

# MicroManager Plug-in Unit User Guide

--MSHOT camera and platform

## 1、Introduction

Micromanager is a general control framework platform for microscope system, which provides a powerful plug-in development mechanism. It allows manufacturers of various microscope industries to access their products into the control framework through secondary development.

This manual will introduce the control access and basic use method of MSHOT MS60 series camera and the platform.

The process of this paper is based on 64 bit version of Micromanager 2.0 gamma, and other versions have not been tested.

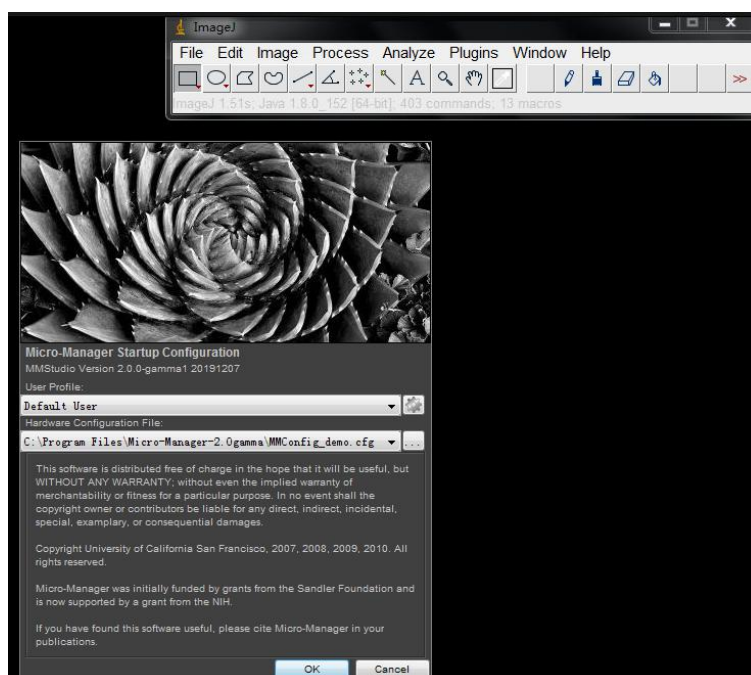
## 2、MSHOT Camera MS60 series Plug-in unit

### (1) Camera access

The plug-in library file developed for MS60 series camera includes camera SDK library file `dvpcamera64.dll` and plug-in library file `mmgr_dal_MSCamera.dll`. (Note: on the target computer, the driver of ms60 series camera needs to be installed in advance to ensure that the computer can recognize the camera, and MSHOT camera control software can control the camera normally.)

Before accessing, you need to copy the above two library files to the Micromanager installation directory (generally: C: program files / micro-manager-2.0gamma).

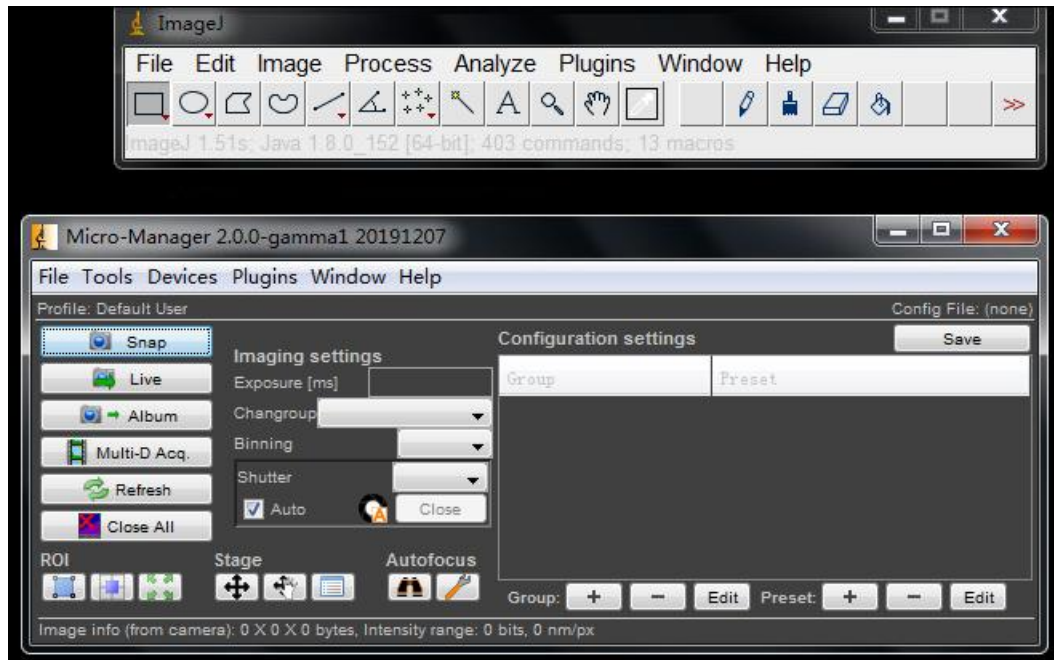
Open the Micromanager software. The default startup interface is as below.



