# SciServer: 2.0.0 Release Notes

## New Features Summary

There are many new features we have introduced – and more to come in subsequent releases – that will make working with your data across both databases and file systems easier and more productive.
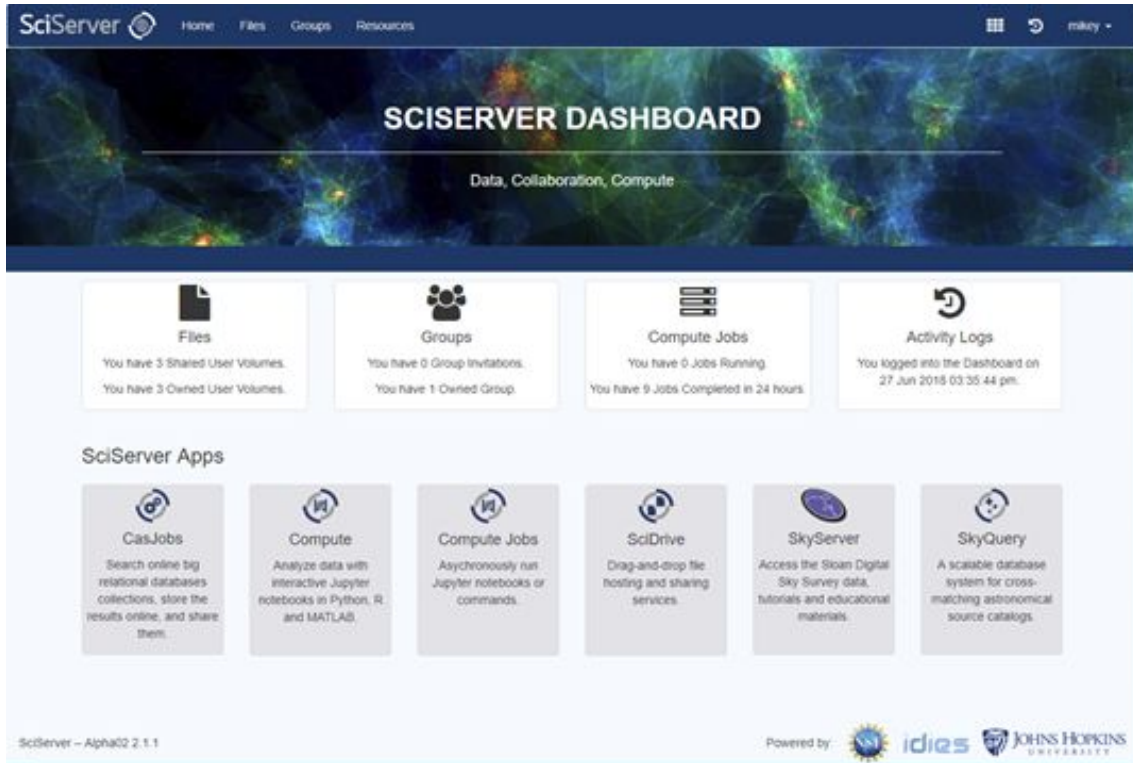
Detailed documentation can be found here:
http://alpha.sciserver.org/wp-content/uploads/2018/06/SciServer-How-Tos.pdf

