Executing a BIAFLOWS workflow without BIAFLOWS server

It is possible to run a workflow image independently of any BIAFLOWS server. This can for instance be useful to process a local folder of images. For this, first install <u>Docker</u> on the target workstation, then:

- Get the docker image of the workflow from Dockerhub: docker pull {remote image}
 - Or alternatively build its Docker image from source (GitHub repository) Inside repository folder: docker build -t {local_image} .
- Prepare an empty folder {DATA_PATH} with a subfolder **/data** itself with subfolders:
 - {DATA_PATH}/data/in: add input images to this folder*
 - {DATA_PATH}/data/out: workflow results are exported to this folder
 - {DATA_PATH}/data/gt: leave empty
- * Images should be 8-bit TIFF (2D) or 8-bit single file OME-TIFF (C,Z,T). The string _**IbI** is forbidden in image name since it is used to identify ground truth annotation images.
 - Run the workflow with the local flag: docker run -v {DATA_PATH}/data:/data -it {image_name} {WORKFLOW_PARAMETERS} --infolder /data/in --gtfolder /data/gt -outfolder /data/out --local

Notes:

--local (-1): indicates to the workflow it should not download nor upload any content from/to a BIAFLOWS instance. Images (input and ground truth) are retrieved from the specified folders. Metrics are displayed on the standard output for all input images.

For a more fine-grained control over BIAFLOWS interactions:

- --no_download (-nd): images and ground truth are not downloaded from BIAFLOWS (should be located in the specified folders)
- --no_annotations_upload (-nau): annotations are not uploaded to the BIAFLOWS instance
- --no_metrics_computation (-nmc): metrics are not computed, nor uploaded to the BIAFLOWS instance
- --no_metrics_upload (-nmu): metrics are not uploaded to the BIAFLOWS instance.

The parameters of a specific workflow run (BIAFLOWS **Workflows** tab) can be retrieved by expanding the information from the blue arrow:

