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Nikon Automated Microscopy: Import and Run GA3 Recipe using the Analysis Explorer in NIS-Elements

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Protocol status: Working

We use this protocol and it's working

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Keywords: ga3 editor, analysis explorer in ni, ga3 recipe, microscopy image data, ga3, visual representation of the analysis workflow process, analysis explorer, versatile image analysis programme, graphical visualisation, nikon ni, analysis workflow process, visual representation, elements software, many outputs possible including image, possible including image, analysis

Abstract

General Analysis 3 (GA3) is a versatile image analysis programme designed for microscopy image data that runs with the Nikon NIS-Elements software. Analyses are developed into procedures, here referred to as “recipes”, which can be created in the GA3 Editor and organised through the Analysis Explorer .

A GA3 recipe contains a series of actions, such as denoising or thresholding, executed on specific inputs like image color channels or binary layers, ultimately generating the desired outcome. There are many outputs possible including images, binary layers, text files, csv files or graphical visualisations.

The recipe is graphically represented as an oriented graph, providing a visual representation of the analysis workflow process.

The below protocol provides a short guide on how to import a GA3 .ga3 file into the Analysis Explorer within NIS-Elements so users can run or edit the GA3 recipe.



Download the .GA3 file

- 1 Download or transfer the .ga3 file from a link or external hard drive onto the computer running NIS-Elements.

