

# **Publishing Images Using OMERO**

A new feature has been made available on the CLS OMERO server, Nightshade.

Selected images can be made accessible to non-OMERO account holders, via a web URL, by placing the images in the PUBLIC group in OMERO.

Instructions on how to make data publically available are below.

Before you proceed, please note the following points:

- Once your data is placed in the PUBLIC group it is effectively visible to the whole world without any log-in required to view it.
- As currently configured, only ROIs associated with data in the PUBLIC group will be visible to the Public User, tags, attachments, comments or ratings will not be visible.
- Public Users will be able to download a JPEG version of your images via their web browser but will not have access to the data in the original format.
- Public Users will be able to alter the rendering settings while viewing, but any changes will not be saved.
- PUBLIC group is Read-Only, so other OMERO users who are also members of the PUBLIC group will be able to access your data and annotations in the PUBLIC group on a Read-Only basis.
- Data moved from other groups into the PUBLIC group will no longer be visible in the
  original group. You will be able to move it back at any stage, but you should
  consider importing a new copy of the data into the PUBLIC group if you wish to
  retain the original copy in its original group.
- You need to be made a member of the **PUBLIC** group on Nightshade, the CLS OMERO server before you can share data.

  To do this please email your CLS-Dundee University LDAP username to the OMERO administrator at:

sysadmin@openmicroscopy.org

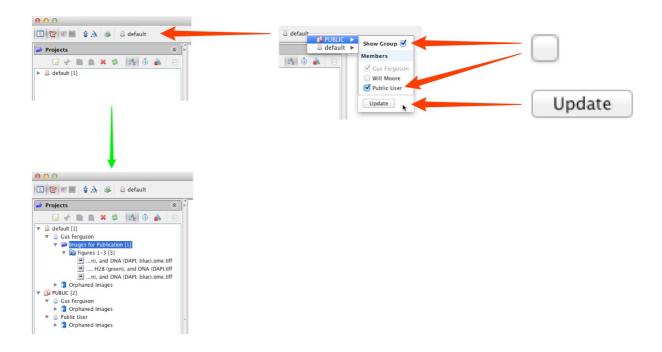
Once you are a PUBLIC group member, log into your OMERO account as usual via OMERO.insight or OMERO.web
If you were formerly a member of just one group on OMERO you will not have seen the Group > User selection menu.

As a member of the PUBLIC group this will now be visible as shown.

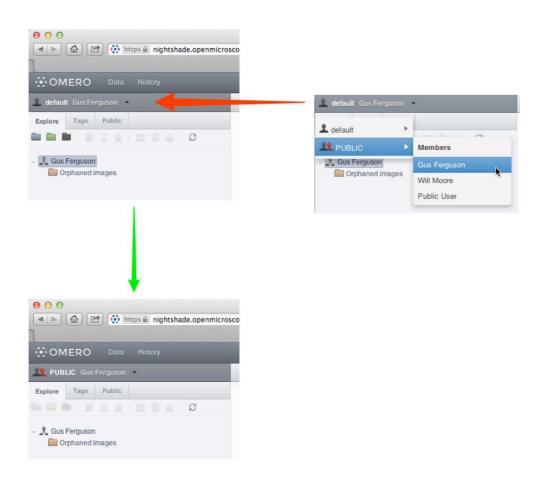




## In OMERO.insight:



## In OMERO.web:

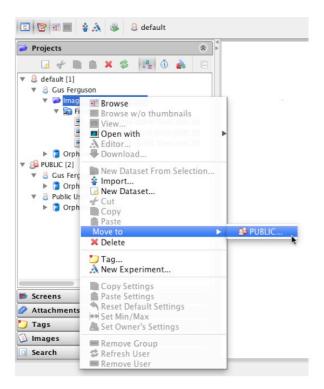


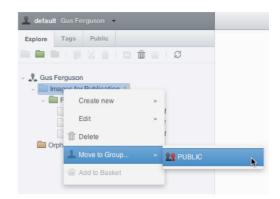




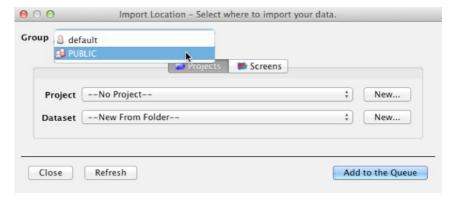
- For images visible to the public, the data must be in the PUBLIC group. You remain the owner of any images in the PUBLIC group, and can still change rendering settings, add ROIs or annotate them. You can either move data from an existing group into the PUBLIC group, or you can import data directly into the PUBLIC group.
- To move data into the PUBLIC group, select the project, dataset or images in the left hand pane.

  Right-click and select **PUBLIC** from **Move to ...** or **Move to Group ...** in the menu. After a confirmatory dialogue, the progress of the move will show in the **Activities** window.





