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NIS-Elements JOB for Well Plate Scanning with Autofocus and Random Point Positioning

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Robert Tetley¹, Stefan Russo²

¹Nikon Healthcare UK; ²Queen Mary University of London

Nikon Healthcare UK, Br...



Robert Tetley

Nikon Healthcare UK

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Protocol status: Working

We use this protocol and it's working

Created: December 31, 2024

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Keywords: NIS-Elements, JOBS, Nikon, Microscopy, Wellplates, Randomisation, Autofocus, elements job for well plate scanning, well plate scanning, focal position, images at random position, autofocus, ni, autofocus routine, elements job, well plate, random position, defined well, point in each well, random point, image, plate

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 capture images at random positions within defined wells of a well plate. At each point in each well, the focal position is determined by an autofocus routine.

Guidelines

This JOB was created in NIS-Elements version 5.42.06.

Materials

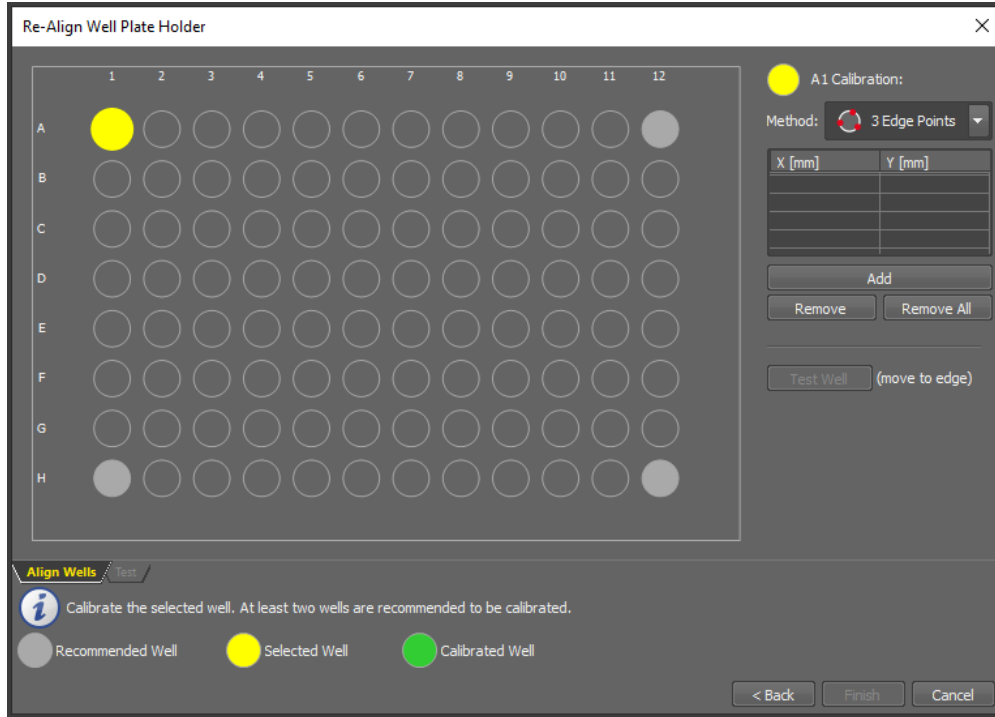
JOB definition for Well Plate Scanning with Autofocus and Random Point Positioning - to be imported into the NIS-Elements JOBS Explorer:



Well Plate Scanning - Autofocus.bin 14.9KB

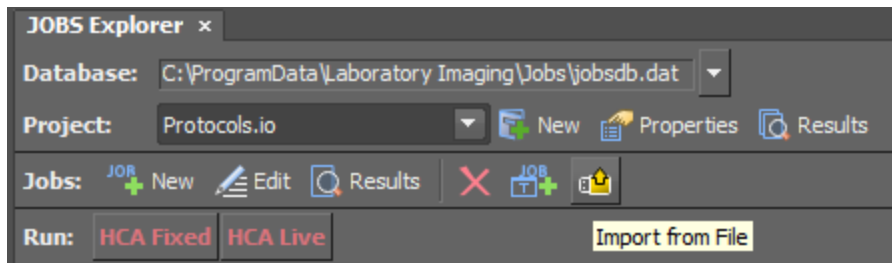
Align Well Plate

- 1 Before running the JOB, please ensure that your well plate of choice has been aligned from the HCA/JOBs menu via the (Re-)Align Well Plate Holder.. wizard.