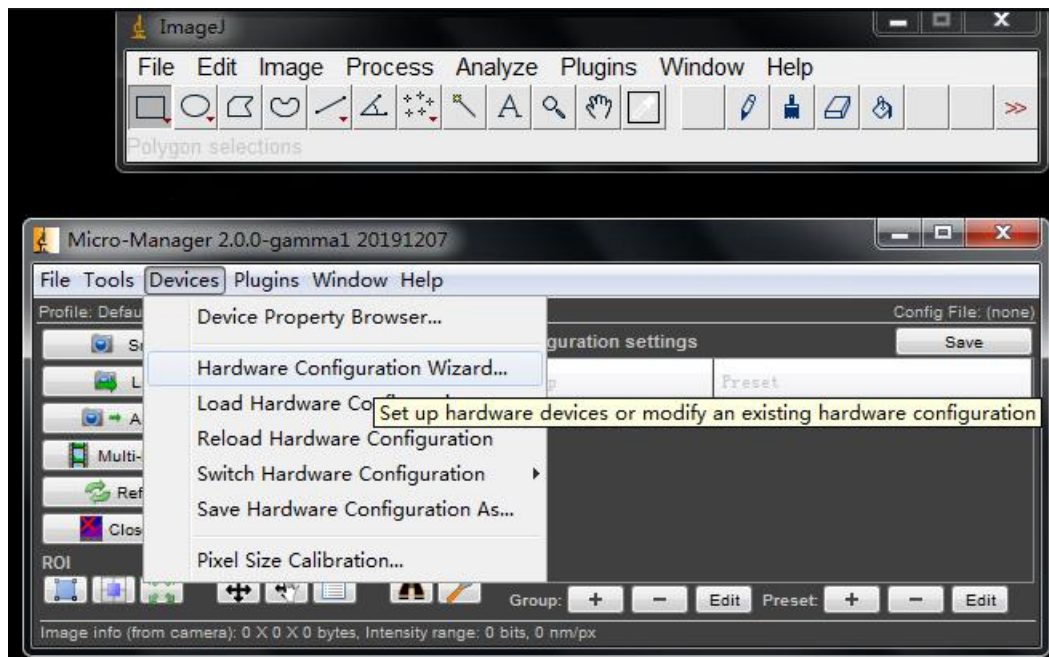
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By default, it contains a configuration file controlled by a virtual hardware collection.

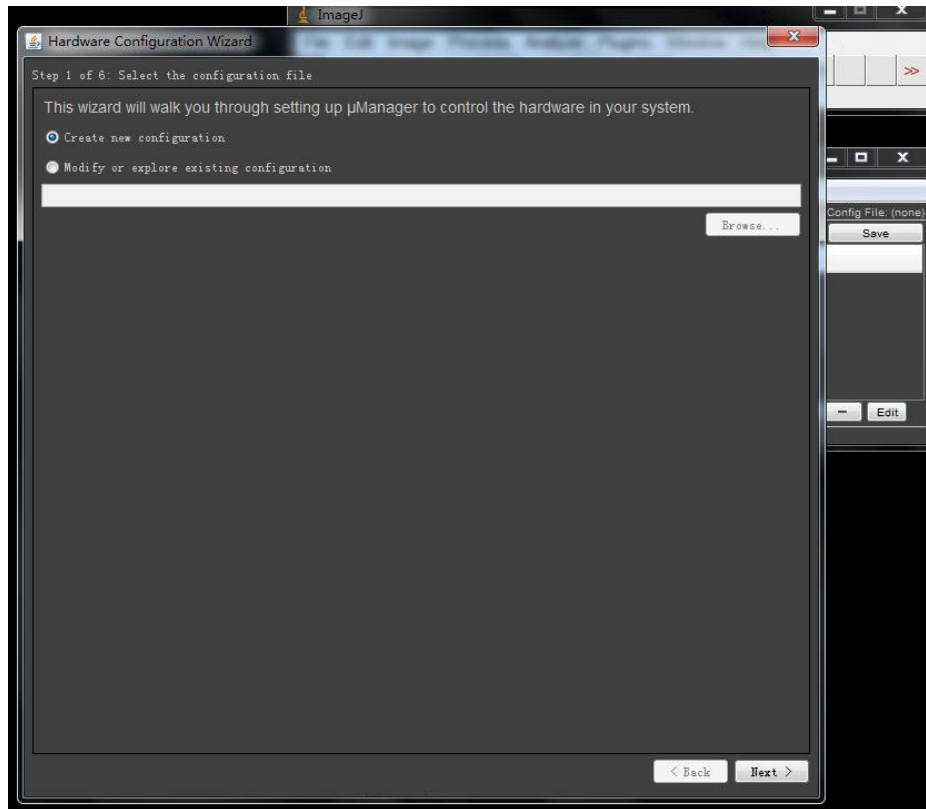
Here, select none from the drop-down box, and click OK to start the new device access wizard, and the main interface will pop up, as shown in the following figure.



