Setting Up Foundry on OSC

1. Make sure your OSC account is associated with the project account which is on the list of accounts permitted to access Foundry. The PI should be able to add you to their project account if you give them your email or OSC username.
2. Go to viafoundry.osc.edu and log in with your OSC credentials. After entering your credentials, you may need to click the "SSO" button on the page that follows to access Foundry.
3. Before running pipelines, you must create a ssh key in Foundry and add your **public** key to your `~/.ssh/authorized_keys` file on OSC:
   a. Go to your Foundry profile by clicking on your icon on the top right of the Foundry homepage and selecting "Profile".
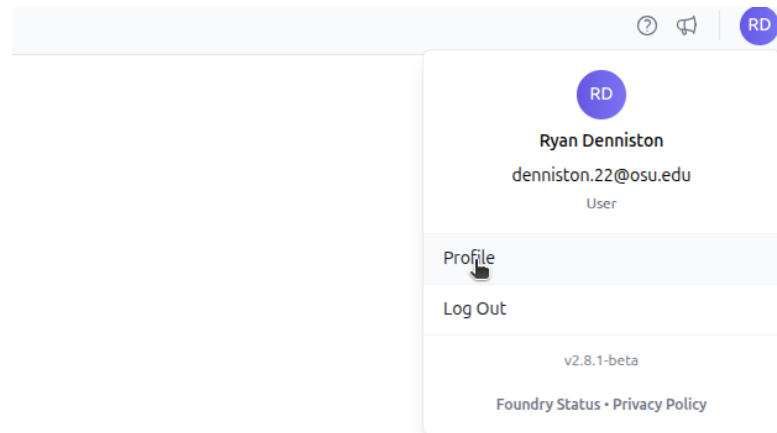
   b. On the profile page, go to the "Credentials" tab.
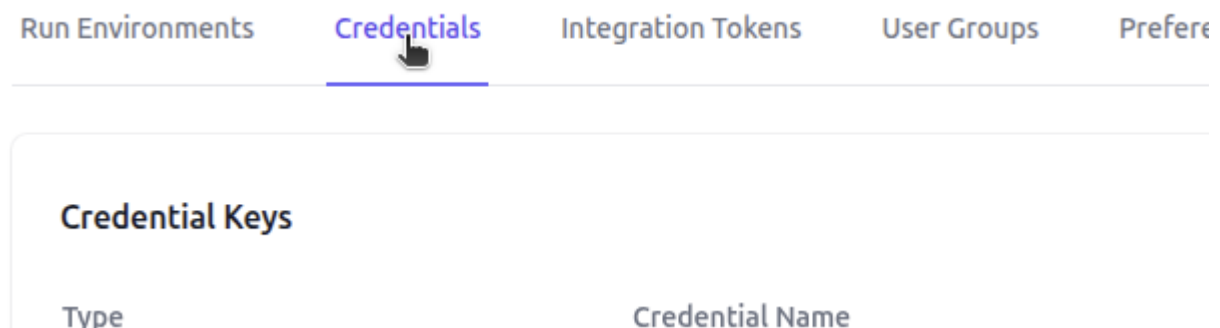
   c. Under the "Credentials" tab, click "Create Credential" on the right.

⊕ Create Credential

Options

:

d. In the popup window that appears, select "SSH" as the credential type, name your key, then click "Generate Keys for Me".

Credential Type *

SSH SSH

Credential Name *

demo_key

Public Key   Generate Keys for Me

Enter Your Public Key

e. Copy the text in the "**Public Key**" box, making sure to get all of it. Do not copy the private key.

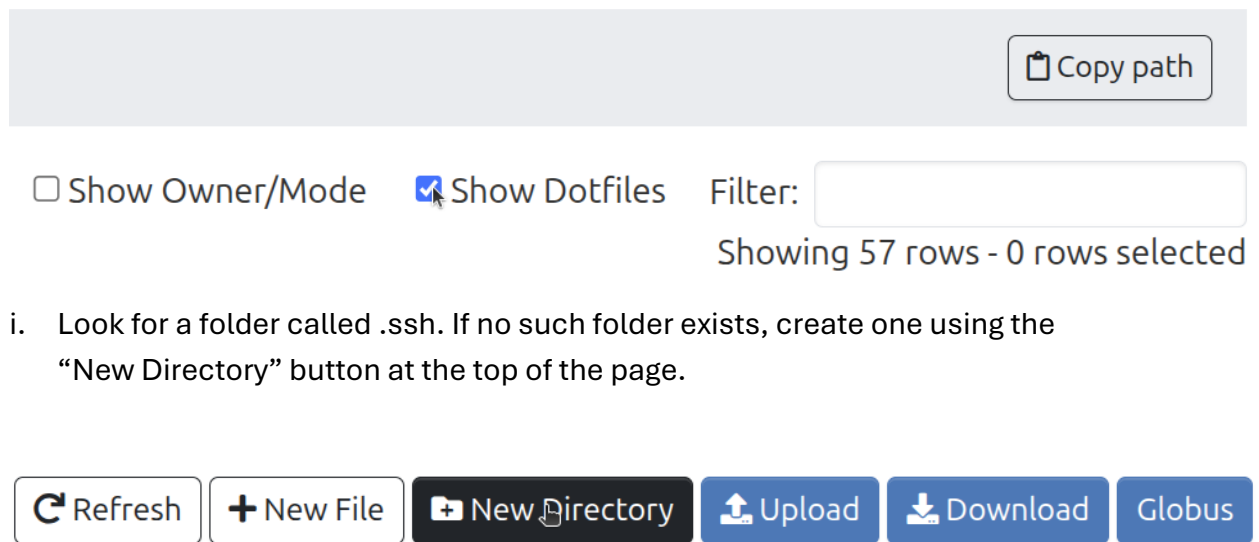Public Key   Generate Keys for Me

ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAAIJe7ZMIdEZz0K8acCcmOVR
WOI2kbKLxaFy1pEqQAPdn+ denniston.22@osu.edu

f. Save the key by clicking the "Save" button.
g. Now, log in to the OSC System Gateway and open your home directory under the Files tab.
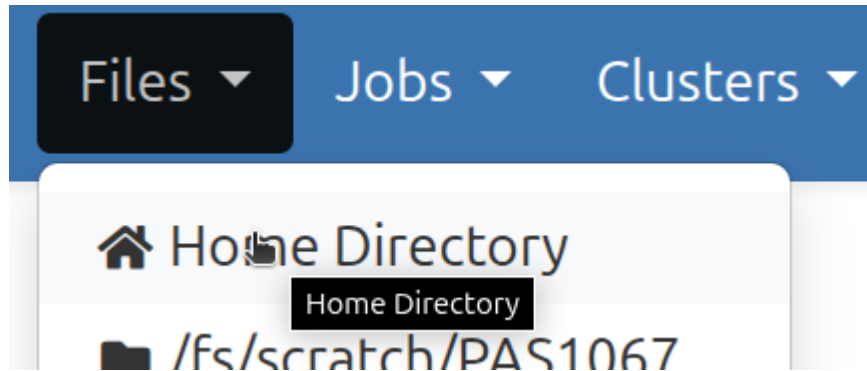
h. In the files tab view of your home directory, select the "Show Dotfiles" checkbox.

i. Look for a folder called .ssh. If no such folder exists, create one using the "New Directory" button at the top of the page.
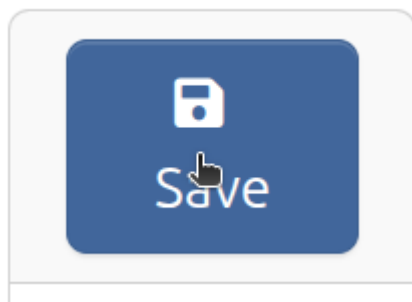

j. Once you have created or located the .ssh folder, click the folder to enter it. Within this folder, create a file called authorized_keys with the "New File" button if this file doesn't already exist.

k. Open the authorized_keys file in the file editor by selecting "Edit" from the drop-down menu for the file.