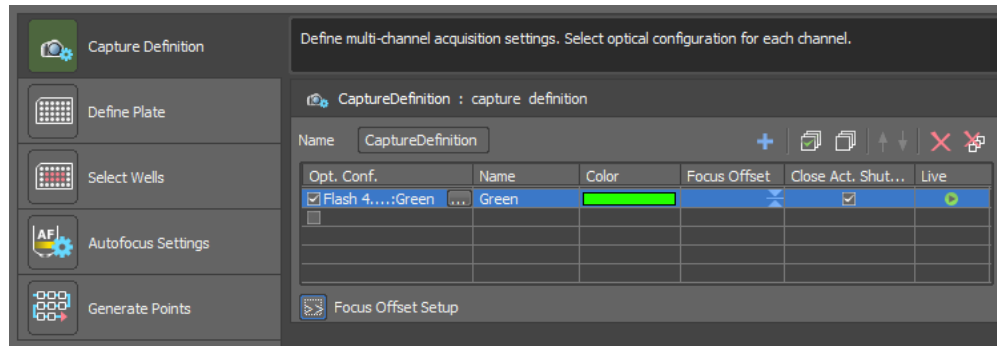


Run the JOB from the JOBS Explorer

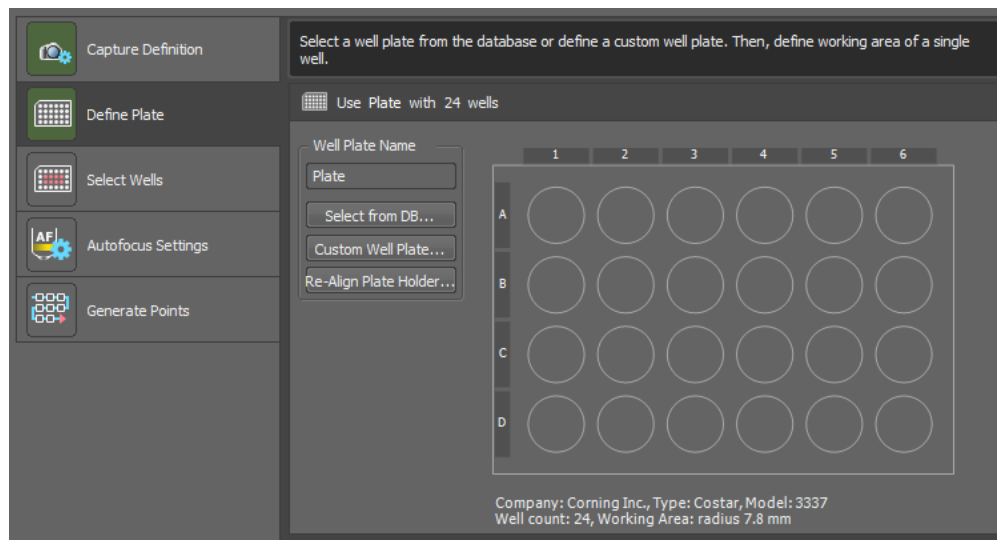
- 2 Download the attached JOB definition (see the Materials tab) and import the file into the JOBS Explorer



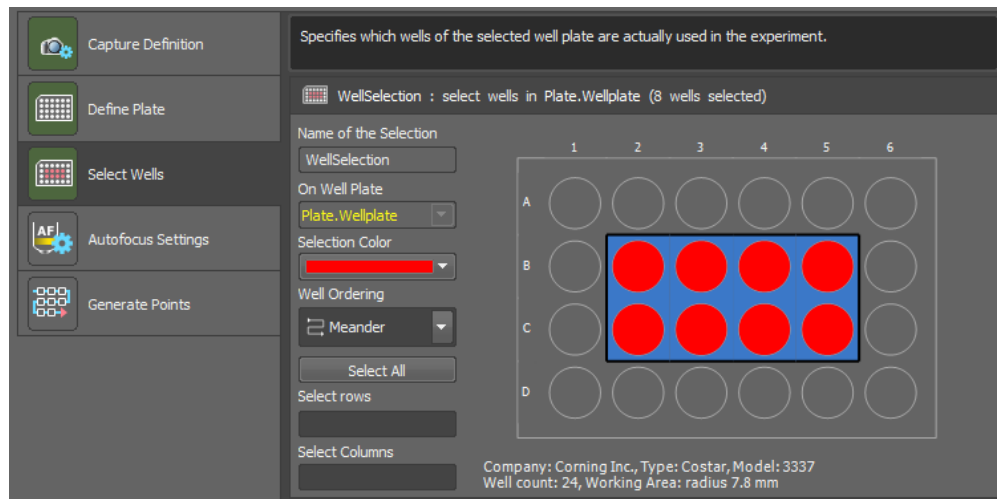
- 3 Click on the name of the JOB definition in the list and click the green Play icon
- 4 In the JOBS Wizard, first select the Optical Configurations/Experiment Setups that define your Capture Definition



