

## Manual Microscope Setup: Using Quick Calibration and the OC Panel

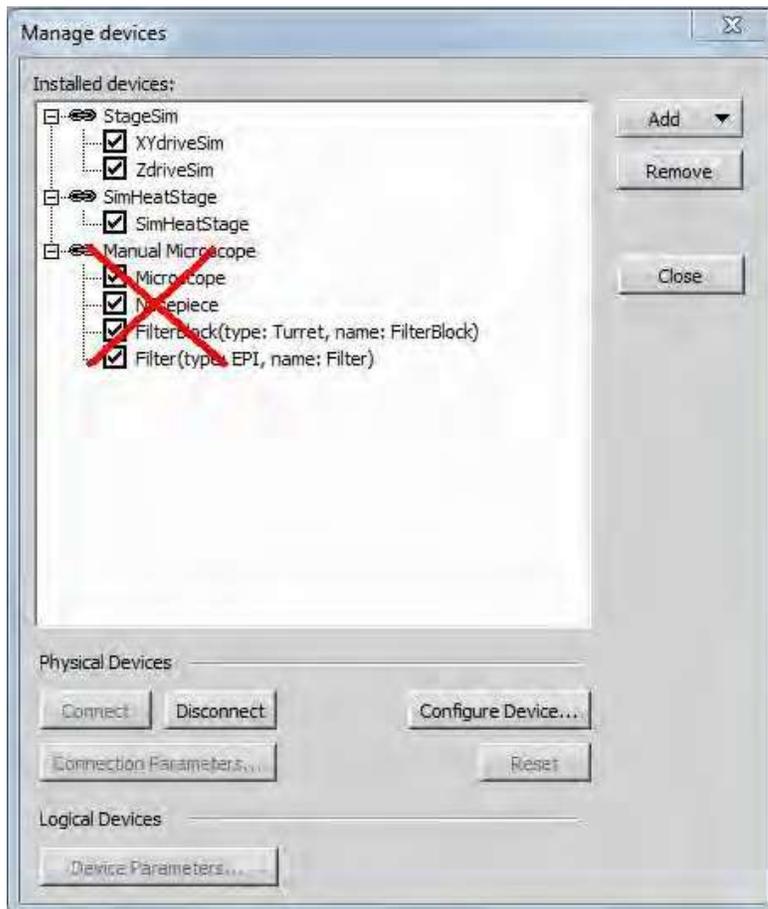
This document specifies the set up calibrations for a stereo or manual microscope in NIS-Elements with multiple objectives and multiple zoom stops utilizing the Optical Configuration (OC) Panel.

Note number: 0016  
 Creation Date: 6/2011  
 Date Modified:  
 Software Version: 3.20.00 or newer  
 Package: C, Ar, Br, D  
 (Local Options Installed)  
 Required Module (s): none

This documentation assumes some familiarity with Nikon NIS-Elements software as well as general knowledge of the PC Windows environment.

A calibration slide or stage micrometer will be necessary if using a manual stage. If setup includes a motorized stage, a sample with good contrast and non-repeating patterns will be best.

### Connecting Hardware

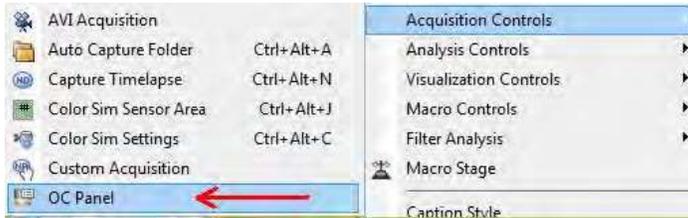


For this type of set up, be sure there are no microscopes or nosepiece devices in the NIS-Elements Manage Devices dialog. This will prevent Quick Calibrations from being an available option.

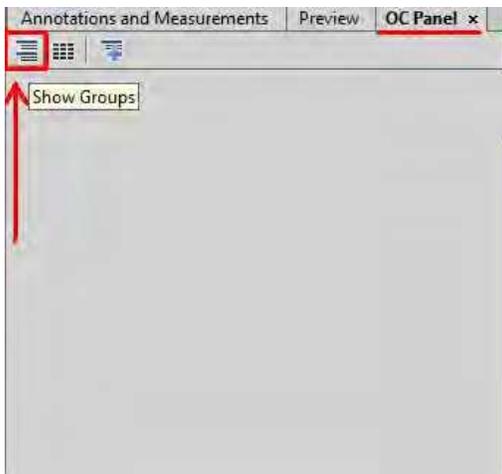


## Layout Setup

Open the “OC Panel” by Right-clicking the Docking Panel and selecting ‘Acquisition Controls→OC Panel’ or going to ‘View→Acquisition Controls→OC Panel’ in the Menu Bar.