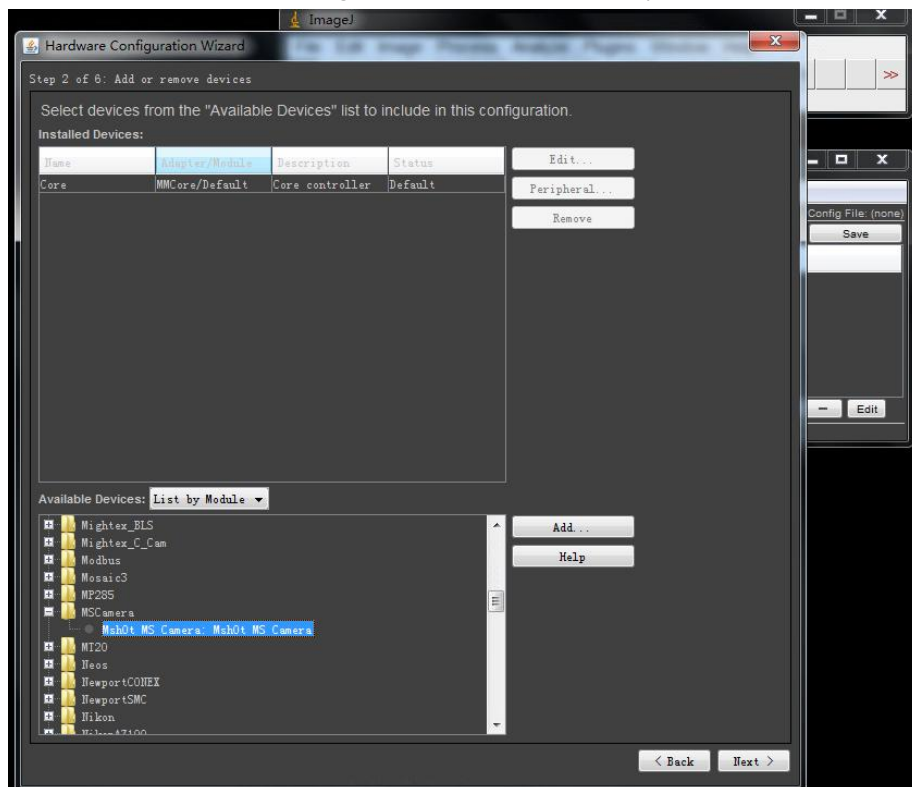
Click the menu in the following figure: Devices-->Hardware Configuration Wizard...



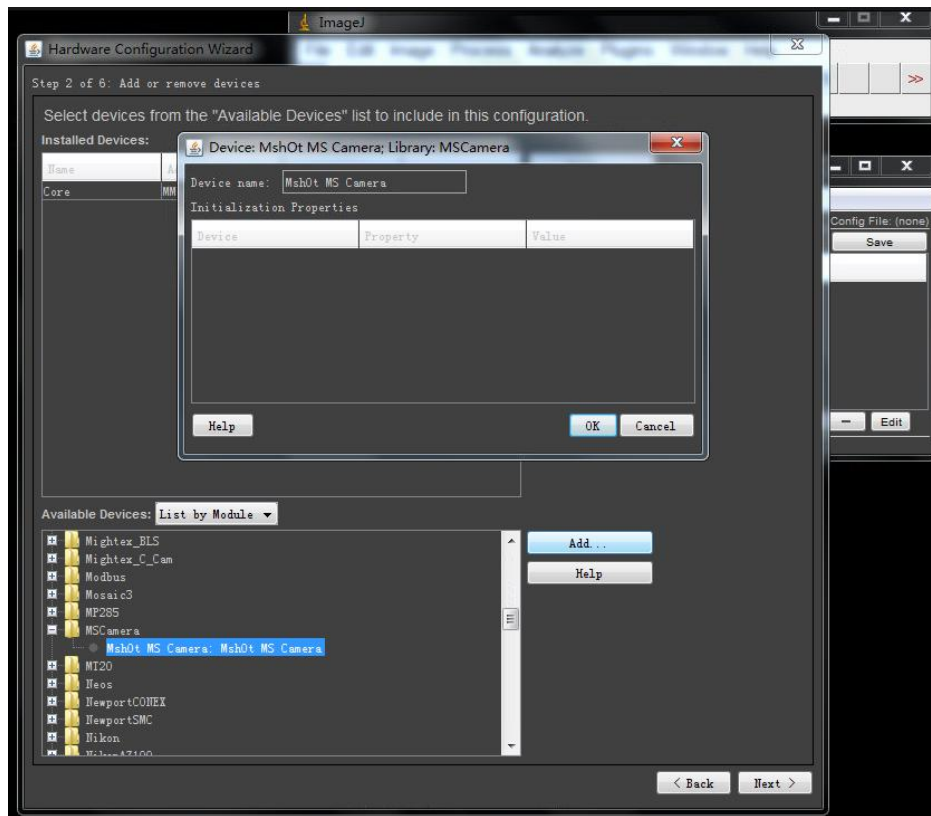
The interface of selecting configuration document will pop up.