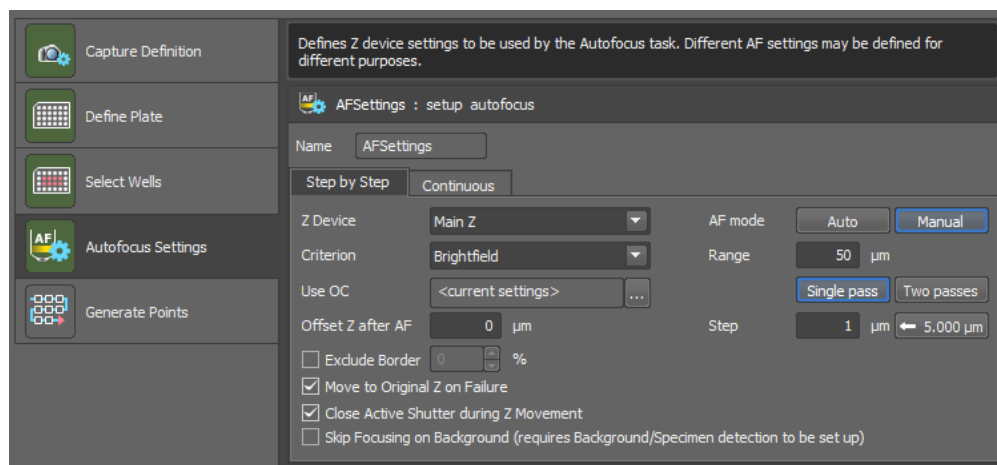
- 5 Define the type of plate that will be imaged



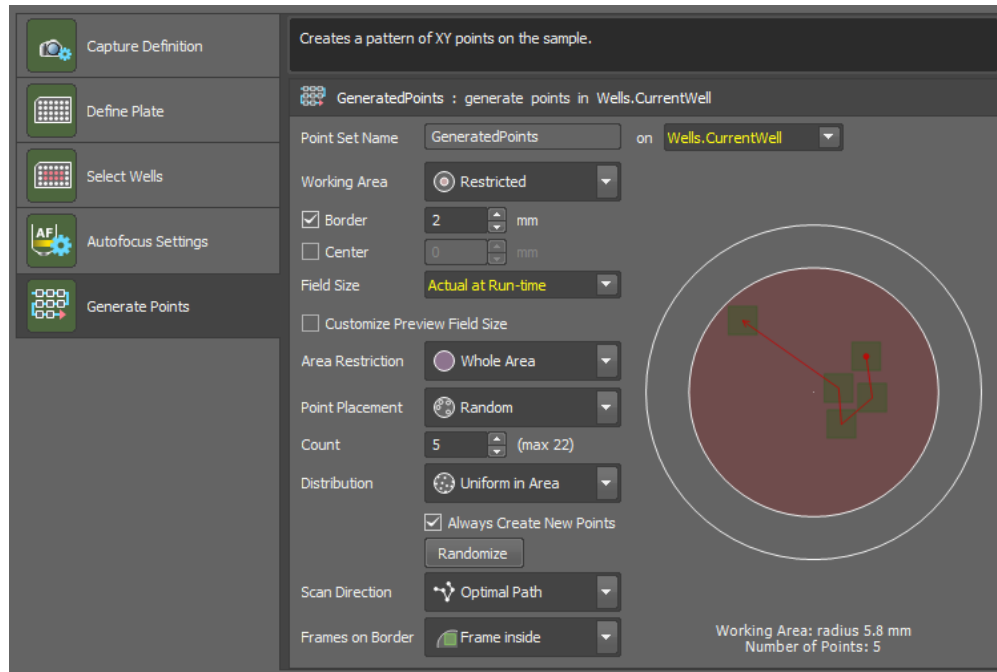
- 6 Select the wells that will be imaged



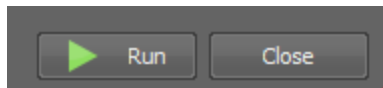
- 7 Select the Autofocus settings that will be used, including the z-device, imaging criterion and range



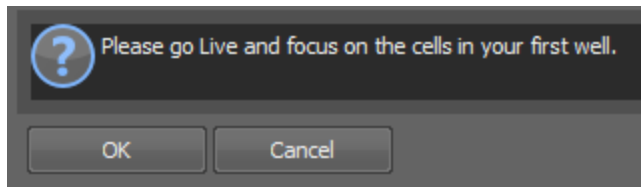
- 8 Define the number of random points you wish to image per well - border (and centre) restrictions can also be specified in this step



- 9 Once all Wizard sections are complete, click Run



- 10 When the JOB starts running, you will first be prompted to go Live and focus on your cells/sample in the first well



Once this is done, click OK

- 11 The JOB will begin acquiring images in each defined well. If you would like to finish acquiring before images have been captured in all wells, click Finish. If you have made an error during setup and wish to discard all image data from the experiment, click Abort.