	Type ▲	Name		Size
☐	🗋	authorized_keys	⋮ ▼	2.58 kB
☐	🗋	known_hosts		

👁 View
✏ Edit
𝐀 Rename
⬇ Download

🗑 Delete
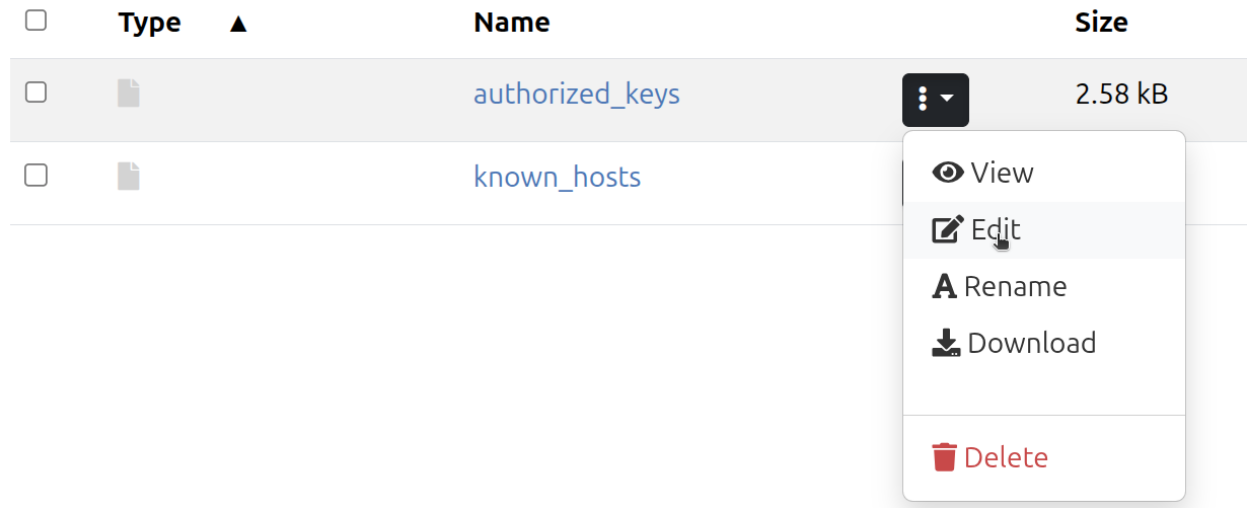
l. Paste your **public key** into the editor at the beginning of the file, or after the last entry if there are already public keys in the file.

/users/PAS1067/rdenn/.ssh/authorized_keys

```
1   ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIMvsEtrqGKA321SnucqHIStIqMoCkUzeMapGQ+sIYIAi denniston.22@osu.edu
```

💾
Save

Key Bindings

Default
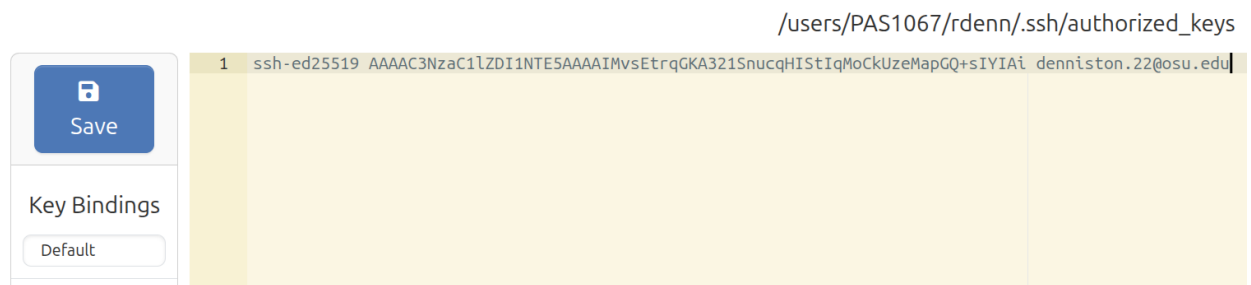
m. Hit "Save".

💾
Save

4. After setting up your ssh key, return to the profile page of Via Foundry where we will set up you Run Environment:
    a. On the profile page, go to the "Run Environments" tab.

Run Environments   Credentials   Integration Tokens

Run Environments

Profile Name
_____

b. Click "Create Environment" on the right.

⊕ Create Environment

Options
_____

⋮

_____

c. Enter a name for your environment and select "cardinal" as the template.
d. In the "Username" field, enter your OSC username.
e. In the "SSH Keys" field, select the ssh key you created in the previous step
    from the dropdown menu. The name may be different for you.

SSH Keys

demo_key   ↕

Apr2025

test_key_2

demo_key

Singularity Cache Folder

f. Enter --account=<PI's project account> under "Other Options" 3 times (once in the Executor Settings for Nextflow section, and twice in the Executor Settings for Nextflow Jobs section).

Executor of Nextflow

SLURM	↕

Executor Settings for Nextflow

Partition

cpu

Memory (GB)

10

CPUs

1

Time(min.)

2000

Other Options

--account=PAS####

Other Options

--account=PAS####

☐ Use Custom Initial Run Settings

Partition

cpu

Memory (GB)

16

CPUs

1

Time(min.)

100

Other Options

--account=PAS####

g. If you or your PI is associated with the college of medicine, you may also need to to change your "Partition" from **cpu** to **nextgen** and add --cluster ascend to the "Other Options" section, as well as specifying your account in this section, such that the "Other Options" field contains: --account=PAS#### --cluster ascend. Both these changes need to be made in 3 locations: (once in the Executor Settings for Nextflow section, and twice in the Executor Settings for Nextflow Jobs section).

h. Test your connection by clicking the "Test Connection" button. If the test is successful, select "Save changes" at the bottom right.

5. See general Via Foundry Documentation for information on how to run pipelines in your Run Environment. Via's documentation can be accessed by clicking the question mark at the top right and then selecting "Documentation".