## 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: <u>http://alpha.sciserver.org/wp-content/uploads/2018/06/SciServer-How-Tos.pdf</u>

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

SciServer () Home Tiles Comps	Resources	III 🤊 mikey -
	SCISERVER DASHBOARD	
	Data, Collaboration, Compute	Mar
	Welcome	
	SoServer Data Storage and Non-Commercial Use Policy, User name	
	Password	
	Create a new account Forpot your password?	
SoBerver – Alpha02 2 1 1	Powered by	JOHNS HOPKINS

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

	36 s	CISERVER	DASHBOAR	RD	
		Data, Collabo	ration, Compute	1 de	
Files You nave 3 Shated User You nave 3 Owned User		Groups we 0 Group Invitations. nave 1 Owned Group.	Compute Jo You have 0 Jobs R You have 9 Jobs Complete	unning. You logo	Activity Logs ed into the Dashtoard on un 2016 03 35 44 pm.
SciServer Apps CasJobs Search online sig resonal databases collections, store the results online, and stare them.	Compute Analyze data with Interactive Juppiter relatebooks in Python, R and MATLAB	Compute Jobs Asychronously nat Jupyter notebooks or commands	SciDrive Drag-and-drop file hosting and sharing services	SkyServer Access the Sloan Digital Sky Survey data. Intonials and educational materials	SkyQuery A scatable database system for cross- matching astornomical source catalogs

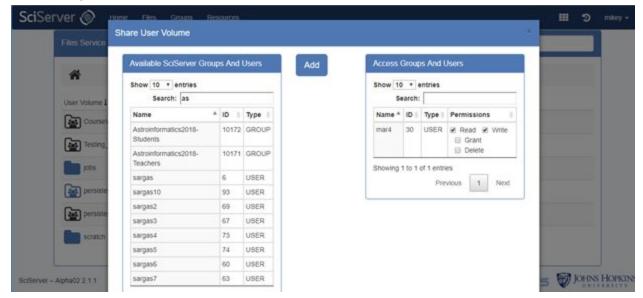
From here, all the usual applications can be accessed and launched under the "SciServer Apps" section, and the new features accessed from the top row of boxes, or the menu items.

**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

Files Service Create User Volume	View Quotas		 Filter	
#				
User Volume I	Root Volume	Owner		
CourseWare	Storage	gerard		
Testing_Job_Queue	Storage	gerard		
jobs	Temporary	mikey	Share Delete	<b>≠</b> Edt
persistent	Storage	mikey		
persistent	Storage	mikey2		
scratch	Temporary	mikey		

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:

Groups 🗢 💽	NewGroup	1	Mombers
Film.			Invité new utvir
admin	Shared Files		mikey Control
New York Dents group	-		mkey2
and the second sec	persistent scratch		Edt Menter Un
	Gio To		
	Shared Volume Conta		
	Bemove Share volume containers with this group to s	oe meri here.	
	Shared Docker Images	_ <b>_</b>	
	Share docker enages with this group to see	them here.	

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

Containers					
Created At	Name	Domain	Image	Status	
2018-06-12 19:50:41.0	sesf	Interactive	Python + R	stopped	▶ <b>8</b> ×
2018-06-05 10:27:12.0	Mike Matlab	Interactive	MATLAB R2016a	stopped	► 8 ×
		ong term storage of			s in the Storage folder an
Storage	backed up. These volume <u>(home/idies/workspace/Str</u> containers, even in the even i.e., under the <u>Storage/use</u> in the SciServer Compute	s are mounted acco orage/username/use ent that a container ername or <u>Storage</u> / e Data Storage Pol	rding to the username of the er volume name/. Files save fails. Other files and folders folders. Your <u>Storage</u> volum icy.	user who created to this folder pe cannot be placed es are subject to s	d them under the path ersist between your in any intermediate path size limitations described
<u>Storage</u> persistent	backed up. These volume /home/idies/workspace/Str containers, even in the ev- i.e., under the <u>Storage/uss</u> in the SciServer Comput By default, all users start v	s are mounted acco orage/username/use ent that a container emame or Storage/ e Data Storage Pol with a Storage volun	rding to the username of the er volume namel. Files save fails. Other files and folders folders. Your <u>Storage</u> volum	e user who created ed to this folder per cannot be placed es are subject to s es in this volume of	d them under the path ersist between your in any intermediate path size limitations described correspond to the same
	backed up. These volume <u>home/idles/workspace/St</u> containers, even in the even i.e., under the <u>Storage/uss</u> in the <u>SciEvere Comput</u> By default, all users start v <u>persistent</u> folder in the vert Use <u>Temporary</u> volumes fi not affected by Compute r of the user who created th files and folders cannot be	s are mounted acco orage/username/username/username/username/or ent that a container mame or Storage/i e Data Storage Pol with a Storage volun sion of SciServer Cr for temporary large fi node failure, but is n em under the path / placed in any interr	rding to the username of the er volume name/ Files save fails. Other files and folders folders. Your <u>Storage</u> volum icy. ne named <u>persistent</u> . The file	e user who creater ed to this folder per cannot be placed es are subject to s es in this volume of ent of this alpha r volumes persist bo es are mounted ac ocrary/username/ e Temporary/user	d them under the path risist between your in any intermediate path izze limitations described correspond to the same elease. etween containers and an cording to the username user volume name!. Oth name or Temporary!

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.

Compute Jobs	Recovered RecTable Method
Show u reties	Search Neme/Command/Notebook
Submission Time If Job	Status
Wed, Jun 27. street 249 2010 2:55 PM	Completed after 4
Wed, Jun 27. steep 249 2010 2:05 PM	Completed after 4 v
Wed, Jun 27, silees 244 2016 2 56 PM	Completed after 4
Wed, Am 27. x1mm 349 2018 2:54 PM	Completed after 4
Wed, Jun 27. x1mgr 3+e 2018 2:54 PM	Completed after 4
Wed, Jun 27. x1erp 348 2018 2:54 PM	Completed after 4
Wed, Aut 27. x1mm Ske 2018 2:54 PM	Completed after 4
Wed, Jun 27. sleep 389 2018 2:44 PM	Completed after 3 v
Wed, Jun 27. Steep Test 2010 50.49-AM stars or	Canceled
Thu, Jun 21, yest 2016 11 01 AM	Completed after a reference
Showing 1 to 10 of 29 entries.	Prevines 1 2 3 Next