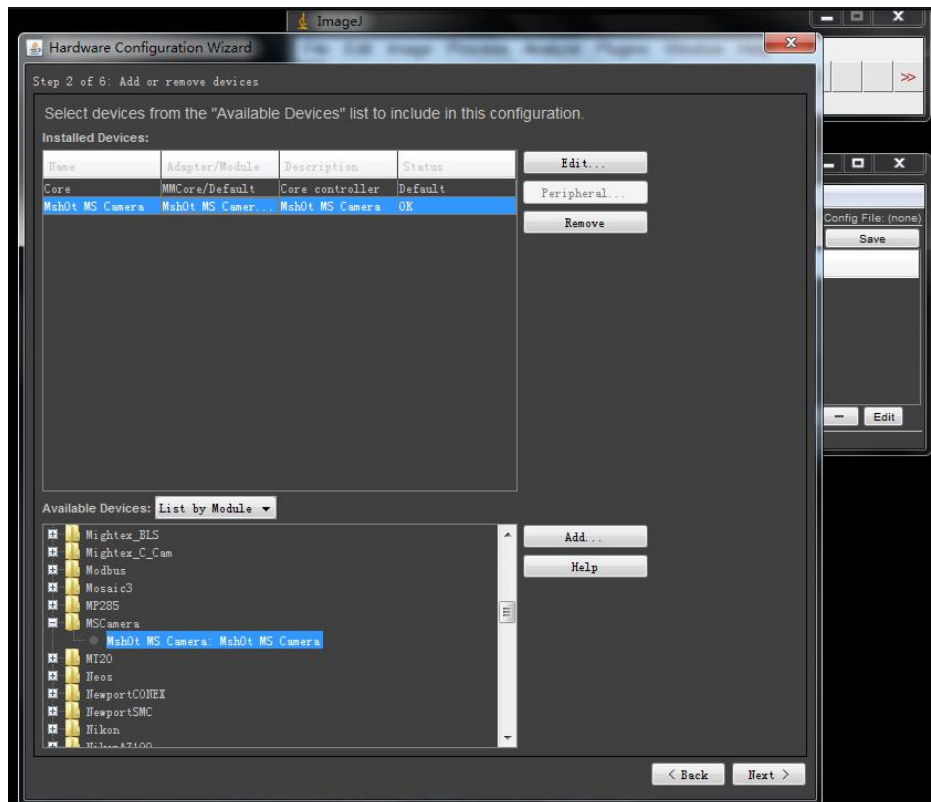
Here, select create new configuration and click next to open the add new device interface



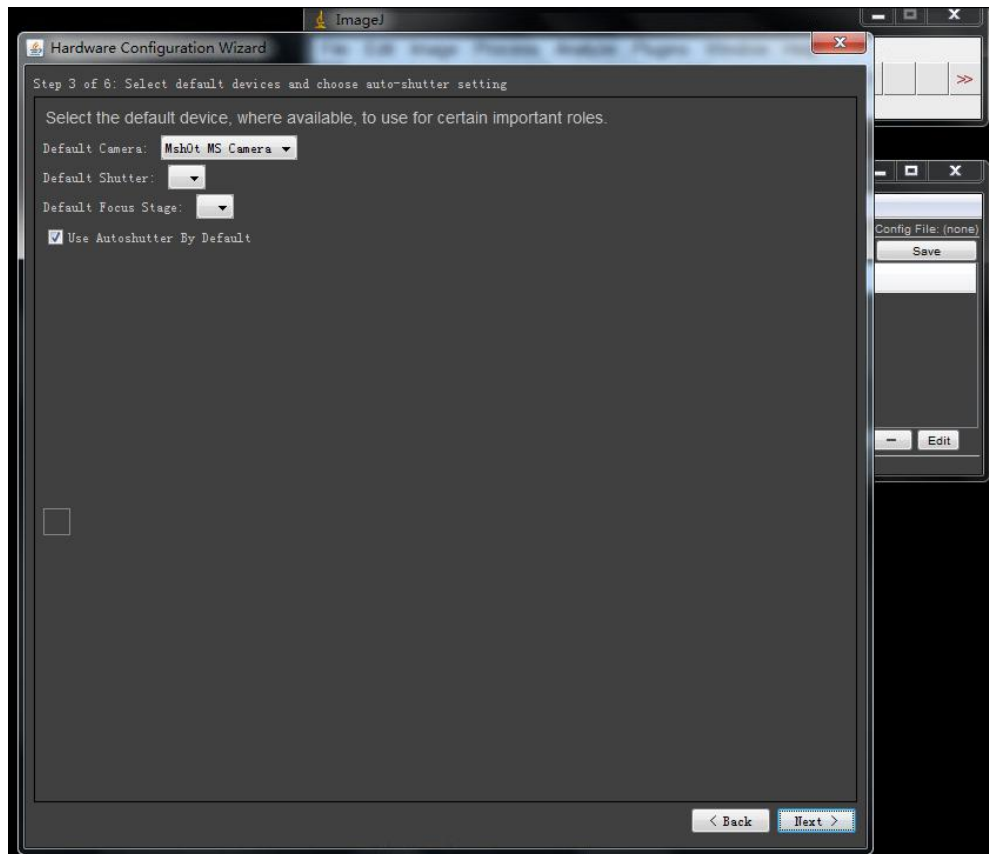
In the figure above, find mscamera from the list, select it, and click Add...



