

Prerequisites

You are familiar with NIS-elements – use help tool within software and in the manual

Note this script is based on NIS-elements template JOBS scripts

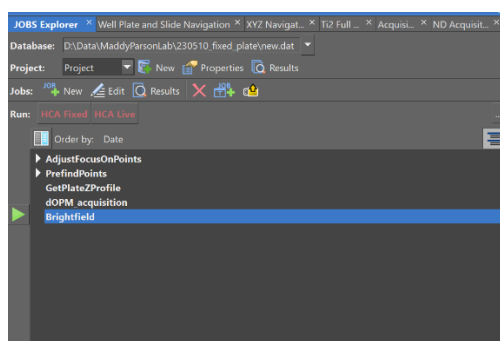
All of the scripts use a ‘Wizard’ that guides the user to define important parameters before the scripts purpose is carried out.

Use the NIS-Elements help tool to work out how and why you would want to use JOBS scripts.

Introduction

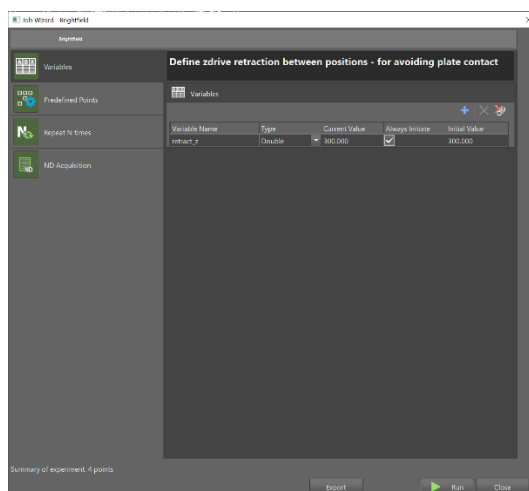
This script loops over a position list and acquires brightfield images from a single z-plane. This could also do fluorescence images by choosing a different wide-field imaging mode. This can be used to to brightfield timelapse imaging. I use it for before and after dOPM timelapse imaging to get brightfield complementary information readout of the region of interest at the beginning and end.

Run Brightfield JOBS script



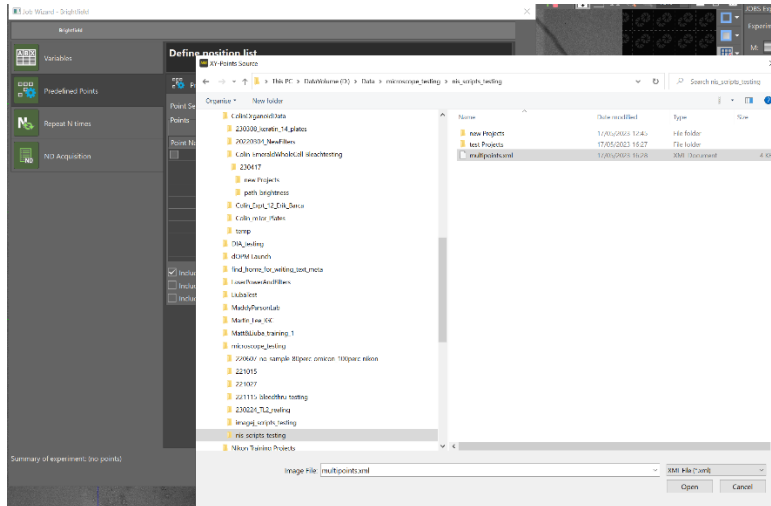
- Run the ‘Brightfield’ JOBS script
- Use the NIS-Elements help tool to work out how and why you would want to:
 - Use JOBS explorer

Set z_retract parameter



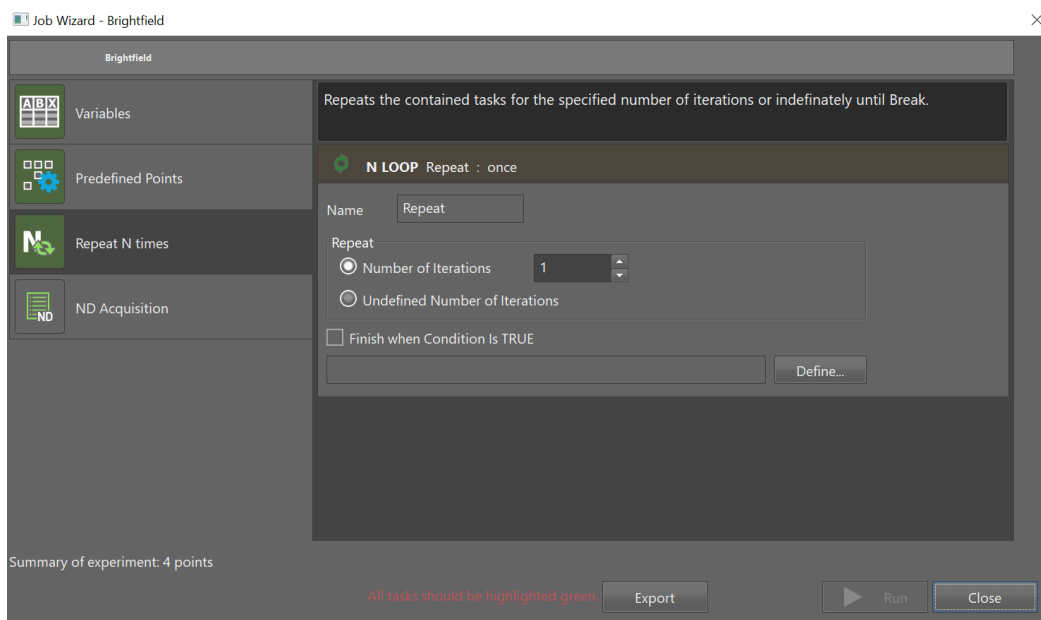
- Set the `z_retract` variable to a number that avoids the chance of the objective colliding with the plate during stage movements.
- Here a conservative 300µm is used but depends on the plate being used – see JOBS script 'GetPlateZProfile' for a way to measure plate flatness.