Software

NIS-Elements

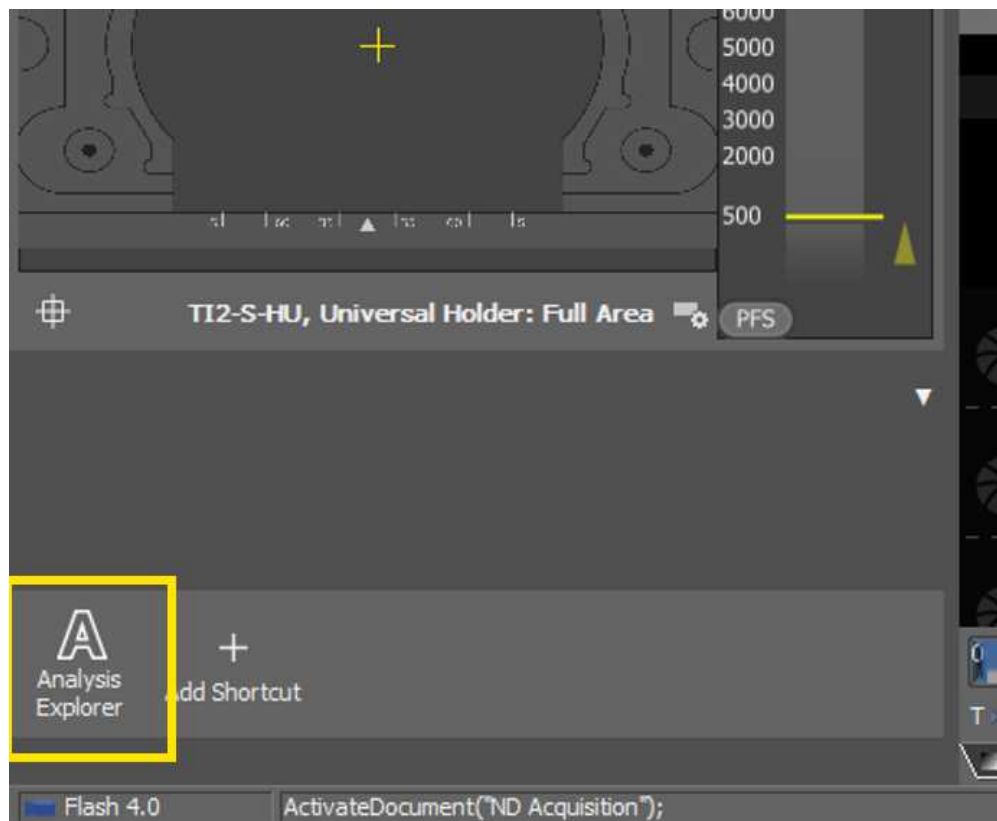
NAME

Windows 11

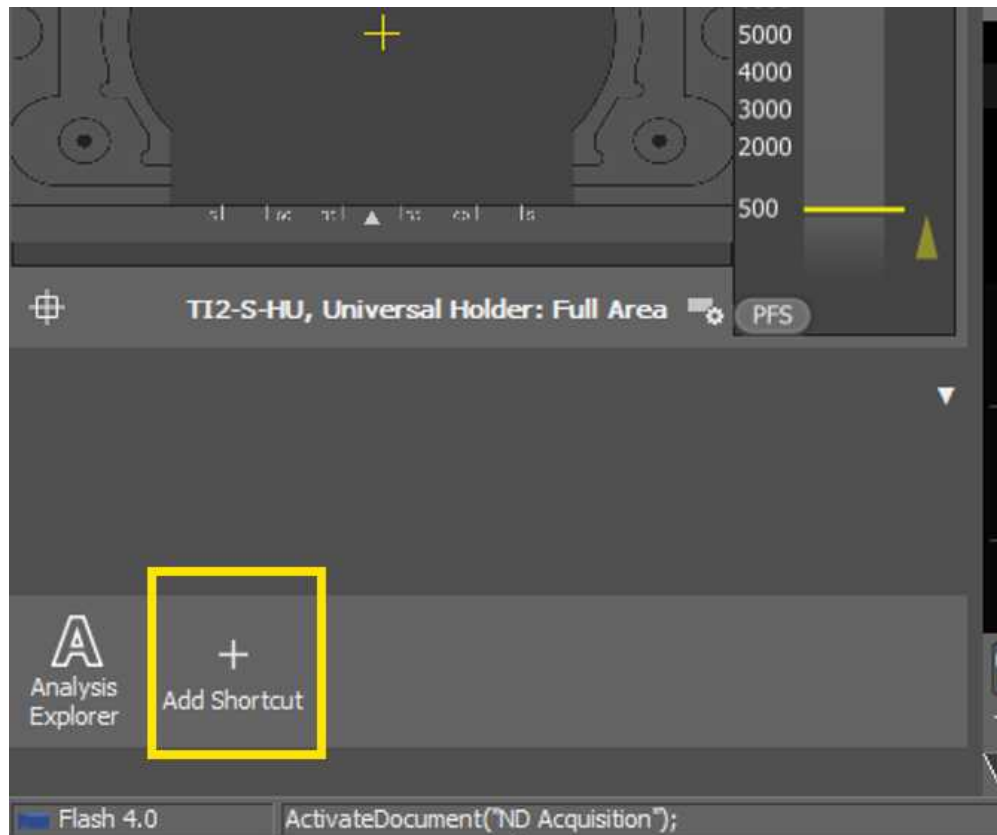
OS

Display Analysis Explorer

- 2 Within NIS-Elements, if the Analysis Explorer is not already visible as a docked control then open the Analysis Explorer panel **using one of the following options:**
 - 2.1 Navigate to Image (top menu) > Analysis Explorer. The Analysis Explorer will then pop up.
 - 2.2 From the shortcuts panel select the analysis explorer

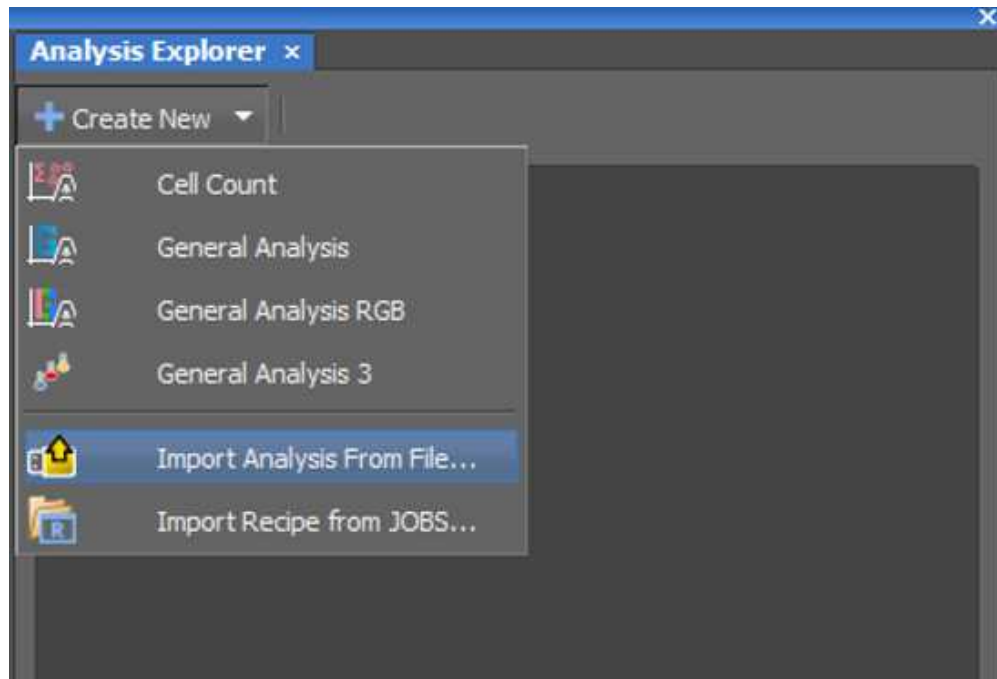


if not present, select the Add Shortcut and Search "Analysis Explorer"



Import GA3 recipe using Analysis Explorer

- 3 From the Analysis Explorer top menu Select "Create New", a pull-down menu with all available analyses will appear from which select "Import Analysis From File"



Run or Edit the GA3 recipe

- 4 Select the imported GA3 recipe and then either choose to either "Run" the GA3 recipe, or "Edit" the GA3 recipe.

