Integrating OMERO and the Huygens Remote Manager

The Huygens Remote Manager (HRM) is a web-based interface to the Huygens software for parallel batch deconvolutions. It is intended for server-side processing of wide-field, confocal, spinning disk and STED microscopes.

Conventional Workflow

Users have to copy data in advance via a network share to the HRM server, then use the HRM webinterface to set up the required parameters and select their images, creating a deconvolution job.

Integrated Workflow

Using the HRM-OMERO integration, users can directly log on to the HRM, retrieve the hierarchy tree of OMERO projects / datasets / images from within the HRM’s web interface and select images from there for creating deconvolution jobs.

Exchanging data with OMERO

After logging in, users will be presented with the tree hierarchy available for them within OMERO. Raw images can be retrieved from OMERO as well as pushed back after processing.

Current Status & Planned Features

<table>
<thead>
<tr>
<th>HRM 3.1</th>
<th>PLANNED FEATURES</th>
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<tbody>
<tr>
<td>Initial support of OMERO, access to archived images only requires HRM and OMERO to be installed on a single server.</td>
<td>Improved support for OMERO groups.</td>
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<td>OMERO 5 operation on distinct servers possible and the recommended installation method.</td>
<td>Transfer of entire datasets.</td>
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<td>Bi-directional transfer possible using OMERO’s OME-TIFF export functionality.</td>
<td>Delayed “in-place” transfer of images during queue processing.</td>
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<td>Full access to all datasets of all collaborative groups user is member of.</td>
<td>Storing of HRM metadata with results.</td>
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<td>No more limitation to images which had their original data archived during upload.</td>
<td>Automatic uploading of results to OMERO after processing.</td>
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USER REQUESTS

Niko Ehrenfeuchter
Aaron Ponti
Daniel Sevilla

Scientific Volume Imaging
BIOZENTRUM
University Hospital Basel
The Center for Molecular Life Sciences