**Authentication**: There is an updated Login Portal and account validation:
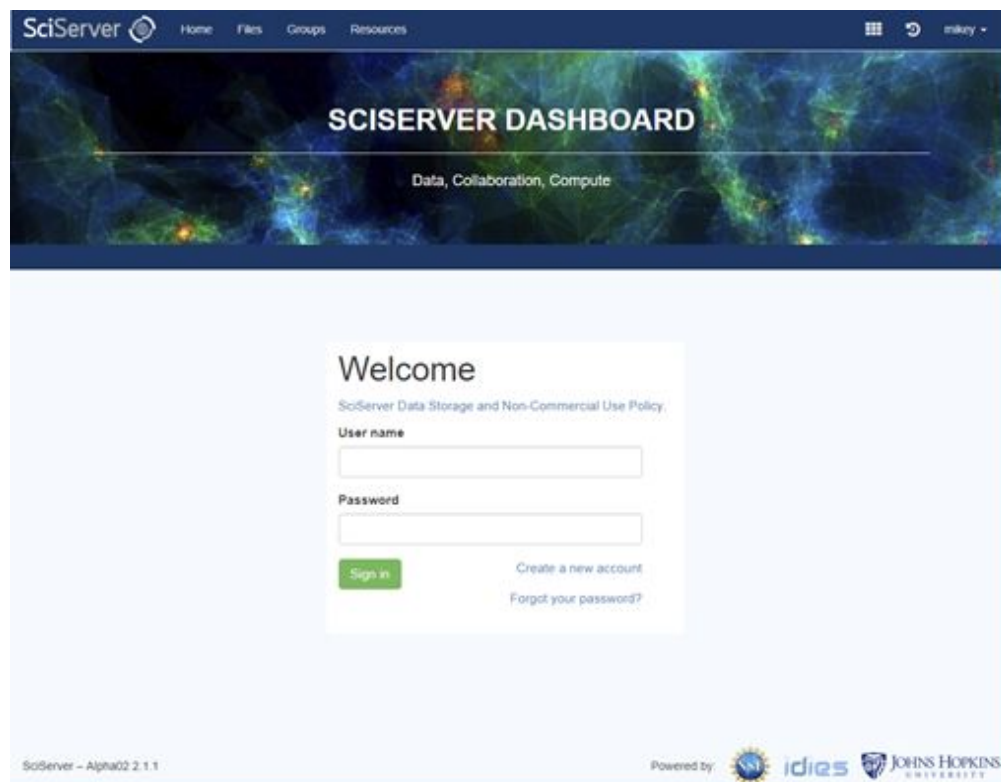


**Dashboard**: There is a new SciServer Dashboard, a central launching point for SciServer Applications:

From here, all the usual applications can be accessed and launched under the "SciServer Apps" section, and the new features accessed from the top row of boxes, or the menu items.

**File Storage**: We have extended our support for files beyond just having access in Compute, and have a UI for file management similar to popular web based approaches
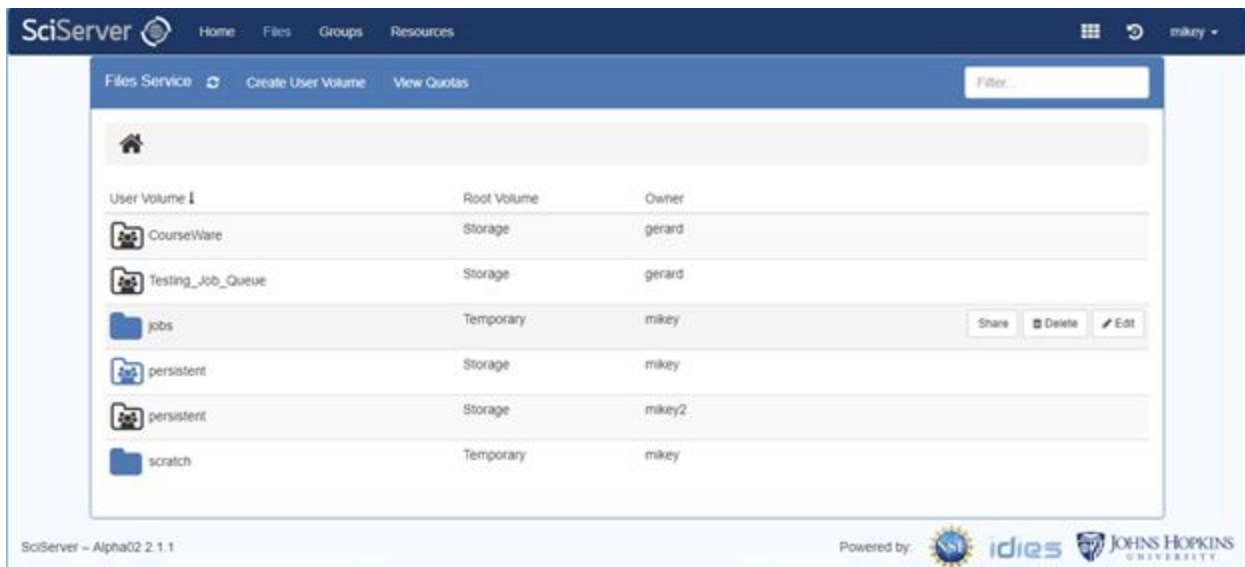


We support all the usual file-based features like Move, Copy, Delete, Rename etc.