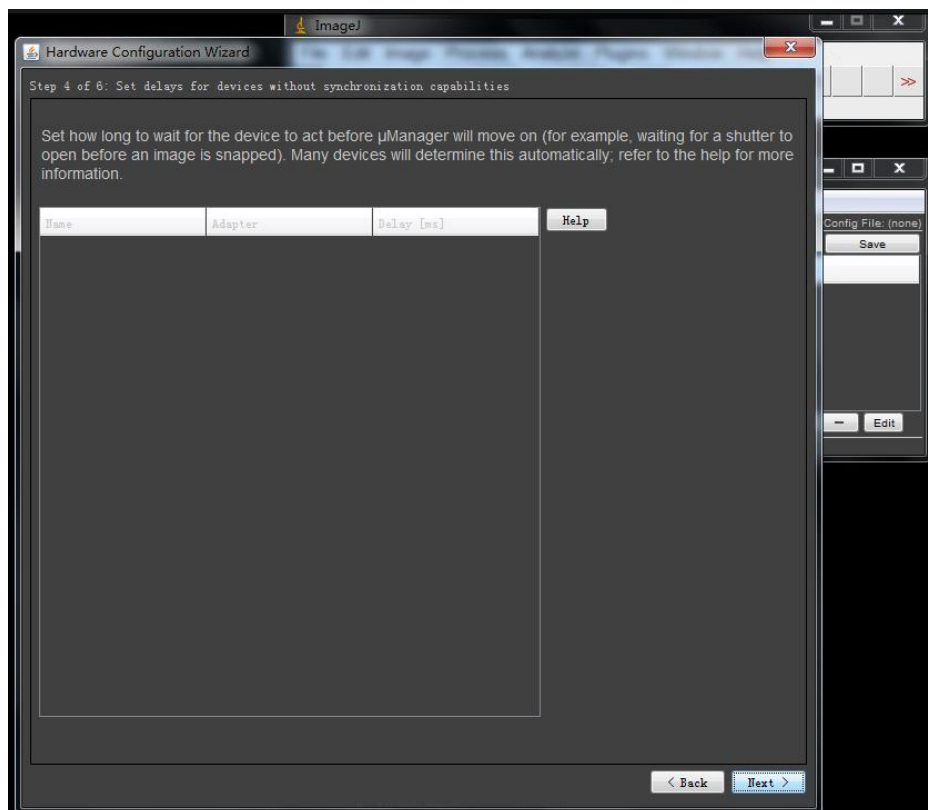
Click OK in the pop-up sub dialog box above to add a new mscamera device, as shown in the following figure:



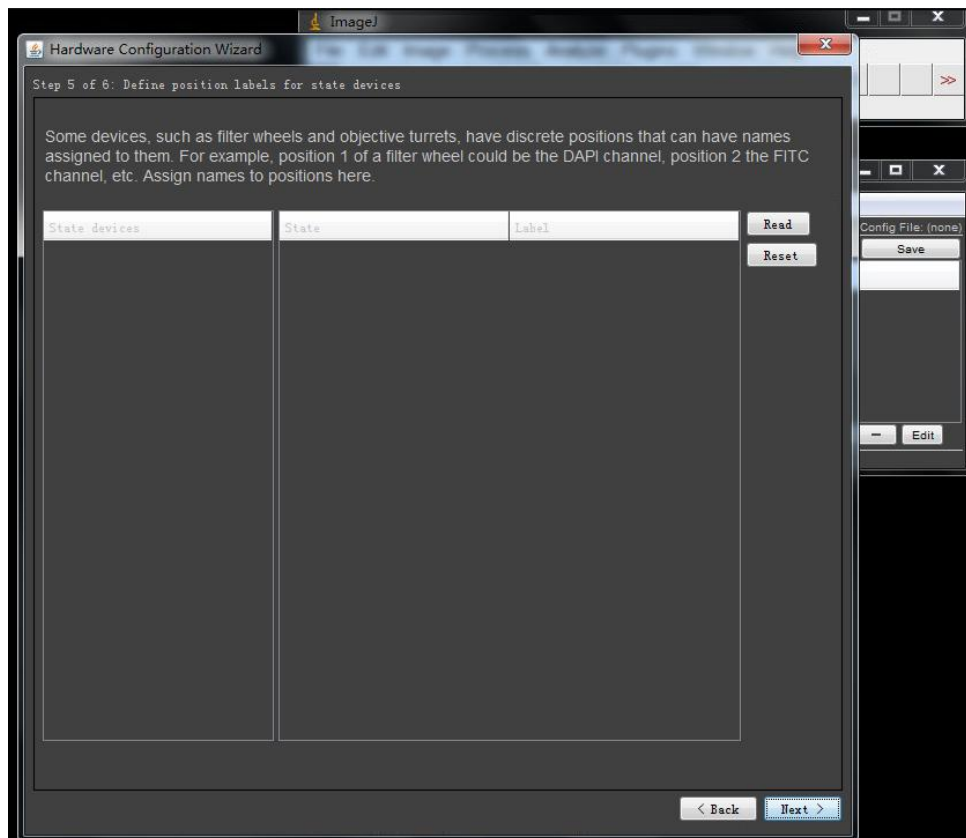
Click Next



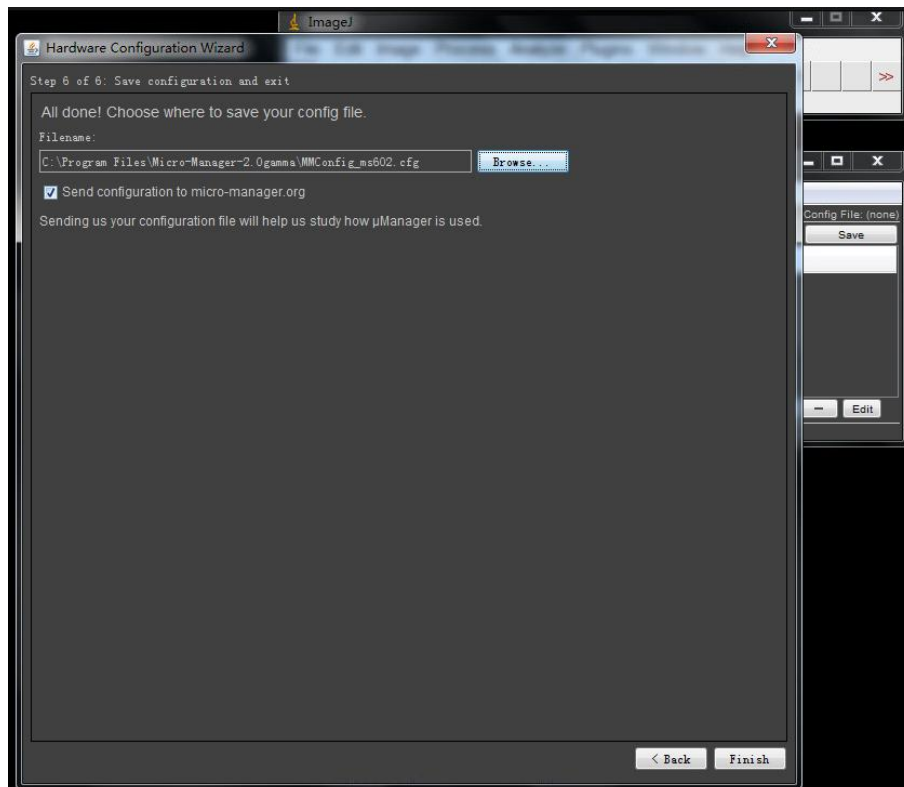
Click Next



Click Next



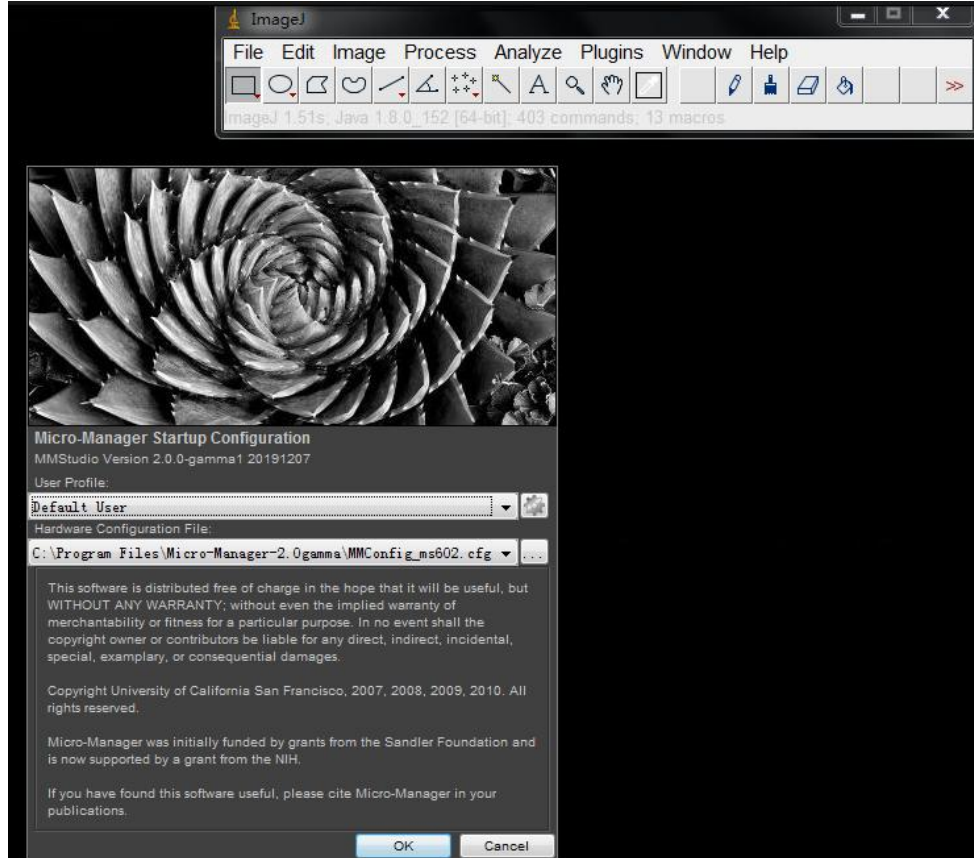
Click Next



