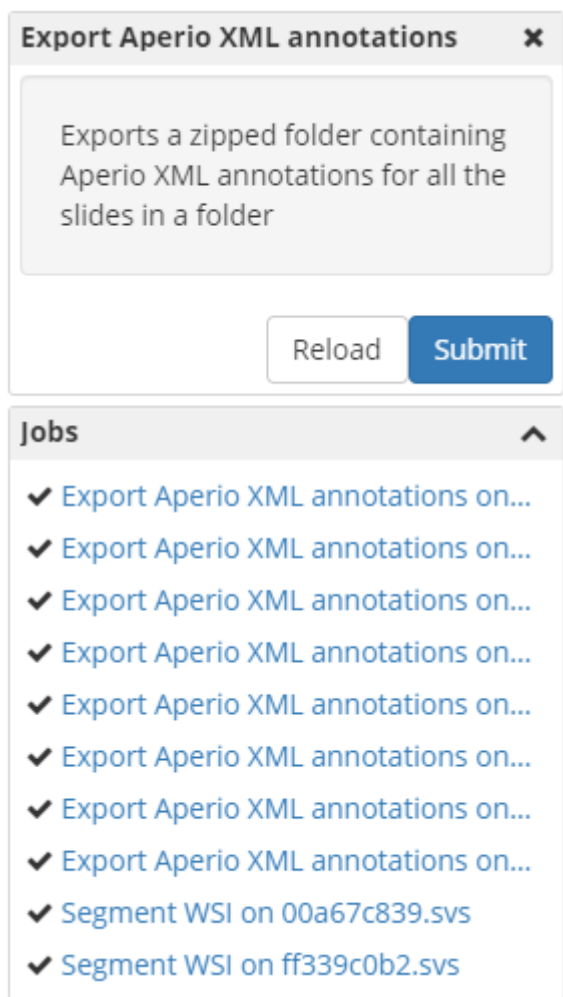
Output Folder Name
Select the name of the zip file produced (containing the XMLs). By default this will be saved in your Private folder.

Export Aperio XML annotations-c 

Training layers
A comma separated list of the annotation layer names to be exported. The name needs to match exactly. Layers will be built up from the annotations in order, sub-compartments should come after their parent structures.

name1,name2,name3,etc

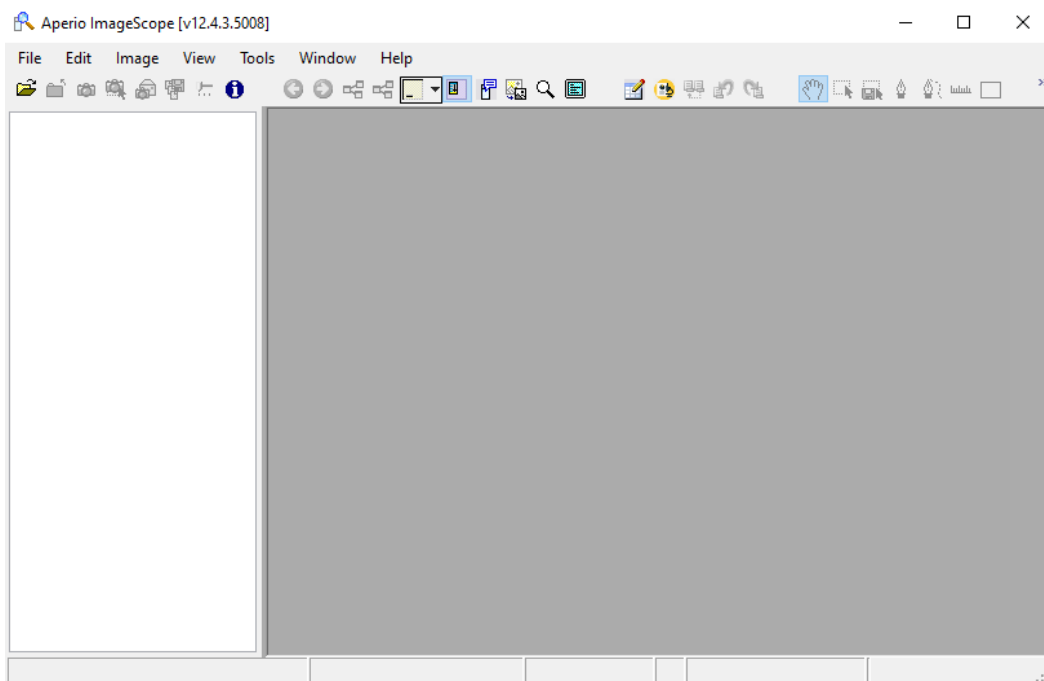
Once you have specified all of the necessary parameters, click 'Submit' to run the job. The tool will begin segmenting the input whole slide image(s) and saving the annotated segmentation to the output file. You can check the status of the segmentation under Jobs section.