**Sharing**: File Sharing allows users to share persistent and scratch storage volumes with other users and groups.
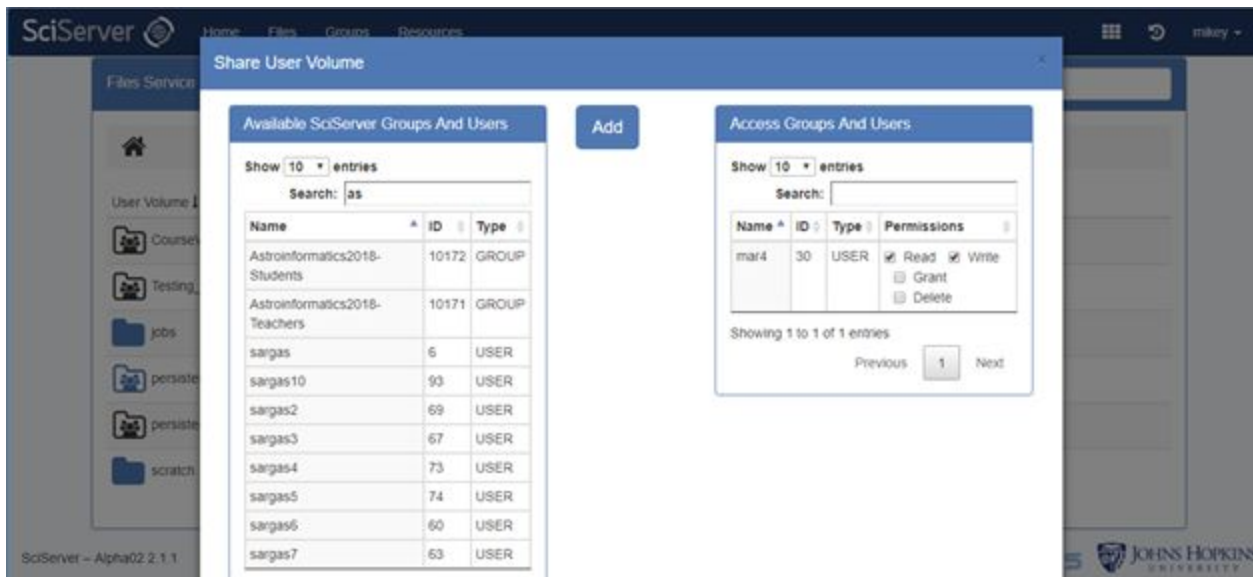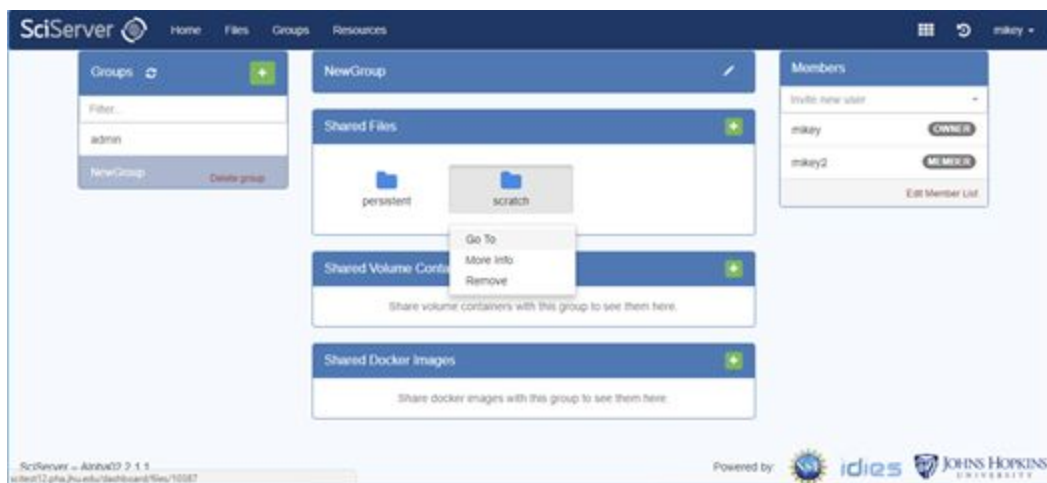


**File Structure**: We now support file storage beyond just the previous "persistent" and "scratch" storage pools.  We have generalized this and we now allow users to create two types of "user volume" in 'Storage' and 'Temporary', which mirror the original 'persistent' and 'scratch' features.

All volumes created under 'Storage' have the same properties as the current 'persistent' – backed up, persistent, and have quotas applied.  All volumes under 'Temporary' have the same properties as the current 'scratch' – temporary, not backed up, unlimited (to available resources).  Indeed, current "persistent" folders will just appear as a folder under 'Storage', and current "scratch" folders will appear as a folder under 'Temporary'.

Folders are not stored directly under Storage or Temporary however, they are stored under a (system managed) subfolder identified by the users SciServer ID.   In this way, you will see your own persistent folders under 'Storage/<yourusername>' and your own scratch folders under 'Temporary/<yourusername>'.  Subsequently, you will also see another users volume that was shared with you under either 'Storage/<otherusername>' or 'Temporary/<otherusersname>'.

| | | | |
|---|---|---|---|
| jobs | | Temporary | mikey |
| persistent | Yours | Storage | mikey |
| persistent | Someone Else's | Storage | mikey2 |
| scratch | | Temporary | mikey |

**Groups**: Group management allows users to create custom groups of users, and to use these groups to share other system resources with, such as User Volumes, Compute images, or Data Volumes:



**Compute**: Compute continues to support Jupyter Notebooks for Interactive analysis:

The basic functionality of Interactive Compute is the same as previously. In addition, we now support JupyterLab.

**Compute Jobs**: Compute jobs submission allows Jupyter Notebooks and standard scripts (e.g. python) to be run in the background on dedicated servers.