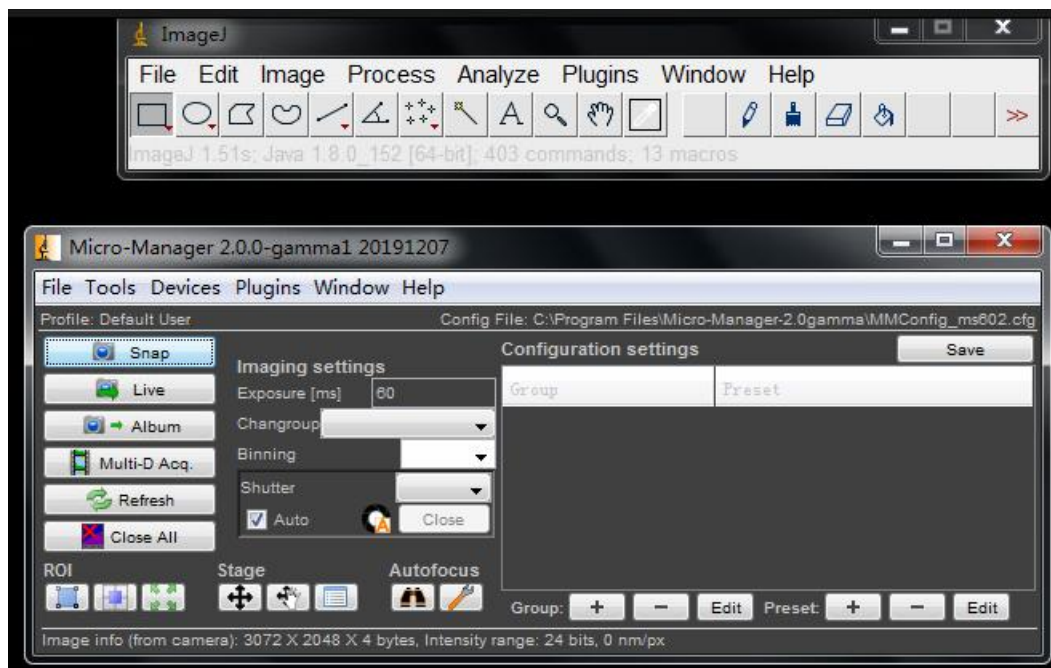


In the figure above, select or enter a name of the configuration file to be saved, click finish, and then restart the micromanager software to start using.

