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NIS-Elements JOB for DNA-Paint Acquisition at Serial Z-Planes

DOI

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Protocol status: Working

We use this protocol and it's working

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Keywords: elements job for dna, perfect focus system, ni, paint acquisition, focus stability, paint image, dna, elements job, nikon, plane through the use, planes this job, image, plane

Disclaimer

Caution is advised when using the JOB, as stage movement is unsupervised. Setting z-drive limits is strongly recommended.

Abstract

This JOB was created in NIS-Elements version 5.42.06, and is designed to acquire DNA-Paint images at multiple serial Z-planes. At each Z-plane, a user-defined number of images is captured. Focus stability is maintained at each plane through the use of Nikon's Perfect Focus System (PFS).

Guidelines

This JOB was created in NIS-Elements version 5.42.06.

Materials

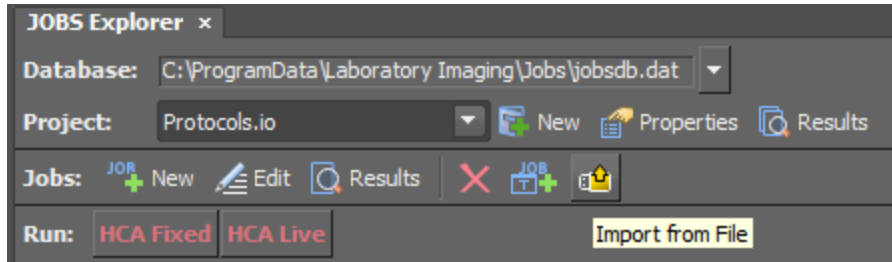


MultiZ_DNAPaint.bin 15.2KB

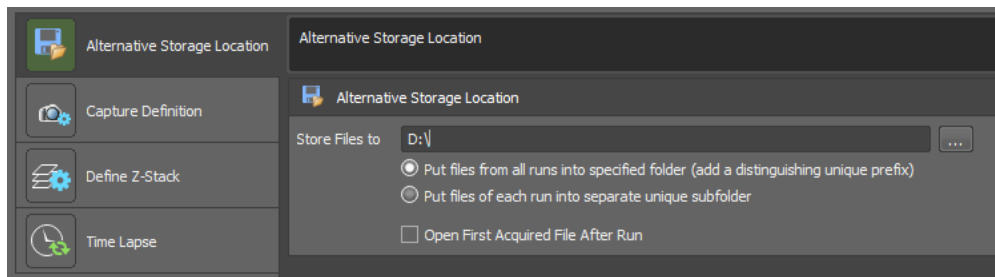
JOB definition for DNA-Paint and Serial Z-Planes - to be imported into the NIS-Elements JOBS Explorer:

Run the JOB from the JOBS Explorer

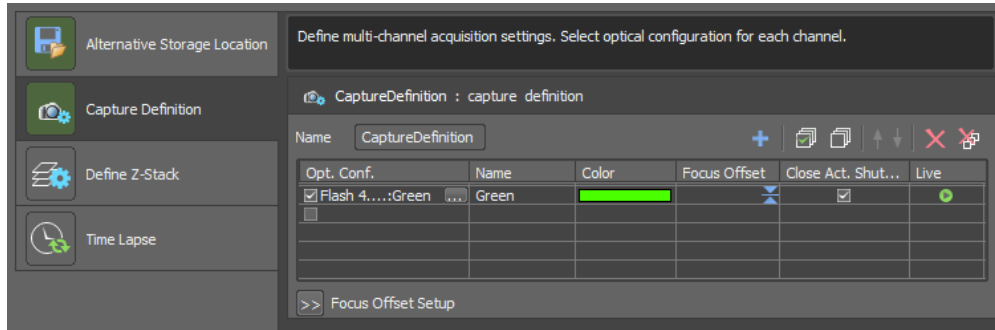
- 1 Download the attached JOB definition (see the Materials tab) and import the file into the JOBS Explorer



