

# **Getting Started with OMERO.insight**

OMERO stores image data on a central server. You can use the OMERO insight client to upload, view and download data from any personal computer.

Your institution's OMERO server administrator will provide you with the server address to use when connecting from OMERO.insight. They may have set up a user name and password for you too. Alternatively your username and password may be your standard login for the institution's networked computers.

## Installing

#### 1 Download the OMERO.insight client

http://downloads.openmicroscopy.org/latest/omero5



Client	Size	File Name	Checksum
Windows	83.02 MB	OMERO.clients-5.2.0-ice35- b101.win.zip	5712f4bc ( <u>SHA1</u> )
Mac OS X	82.8 MB	OMERO.clients-5.2.0-ice35- b101.mac.zip	8dae773c ( <u>SHA1</u> )
👌 Linux 🛄	82.67 MB	OMERO.clients-5.2.0-ice35- b101.linux.zip	5c05fd76 ( <u>SHA1</u> )

• OMERO.web is part of the server package, so individual users do not need to install it locally.



2 Expand the OMERO.insight client archive and move it to your home directory.

#### Windows:



## **3** Open the OMERO.insight client.

	••••••••••••••••••••••••••••••••••••••
<ul> <li>OMERO.insight_64.exe</li> <li>OMERO.insight.app</li> <li>OMEROinsight_unix.sh</li> </ul>	Iocalhost [LAN]
	Quit         1       52.0-5150         OMERO is distributed under the terms of the GNU GPL For more information, visit openmicroscopy.org         Image: Imag

**Note:** Mac users may be blocked by a warning that OMERO.insight has been prevented from opening as it is from an unidentified developer. Follow these instructions to adjust the security settings so OMERO.insight can run on your Mac: <u>https://support.apple.com/kb/PH14369</u>





# Adding Server and Logging In

Adding the server is only required the first time an OMERO server is accessed from the computer.

1	Click on the <b>Spanner</b> icon.
---	-----------------------------------

••••••••••••••••••••••••••••••••••••••	
localhost [LAN]	Z
Username:	
Password:	
Quit	
5.2.0-b150 OMERO is distributed under the terms of the GNU GPL. For more information, visit openmicroscopy.org	
••• OME	

2 In the Add Server dialogue box, click on the + icon.

1. A	Server	×
Serv En se	vers ter a new server or lect an existing one.	Z
Serve e.g. te You s	er Address and Port est.openmicroscopy.org or 134.20.12.33 hould not have to modify the port.	
2	localhost	4064
	- 1	
•		
Conr	nection Speed	_
Conr	nection Speed LAN O High (Broadband) O Low (Dial-u	))

3



3 Enter the server address provided by your OMERO administrator. Click on **Apply**.



4 Enter the **Username** and **Password** provided by your OMERO administrator. Click on **Login**.





# **Adding Image Data**

#### 1 Click on the **Importer** icon.

	•	Polly Stack connected
A	File Edit Window Help	
Ť	Projects	
	� ✔ 📄 💼 🗶 🕸 🛃 🕚 ⊕ 🍰 Laws-Skye [1]	

2 Use the **File Chooser** to locate data to be imported on local or networked drives.



3 Select image data to be imported. Click the right **Add** arrow.







- 4 Specify location for saving imported data:
  - select a group if you are a member of more than one
  - a new project and/or dataset can be created
  - an existing project and/or dataset can be selected from the drop-downs
  - a new dataset can be automatically created from the source folder
  - click Add to the Queue

•	Import Location - Select where to import your data.			×	
Group 🔒 La	aws-Skye (Collab) 🗸 🗸				
📬 Project	s 📑 Screens				
Project	No Project	~	New		
Dataset	New From Folder	~	New		
				-	Add to the Occasion
Close	Refresh	Add	to the Queue	1	Add to the Queue
	Group State	Import Location - Select where to import your data.      Group Claws-Skye (Collab)     Projects Screens      Project No Project-      Dataset New From Folder-      Close Refresh	Import Location - Select where to import your data.  Group Claws-Skye (Collab)  Project Servers Project - No Project- Dataset -New From Folder- Close Refresh Add	Import Location - Select where to import your data.  Group  Course Streens  Project  New  Dataset  Hew From Folder  Cose  Refresh  Add to the Queue	Import Location - Select where to import your data.     Import Location - Select where to import your data.       Group is tans-Skye (Colleb)     Import Location - Select where to import your data.       Projects     Screens       Project     Ho Project - Import Hour - Import Your New       Dataset     Hew Fron Folder - Import Your New       Close     Refresh       Add to the Queue

5

Data to be imported appears in the queue pane. When ready click on **Import**.

Files to import C	ptions					
Free Space	Im	oort size: 720 MB				
File or Folder	Group	Project/Dataset or Screen	Folder as Dataset	Size		
P-TRE_29	Laws-Skye (Coll	🔄 Nature Pap		130 MB		
P-TRE_30	Laws-Skye (Coll	📄 Nature Pap		140 MB		
P-TRE_31.r	Laws-Skye (Coll	詞 Nature Pap		200 MB		
P-TRE_32.r	Laws-Skye (Coll	💼 Nature Pap		125 MB		
P-TRE_33.r	Laws-Skye (Coll	📄 Nature Pap		125 MB		
1			Cancel All	Import		Import

6

Import progress will be shown in the Import #1 tab.