Load position list to iterate over



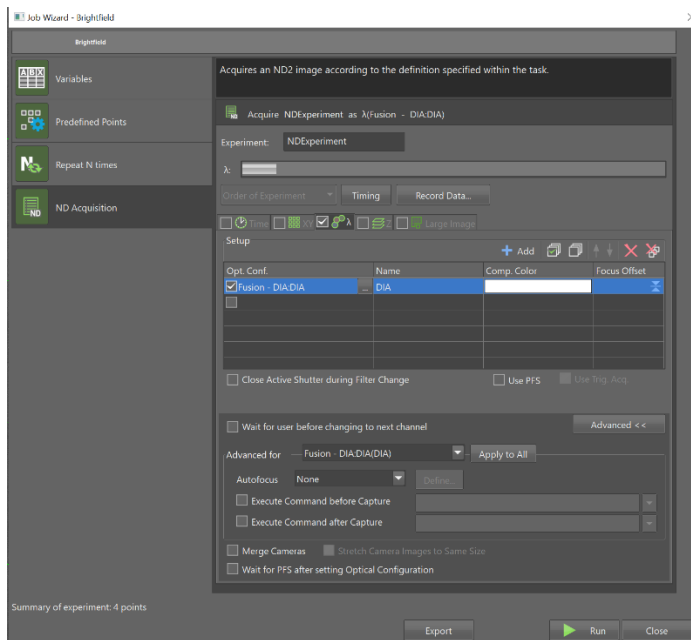
- load or define position list xml or csv file

Set timelapse parameters



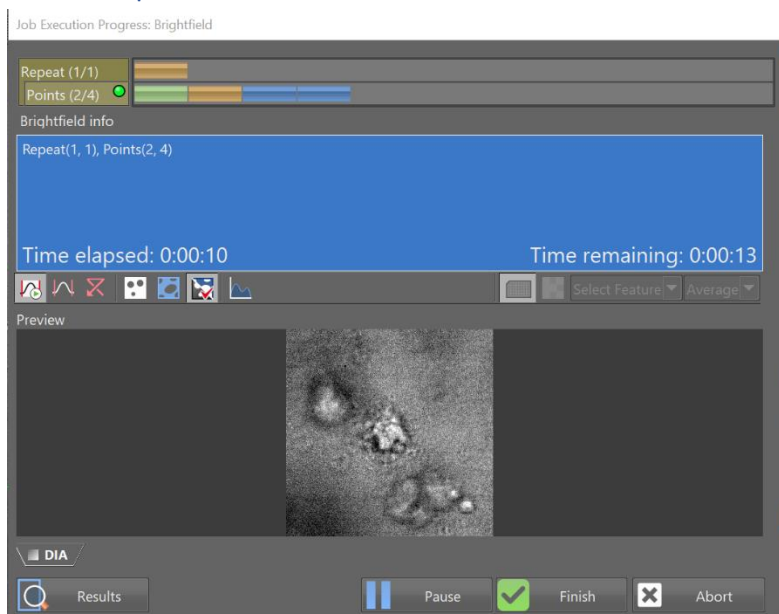
- choose whether time-lapse or not and the frequency of time points
- need to choose frequency that is longer than acquisition time for position list
- Use the NIS-Elements help tool to understand timing requirements in timelapse imaging

Define wide-field imaging



- Here we use an embedded 'NDAcquisition' to define the acquisition. In this case we are just doing a wide-field brightfield image but could be changed to something else.

Run acquisition



- Run the acquisition – collects a single image from each xyz location
- Typically, fast if brightfield and gives snapshot of xyz position list and whether they match up with regions of interest

Script Assumptions

- **Already defined a position list**