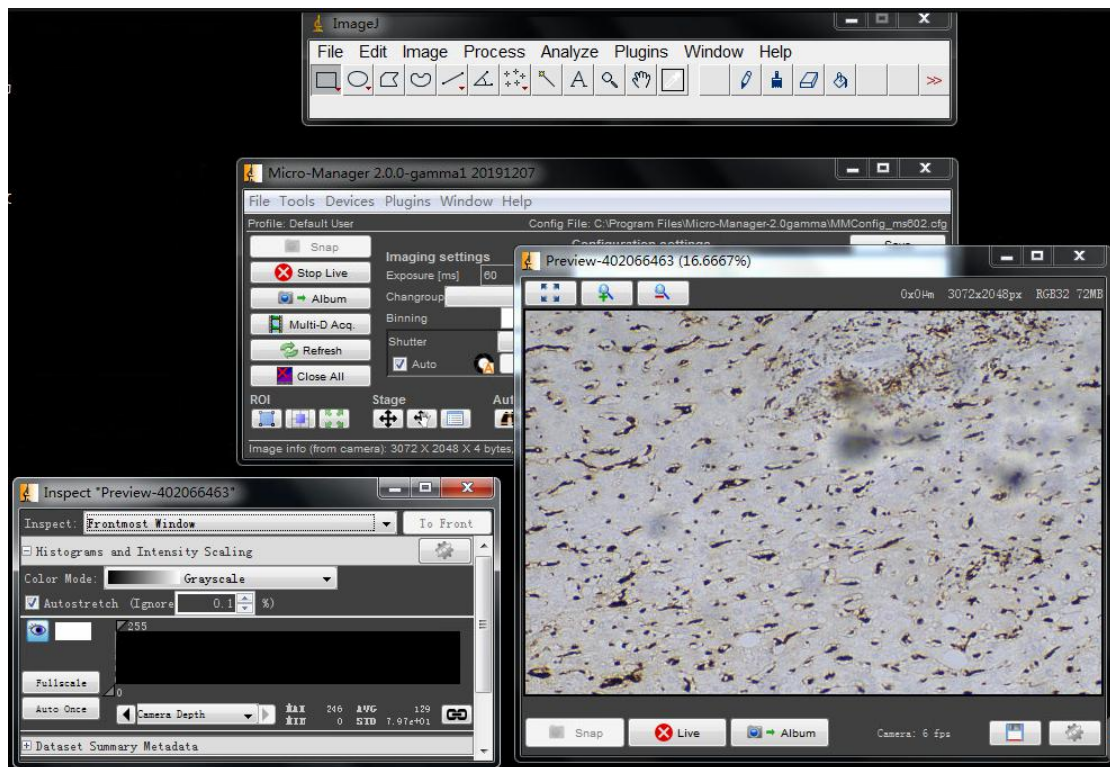
## 2) Basic operation of camera control



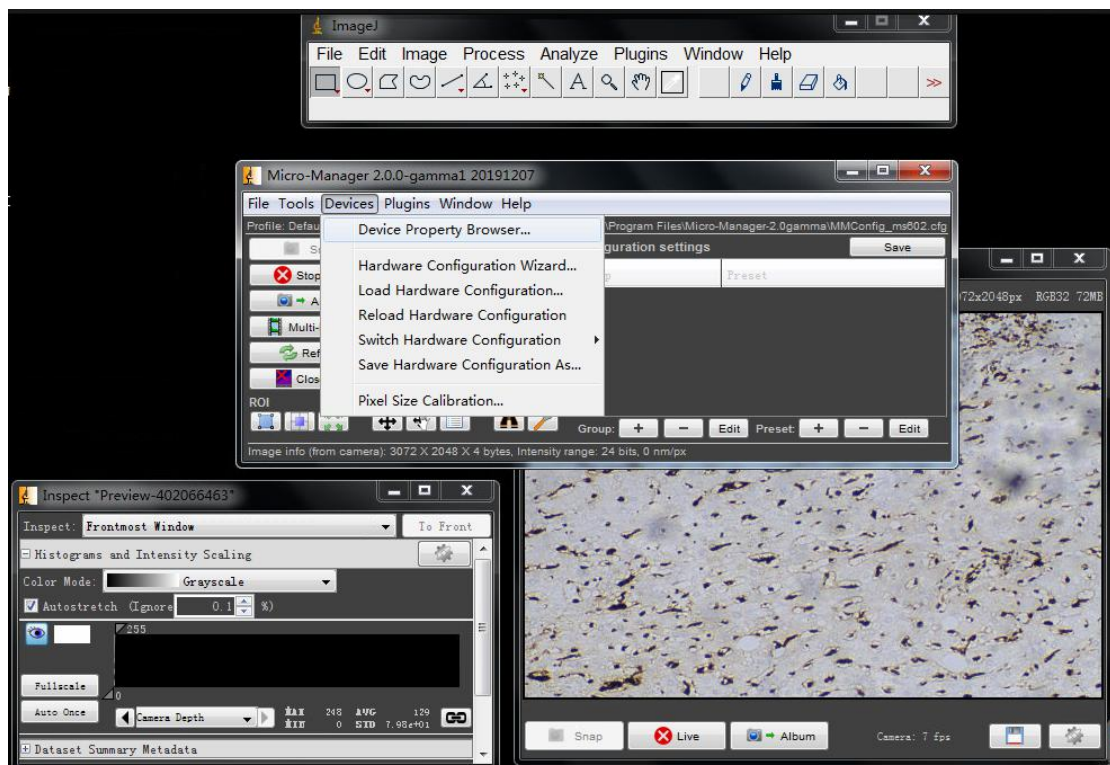
In the startup interface, the newly created camera profile is selected by default. Click OK to open the main interface.



Click the live button to pop up the preview window of camera image.

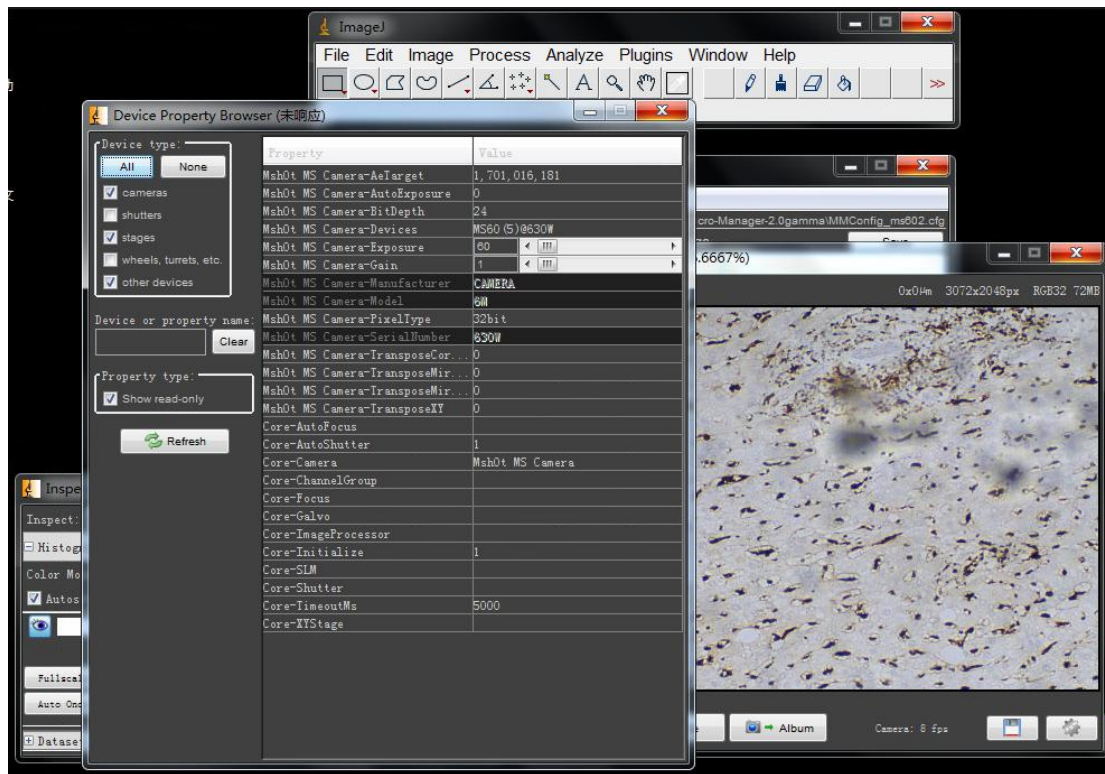


Click on the menu Devices-->Device Property Browser...





The camera property setting interface will pop up, as shown in the figure below



Among them, the current support of automatic / manual exposure (autoexposure), exposure time (exposure), gain adjustment (gain) and other conventional settings. So far, the access and basic use of the camera are introduced.