Further data can be queued and imported using the **Select Data to Import** tab. Multiple queues can be run simultaneously.

A green check is shown in the **Import #1** tab and in the top right corner of the main Data Manager window when the queue is successfully imported.

	0	Import Data		- 🗆 🗙
	Window Help			
	Import Data			
	Select data to import and monitor imports.			<b>*</b>
📈 Import #1 😡 🗕 🚽	1 Import #1			
	Report: 3 out of 5 uploaded Import Size: 470 MB	Show Faled	When upload is complete, the window and OMERO session can Reading will continue on the	import be closed. server.
	P-TRE_29_R3D_D3D.dv	Upload 130 MB Pro	cessing Complete	View
	P-TRE_30_R3D_D3D.dv	Upload 140 MB Pro	cessing Complete	View
	P-TRE_31.r3d_d3d	Upload 200 MB Pro	cessing stading Pauls	Cancel
	P-TRE_32.r3d_d3d	Upload 38/125 MB 2s Left Pro	cessing Pending	Cancel
	P-TRE_33.r3d_d3d	Pending		Cancel
5 Imported V				
Preview			Retry All Submit All Cancel All	Close





7 Double-click on the thumbnail or select from the **View** menu to open the image in the full viewer or close the Import Data window to return to the Data Manager window.



8 Click the **Refresh** button to see the imported data in the Data Manager window. Import progress is shown on the top right-hand side of the Data Manager window. Notifications of any import failure will also appear there with a red X.

-			
	Polly Stack connected to demo.openmicroscop	y.org	- ( ×
File Edit Window Help			
📴 📴 🔳 🔹 🚳 Display roups 🔻		Search	20 Imported 🧹
🍽 Projects	🔊 🖌 🔻 filter images 📰 🖽 🕵 📭	General Acquisition Preview	
🚽 🖋 🗎 🛍 🗶 🤹 🛃	Workspace: 15 of 15 images	Full Viewer	🗰 🖬 I.d. 🙀
Polly Stack	P-TRE_10_R3D_D3D.dv_vol (Apr 2, 2014)		
Burger DAPI Data [2]		P-TRE_10_R3D_D3D.dv_V01	
Figure 1 Data [15]		Owner: Polly Stack	Show all
P-TRE_10_R3D_D3D.dv_V0		Image Details	۲
P-TRE_12_R3D_D3D.dv			
P-TRE_15_R3D_D3D.dv		Add Description	
P-TRE_19_R3D_D3D.dv		Acquisition Date: 2014-04-02 07	7:20:49
P-TRE_21_R3D_D3D.dv		Dimensions (XY): 768 x 768	
		Pixels Size (XYZ) (nm): 66.31x66.31x2	200.00
P-TRE_22_R3D_D3D_proj.dv		2-sections/Timepoints: 15 × 1 Channels: 457, 528, 617	
P-TRE 22 R3D D3D VOL D3D.dv		ROI Count: 0	



# **Viewing Image Data**

1

The Data Manager window is divided into 3 panes:

- the left hand pane shows the data tree and tabs for screens, tags and search
- the centre pane shows thumbnails and enables filtering of images
- the right hand pane shows the general information, metadata and the preview



- 2
- Double click the image name or thumbnail to open an image in the full viewer or click on the image viewer icon.





3 The image viewer enables you to change rendering settings. Hide / show rendering settings pane. Toggle between colour and monochrome rendering.



4 Click the colour picker to open the colour picker window. This is used to change the colour rendering for a channel. Clicking the colour well toggles the channel on or off







5 Click on **Metadata** button to view the metadata in the right pane.

6 Click on **Measurement Tool** button to open the Measurement Tools palette.



7 Use the toolbar to draw Regions of Interest (ROIs). Click on the tabs to see details of ROIs or view results of analysis based on them.





8 Use the sliders to step through **Z-stacks** and **T-sequences** or click the **Play** triangle to play through them as a sequence.









## **Using Java Web Start**

Warning: Due to the steady increase of issues not under OMERO's control, continued support of Java Web Start for distribution of OMERO.insight is not sustainable and is likely to become impossible in the near future.

Therefore Java Web Start for OMERO.insight has been removed from version 5.2. Java Web Start is still available in OMERO version 5.1.4 and earlier, but has been deprecated and will no longer be supported.

If users have restrictions on their ability to install software on their computers, a version of the OMERO.insight client can be downloaded as a Java Web Start package via the OMERO.web client.

Using Java Web Start ensures you are always using an up-to-date version of OMERO-insight. For all practical purposes the Java Web Start OMERO.insight client is identical to the standard OMERO.insight client.

To access the OMERO.web client you will need a web address (URL) provided by your OMERO administrator. Your username and password to log in is the same used for the OMERO.insight client.

1 Click on the Java Web Start button.





2 Click on the **OMERO.insight** link on the pop-up window.



3 On Windows the Java package usually downloads and starts unzipping automatically. On the Mac you may have to double-click the downloaded file to expand it.

	Starting application	X OFFICIENT			
8	Location: https://hghtshade.apermicroscopy.org	Cancel	• • • • • • • • • • • • • • • • • • •	Starting application	OHEFOLI Is year
			Location: https://nig	htshade.openmicroscopy.org	Cancel

4 Click **Run** to open OMERO.insight. The saved application is then used like any other programme.