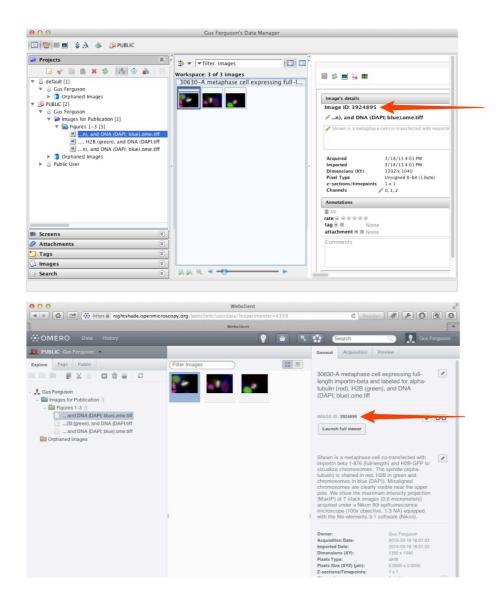
To import data directly into the PUBLIC group, in the Import Location window choose **PUBLIC** from the **Groups** drop-down menu.







6 Images IDs, shown in the right pane, are used to link to images in the PUBLIC group.



7 To create an HTML link to the thumbnail or the full viewer display of the image, use the following syntax where **1234** represents the image ID:

thumbnail (default size)

https://nightshade.openmicroscopy.org/webgateway/render\_thumbnail/1234/

thumbnail (size 200px)

https://nightshade.openmicroscopy.org/webgateway/render thumbnail/1234/200/

image viewer

https://nightshade.openmicroscopy.org/webgateway/img\_detail/1234/

The following example HTML code gives the page shown.





```
<body>
>
  Default thumbnail for:<br/>
  Metaphase cell - alpha-tubulin (red), H2B (green), and DNA (DAPI; blue) <br/> br/>
>
  <a href="https://nightshade.openmicroscopy.org/webgateway/img_detail/3924895" target="_blank">
  <img src="https://nightshade.openmicroscopy.org/webgateway/render_thumbnail/3924895/"/></a>
>
  Click on thumbnail or
  <a href="https://nightshade.openmicroscopy.org/webgateway/img_detail/3924895" target="_blank">
  link</a> to see the image in the full viewer (opens in a new tab/window).
<q\>
>
  200 px thumbnail for:<br/>
  Metaphase cell - alpha-tubulin (red), H2B (green), and DNA (DAPI; blue) <br/> br/>
<q>>
  <a href="https://nightshade.openmicroscopy.org/webgateway/img_detail/3924895" target="_blank">
  < img src="https://nightshade.openmicroscopy.org/webgateway/render_thumbnail/3924895/200/"/></a>
>
  Click on thumbnail or
  <a href="https://nightshade.openmicroscopy.org/webgateway/img_detail/3924895" target="_blank">
  link</a> to see the image in the full viewer (opens in a new tab/window).
</body>
```

#### Default thumbnail for:

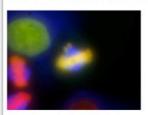
Metaphase cell - alpha-tubulin (red), H2B (green), and DNA (DAPI; blue)



Click on thumbnail or link to see the image in the full viewer (opens in a new tab/window).

### 200 px thumbnail for:

Metaphase cell - alpha-tubulin (red), H2B (green), and DNA (DAPI; blue)

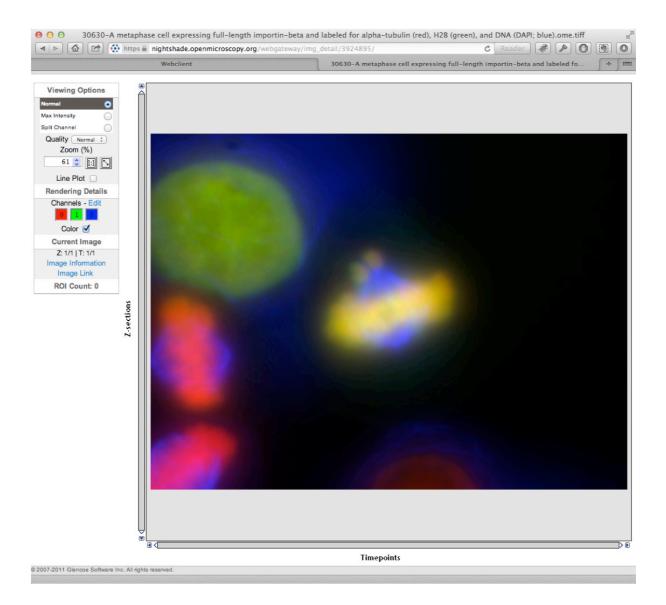


Click on thumbnail or link to see the image in the full viewer (opens in a new tab/window).





Viewing an image in the full viewer, the public user can zoom, scroll, step through Z or T sections, adjust rendering settings and view ROIs and basic image details. Any changes made will not be saved.



**9** The OMERO WebGateway is a Django app that enables images in the PUBLIC group to be viewed in a number of other ways.

Details can be found at:

https://www.openmicroscopy.org/site/support/omero4/developers/Web/WebGateway.html

