Oxford Update
Hierarchial Data, Tagging and Search

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Update

- Installation of large scale OMERO in production
- Proliferation and promotion of use in Davis lab and beyond
- Feedback to Dundee
- Processing Services
- Tagging Prototype
- C++ Gateway
Processing Services

- Denoising
- Deconvolution
- Localisation Microscopy
- Matlab Analysis
Figure: Prototype Demonstrating Auto-Tagging
C++ Gateway

- Friendlier C++ interface wrapping for OMERO Clients
- Based on and mirroring the Python Gateway
Hierarchial Data, Tagging and Search

- Very common request for OMERO to have more levels than Project and Dataset
- Driven by very reasonable need to organise data
- Why and how are tags a solution to this?
- Can tags be an improvement on this?
Figure: Filesystem Hierarchy
**Figure:** Alternate Filesystem Hierarchy
The Important Information

▶ E.g. 'File1_Info1_Info2_Info3_Denoised.dv'
▶ From directory structure: 2013, Collaborations, Pete, DeltaVision, Denoised
▶ From filename: Info1, Info2, Info3
Using Tags Instead

- Assign tags for all important information
- The only difference in navigating tagged data as opposed to a filesystem is greater choice of path to take
Figure: All Tags, Searchable
Figure: Selecting Starting Point
Figure: Initial Tag Intersection and Results
Update
HierarchicalData

Filesystem Hierarchy
Important Information
Tag Navigation
Nested Common Search Criteria
In Practice

Figure: Reduced Tag Intersection and Results
Figure: Further Reduced Tag Intersection and Results
Figure: Further Reduced Tag Intersection and Results
Figure: Exact Replica of Filesystem Hierarchy
Nested Common Search Criteria

- What if the criteria of interest is not at the top level of the filesystem tree?
- Difficult to search in a filesystem.
- What about with tags?
- E.g. All Denoised data from 2013
Figure: Filesystem Hierarchy
Figure: '2013' Starting Point
Figure: Results matching '2013' and 'Denoised'
Mockups based on design discussion with Will, Jean-Marie, Gus and others

For implementation in OMERO Clients

Search needs some work