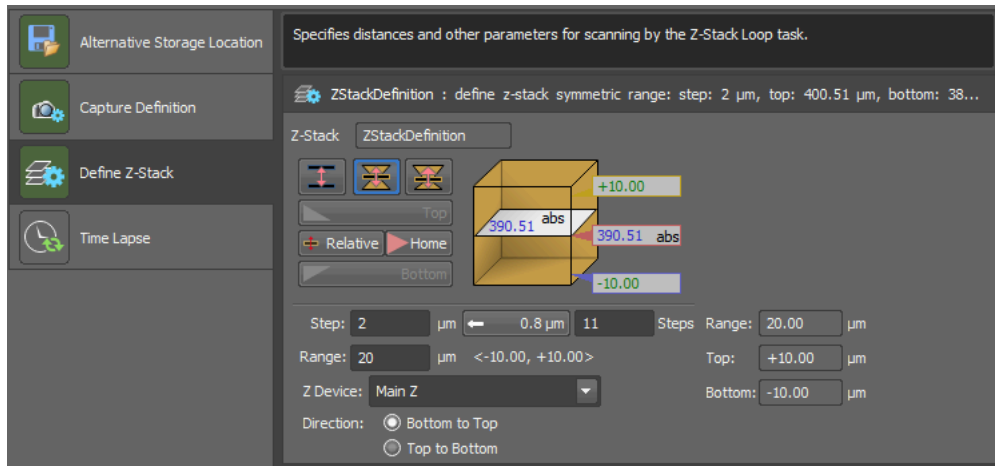
- 2 Click on the name of the JOB definition in the list and click the green Play icon
- 3 In the JOBS Wizard, first define an Alternative Storage Location where images will be saved



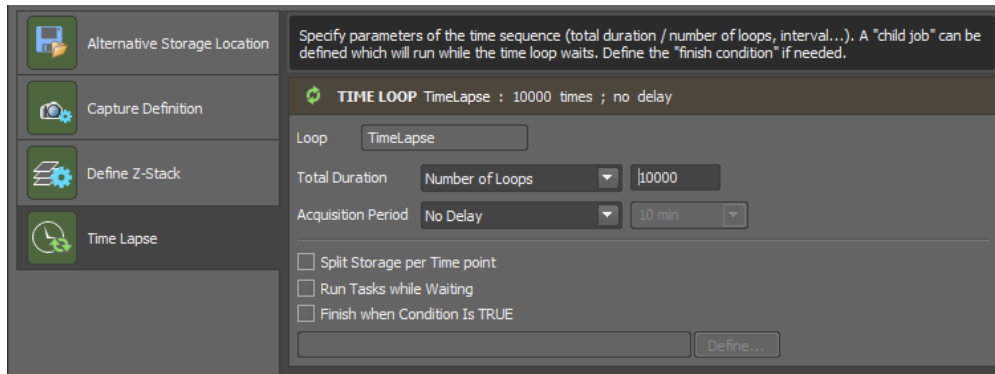
- 4 Select the Optical Configurations/Experiment Setups that define your Capture Definition



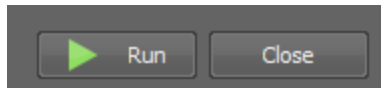
- 5 Select the Z-stack parameters for image capture, including z-range, z-step size and z-device.



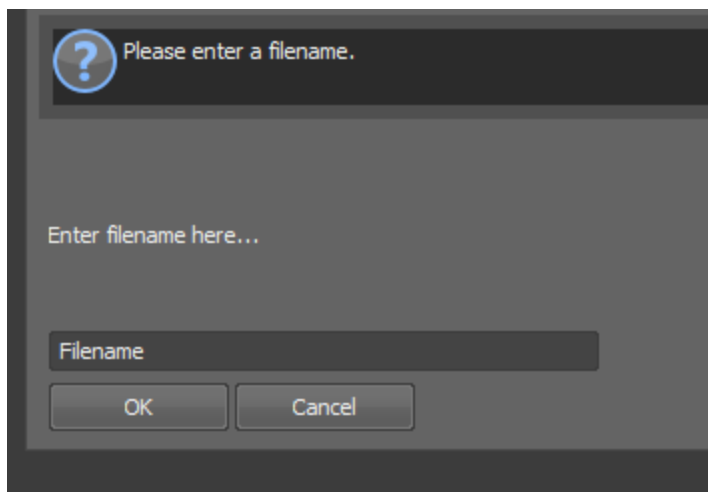
- 6 In the Time Lapse parameters, define the number of images to be captured at each z-plane (by selecting "Number of Loops"). For fastest imaging, select No Delay as the Acquisition Period.



- 7 Once all Wizard sections are complete, click Run



- 8 When the JOB starts running, you will first be prompted to enter a file name for your images. Once this is defined, click OK.



- 9 The JOB will then begin acquiring images at each z-plane after automatically defining PFS offsets for each plane. If you would like to finish acquiring before images have been captured at every z-plane, click Finish. If you have made an error during setup and wish to discard all image data from the experiment, click Abort.

