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 workflow Docker image from source (GitHub repository) Inside repository folder: docker build -t {local_image} .

- Prepare an empty folder {DATA_PATH} with a subfolder /data and 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

• 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): do not download nor upload any content from / to BIAFLOWS. The images (input and ground truth) are read from specified folders. Metrics are optionally displayed to standard output.

For a more fine-grained control over BIAFLOWS interactions:

- --no download (-nd): images and ground truth are not downloaded from BIAFLOWS
- --no_annotations_upload (-nau): annotations are not uploaded to BIAFLOWS
- --no_metrics_computation (-nmc): metrics are not computed
- --no metrics upload (-nmu): metrics are not uploaded to BIAFLOWS.

^{*} Images should be 8/16-bit TIFF (2D) or 8/16-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.