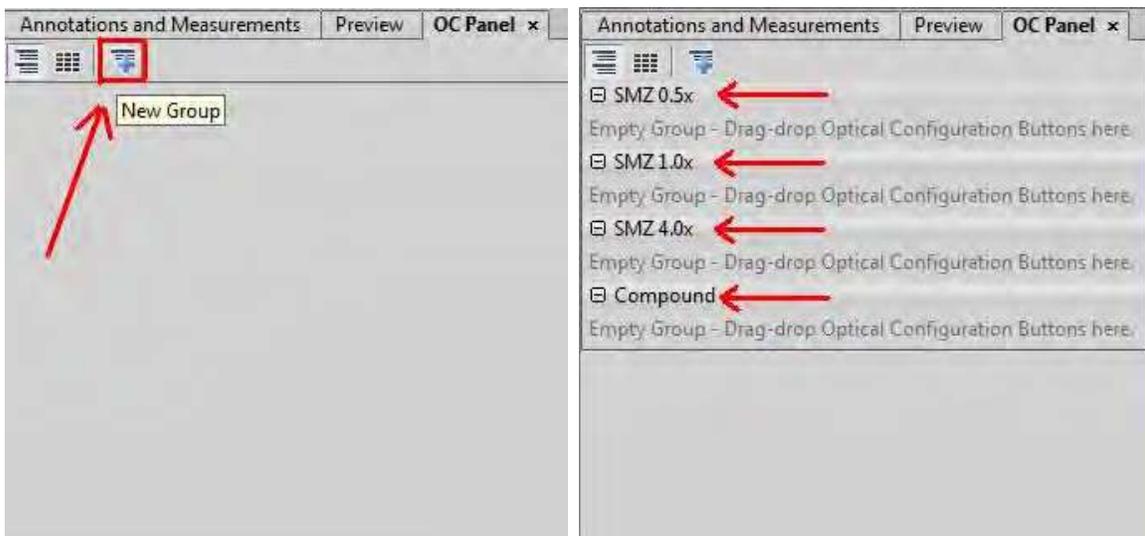


After opening the “OC Panel,” activate ‘Show Groups.’



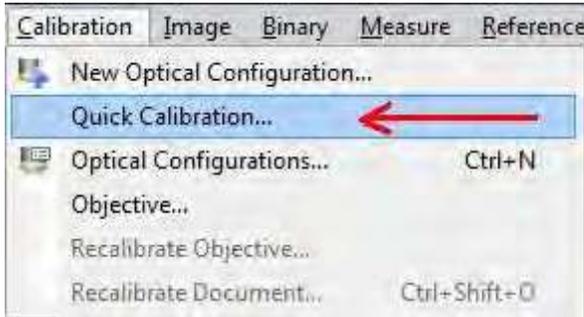
Add ‘New Groups’ appropriate to the setup needed.

This example shows groups for an SMZ-1500 (3 objectives and 5 Zoom Stops) and a Compound Microscope dual setup:



## Calibration of Objectives

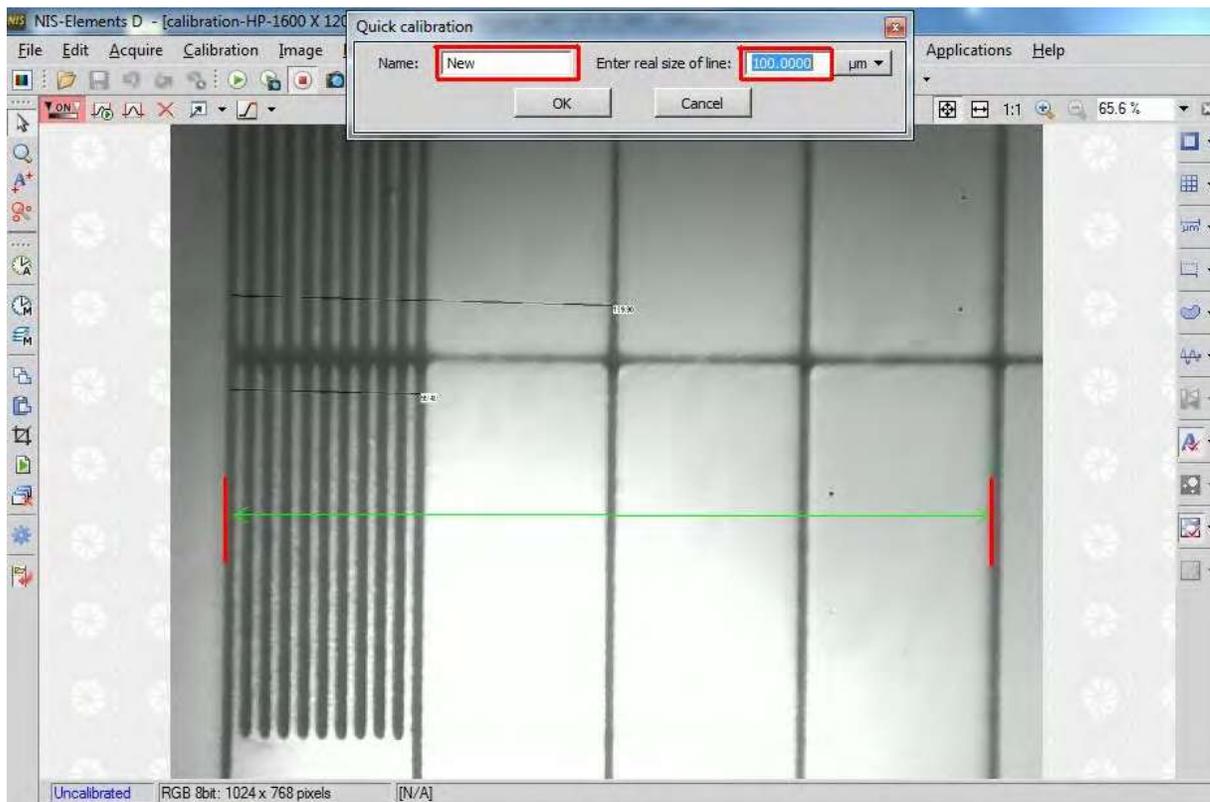
Next calibrate each and every objective for every Zoom Stop using “Quick Calibration...” This can be found in the “Calibration→Quick Calibration...” from the Menu bar.



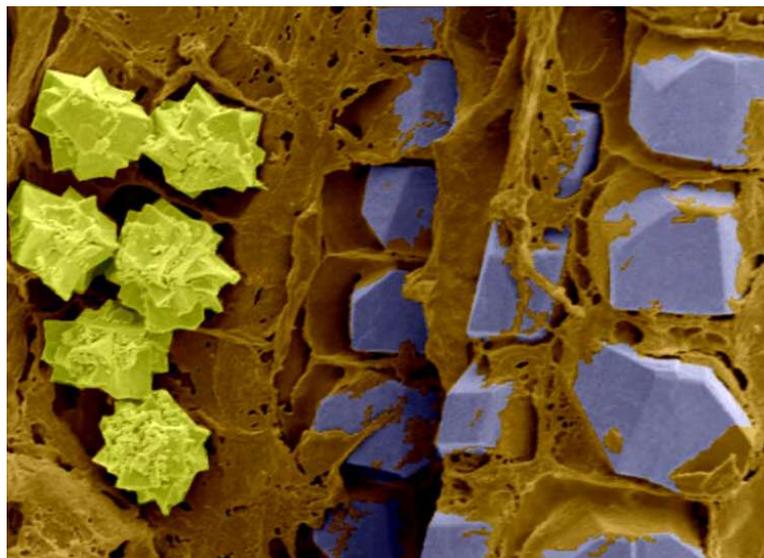
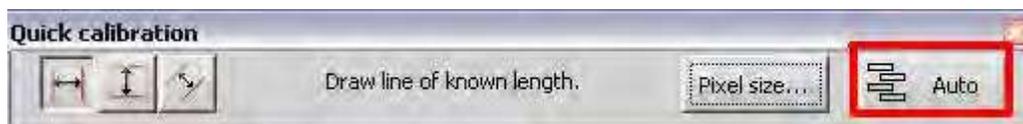
On microscopes with a manual or fixed stage, it is best to use a calibration slide or stage micrometer.



Enter a descriptive and unique name for each calibration, such as 1x@1xMag and enter the length of the measurement line in the appropriate units. (100um, .75 in., etc)

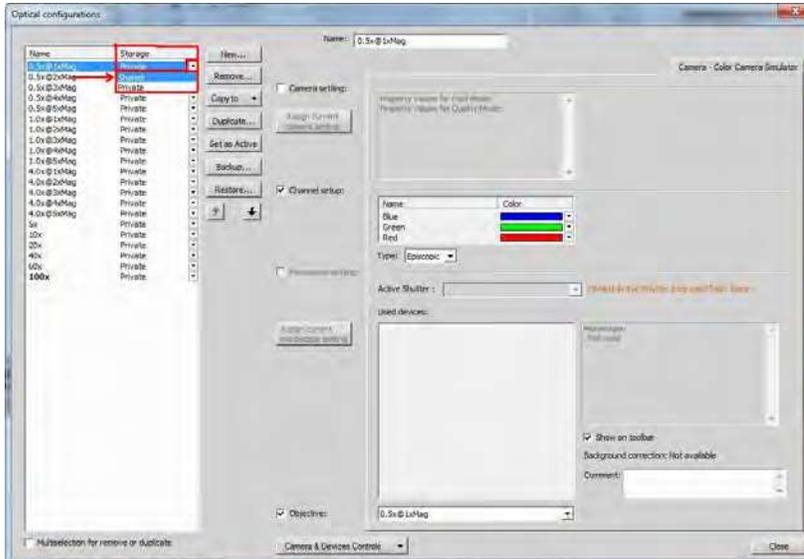


If a motorized stage controlled by NIS-Elements is being used, a sample with good contrast and non-repeating patterns can be used with the “Auto” option.

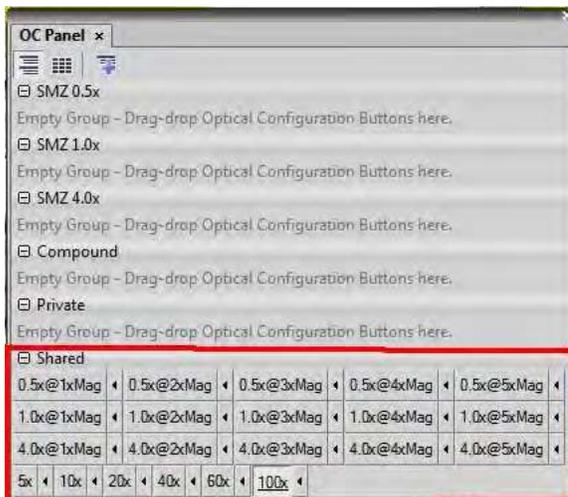


## Adjusting Layout

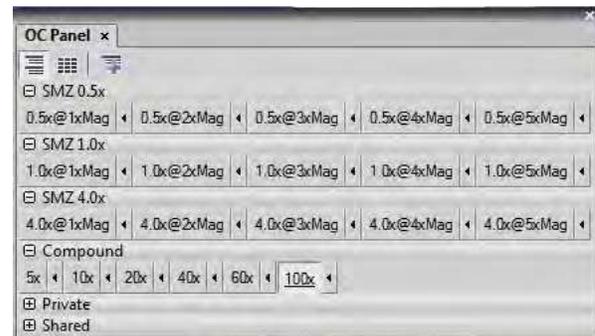
Now all the Optical Configurations need to be changed from “Private” to “Shared.” This can be done by going to ‘Calibration→Optical Configurations...’ and then clicking on the dropdown next to each OC and selecting “Shared.”



The OC buttons can then be drag and dropped to their appropriate groups:



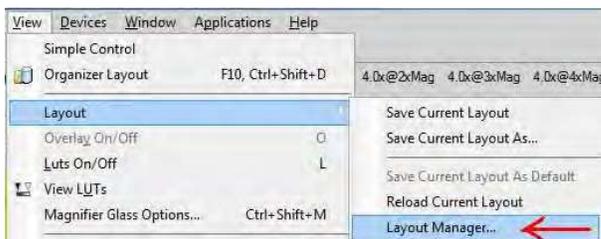
Before



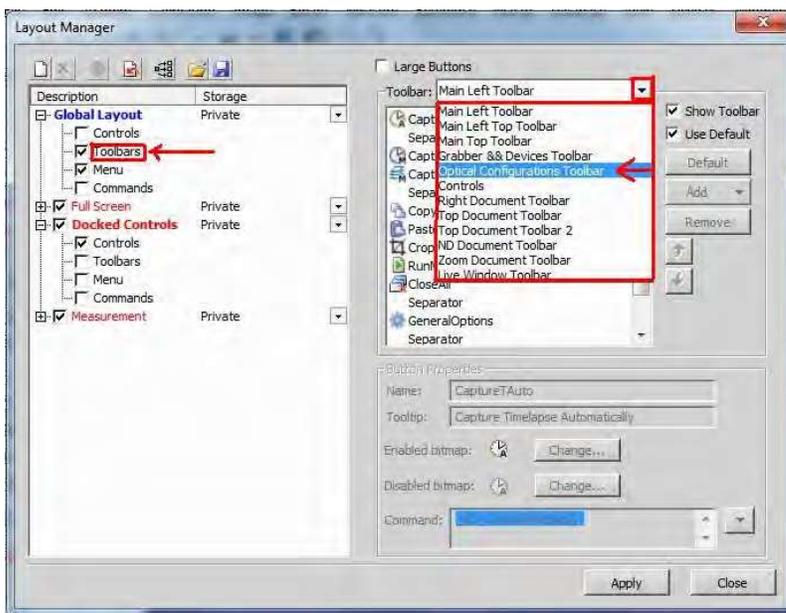
After



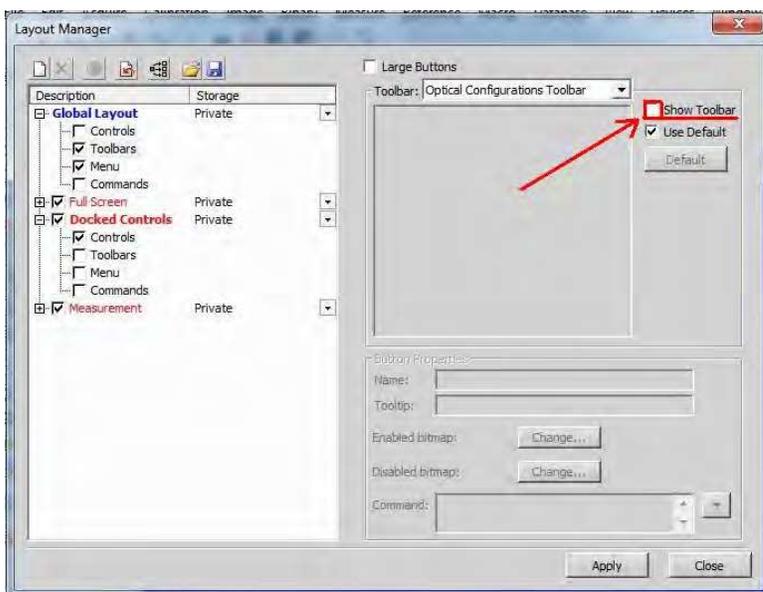
If desired, the OC buttons in the upper toolbar can be hidden in the Layout Manager by going to ‘View→Layout→Layout Manager...’



Select “Toolbars” in the “General Layout” and Select “Optical Configurations Toolbar” in the Toolbar dropdown.

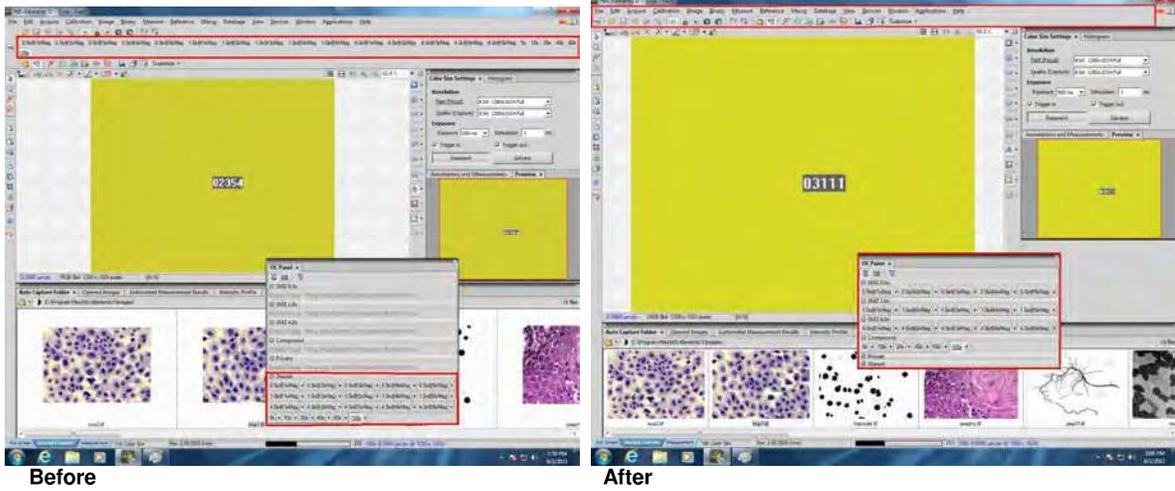


Uncheck “Show Toolbar” and click “Apply.”





This will minimize the number of options in the Top Toolbar.



The OC Panel can be "Docked" if desired.

