

Workshop 1: OMERO installation and configuration

The presentation and a PDF version of the workshop are available at <https://downloads.openmicroscopy.org/presentations/2024/Kobe>

Software versions used for this workshop:

- OMERO: 5.6.13
- OMERO.web: 5.27.2
- omero-guides: 2021.11.09
- OMERO.insight: 5.8.6
- OMERO.insight-ij: 5.8.6
- OMERO.iviewer: 0.14.0
- OMERO.figure: 7.1.0

Summary

OMERO.server installation

OMERO.web installation

Applications for OMERO.web installations:

- OMERO.iviewer installation
- OMERO.figure installation

User/group creation in OMERO

Import images on command line

Bulk import

Programme

OMERO.server installation

In this section we will cover the installation of OMERO.server in a Linux environment. We will install and start OMERO.server, learn how to validate the installation and log in to the newly installed server as root user.

Basic installation

1. See <https://omero.readthedocs.io/en/stable/sysadmins/unix/server-installation.html> - select either the installation on RHEL 9 or Ubuntu 22.04 as appropriate and follow the steps up to and including the cmd
`omero admin start`
2. Run the cmd
`omero admin diagnostics`
3. Run the cmd
`omero -u root -s localhost -w $OMERO_ROOT_PASS login`
4. Verify that the above cmd was successfully executed by running the following command
`omero user list`

Note: if you did not log in as root successfully, your installation is not successful - you need to ask/consult the logs and solve the problem.

5. cd to the logs directory:
`cd /opt/omero/server/OMERO.server/var/log`
6. Inspect the logs for errors
`cat *.log | grep ERR`

OMERO.web installation

In this section we will cover the installation of OMERO.web in a Linux environment. We will install and start OMERO.web, connect to OMERO.server and then install 2 applications for OMERO.web: OMERO.iviewer and OMERO.figure.

Basic installation

1. See <https://omero.readthedocs.io/en/stable/sysadmins/unix/install-web/web-deployment.html> select either the installation on RHEL 9 or Ubuntu 22.04 as appropriate and follow the steps up to and including the cmd
`export PATH=/opt/omero/web/venv3/bin:$PATH`
2. Skop the following steps and go directly to the Configuring NGINX chapter. Run the cmds in **Configuring NGINX** chapter.
3. Run the cmds in the following **Running OMERO.web** chapter up to and including
`omero web start`
4. Validate the installation by running
`curl -sL localhost:4080`

Installation of applications for OMERO.web

1. See <https://pypi.org/project/omero-figure/> for installation of OMERO.figure
2. See <https://pypi.org/project/omero-iviewer/> for installation of OMERO.iviewer

Go to your browser and type in the IP address of your VM. You should see the login page of OMERO.web.

Command line import, bulk import, in-place import

These import sections not covered in the workshop can be found at <https://omero-guides.readthedocs.io/en/latest/upload/docs/import.html>

Ansible installation (optional)

See https://github.com/I3D-bio/fit-for-omero_ansible-playbook

Note: In order to log in, the variables are listed in https://github.com/I3D-bio/fit-for-omero_ansible-playbook/tree/main/vars