Which server to use?

- Usage of the training servers run by OME Team: Principally possible, but you are dependent on OME Team terms which can vary according to the situation. Needs to be discussed case by case and availability will depend on time of the year and load on existing servers. Do not assume automatic availability for you and do not underestimate the burden on OME Team when asking for such training server usage or custom adjustments.
- 2. Can I use my local existing OMERO server for running a training? Possibly, yes, depending on how you feel about the two drawbacks (a and b) listed below and a possible solution (c).
 - a. The user/group setup on your server might be a challenge: Typically, your server will be set up to serve your institutional structure needs (Labs and PI structure of your institute), which might not give you the possibility to demonstrate the user/group setup and thus full range of cooperation possibilities in OMERO.
 - b. If using the pre-existing user/group setup, you will lose the ability to pre import data for the users, instead, relying on their own data.
 - c. A compromise solution of the challenges a) and b) above might be creation of new groups and users on your production server just for the training purposes. But beware that you cannot delete groups and users in OMERO.
- 3. You can set up a dedicated training server using the <u>ansible playbook</u>. Ansible is a server management software. If you do not want or cannot use Ansible, you can still get inspiration from the <u>ansible playbook</u> such as the <u>list of apps</u>, and <u>poolsize configuration</u> (for 50 concurrent users) setup.
- 4. Note that some features of OMERO are shipped as Apps, this means you have to install them separately. Installation is very easy but has to be done explicitly. One of such Apps is also the OMERO.figure. If not using the ansible playbook, make sure you consult it for the list of apps. Another list of Apps is also available on the OME website.

Group/user setup

- Note: you cannot delete a user or group in OMERO without deleting the whole database.
 Thus, it is advisable to think through your user/group setup before you start creating
 these.
- 2. Use <u>script</u> (creates two trainers (which are also administrators in OMERO sense), 50 users and 4 groups. All users are members of all 4 groups. The 4 groups cover the 4 <u>permissions levels in OMERO</u>. The bulk of the data is then imported into the Read-annotate group type, which is the most common group type in OMERO and showcases the cooperation aspects very well. The Read-annotate group type is also a default group for all users and trainers..

Which data should we use?

1. You can use any images which are available to you, but the advantage of using publicly available ones is obvious. The OME Team is using the image data from the following sources, which you can use too: Whatever images you use, be sure to have enough of

modalities, multi-z, multi-t and multi-channel images and images with rich original metadata.

- a. There is a good pool of publicly available image data in the Image Data Resource (IDR). The OME Team is typically using the IDR data in their training. To get the IDR data to your server, download them from IDR first, then import into your training server.
- b. You can also use <u>publicly available images from the OME downloads page.</u>

How should I import image data ahead of the session

- a. In-place import will give you great saving of storage space for the multitude of users you want to import data for. You can use it either directly, or, use the OME Team's import script listed below.
- b. Import for many users in batch manner a bash script for importing in an ImportAs manner data for all users in-place. The data can be imported into OMERO either in Project/Dataset/Image form or Screen/Plate/Well form. The script assumes an in-place import environment is set up on the machine where OMERO.server is installed, and the files to be imported are mounted on a volume visible from that machine. The script can be used either
 - i. with a bulk file (a predefined YAML file such as idr0021-experimentA-bulk.yml which contains the specification of the import and points to a filePaths.tsv file such as idr0021-experimentA-filePaths.tsv with paths to image files on the disk. This structure can be easily overtaken if importing the IDR images, as it is used for import into IDR itself and all the YAML and TSV files are available on github.
 - ii. or in a "normal" mode (specifying the path to the image files directly in the bash script itself.