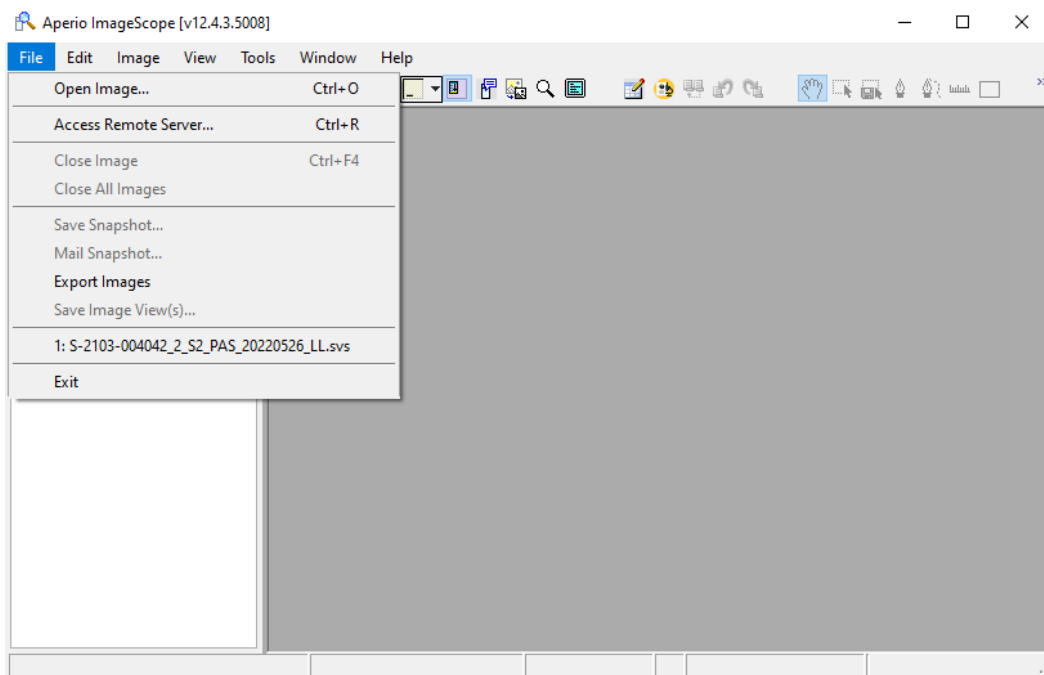
- Finally, specify the output annotation file will be saved.

Using Aperio (ImageScope Application) to view the annotations

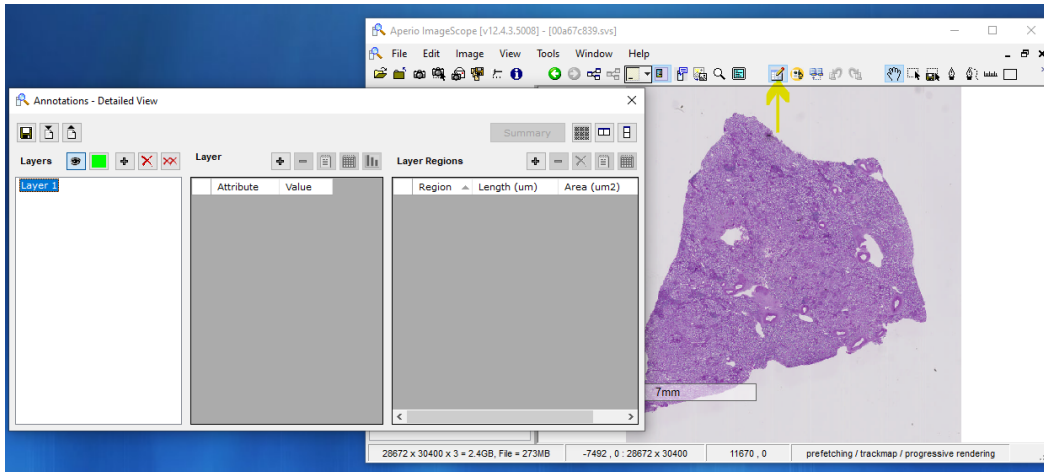
- Once you have exported the annotation, you can find this on the path where you have save it in the previous steps.
- Download the file and also the whole slide image which you want to annotate.
- Open ImageScope x64 or any similar application.



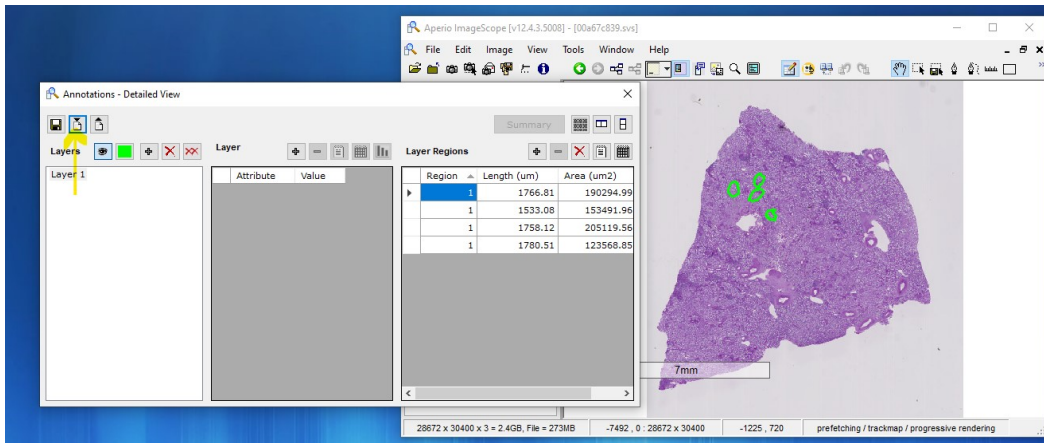
- Load the svc image from File -> Open Image



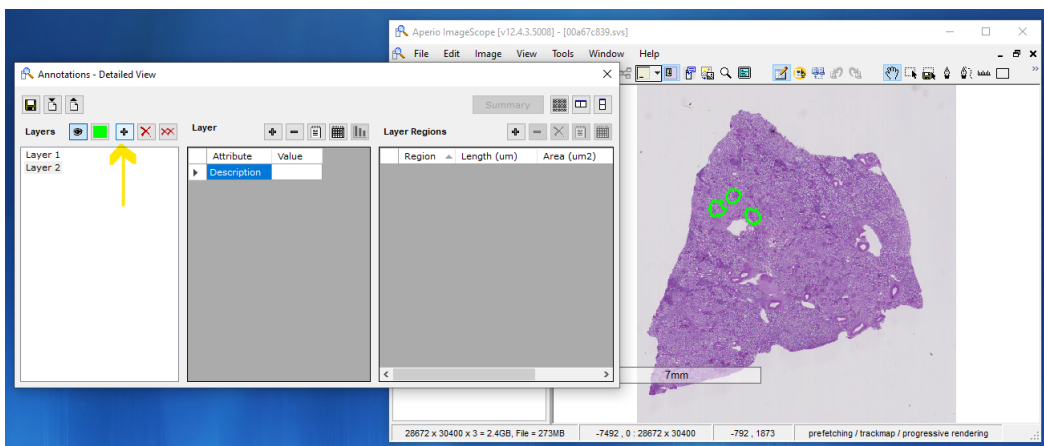
- You can find the annotations button on the top, click on it.



- You can load the XML files from the button beside save option from the above image.



- There are many functionalities in ImageScope application that can be used to view the segmentations.



- You can add layers and provide description but clicking on the "+" on the top left button as shows below:
- You can change the color of the annotations by using the color change button just beside "+" symbol.
- you can delete layers by using the cross symbol just beside the "+" symbol.
- For deleting multiple layers you can use the double cross symbol which is just beside the cross symbol.