

DiCOS Apps

ASGC

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istributed Cloud Operating System to support big data analysis and e-Science

Categories of DiCOS Apps

- Bio-Apps
 - CryoSPARC version, 2, 3, 4 (rtx 3090)
 - Relion version, 3, 3.1, 4-beta (rtx 3090, P100)
 - AlphaFold (rtx 3090, A100) and RoseTTAFold. (rtx 3090)
 - Dynamo, IMOD, EMAN2, cisTEM, Jupyter...etc.
- Phys-Apps
 - Deepmd-kit, MAML, Paraview, Ovito, Qiskit...etc.
- Machine-learning-Apps
 - Jupyter-Lab (PyTorch, Tensorflow) (cpu, P100, A100, rtx3090, rtx4090)
 - Triton
- Other-Apps
 - MATLAB


<https://dicos.grid.sinica.edu.tw/dockerapps/>

Jupyter


**Jupyter Lab**
Version: CPU with Tensorflow v1
Resources: 49%

OpenDelete


End Time: Oct. 3, 2025, 11:55 a.m.

**Jupyter Lab gpu 3090**
Version: GPU with Tensorflow 3090
Resources: 15%


Launch ▾

**Jupyter Lab GPU A100**
Version: GPU with Tensorflow A100
Resources: 50%


Launch ▾

**Jupyter Lab GPU A100**
Version: GPU with Tensorflow v2.6
Resources: 50%

Launch ▾

**Jupyter Lab GPU A100**
Version: GPU A100
Resources: 50%

Launch ▾

**Jupyter Lab GPU rtx4090**
Version: GPU rtx4090
Resources: 100%

Launch ▾

- 2 hours
- 3 days
- 7 days
- 10 days

The path of Disk Space

- All user
 - /dicos_ui_home/{user} (UI) (100 GB only)
- NSTCCore group
 - /ceph/sharedfs/work/group}/{user} (3 TB for free)

Hands-on

- <https://dicos.grid.sinica.edu.tw/dockerapps/nstc>
 - 抓取股票資料 + 畫圖
 - 爬蟲抓取 Yahoo 新聞標題

DiCOS Apps

NSTC202510 Workshop

JupyterLab



JupyterLab

Version: 2 CPU cores

Resources: %



Open

Delete

End Time: Oct. 7, 2025, 1:44 p.m.

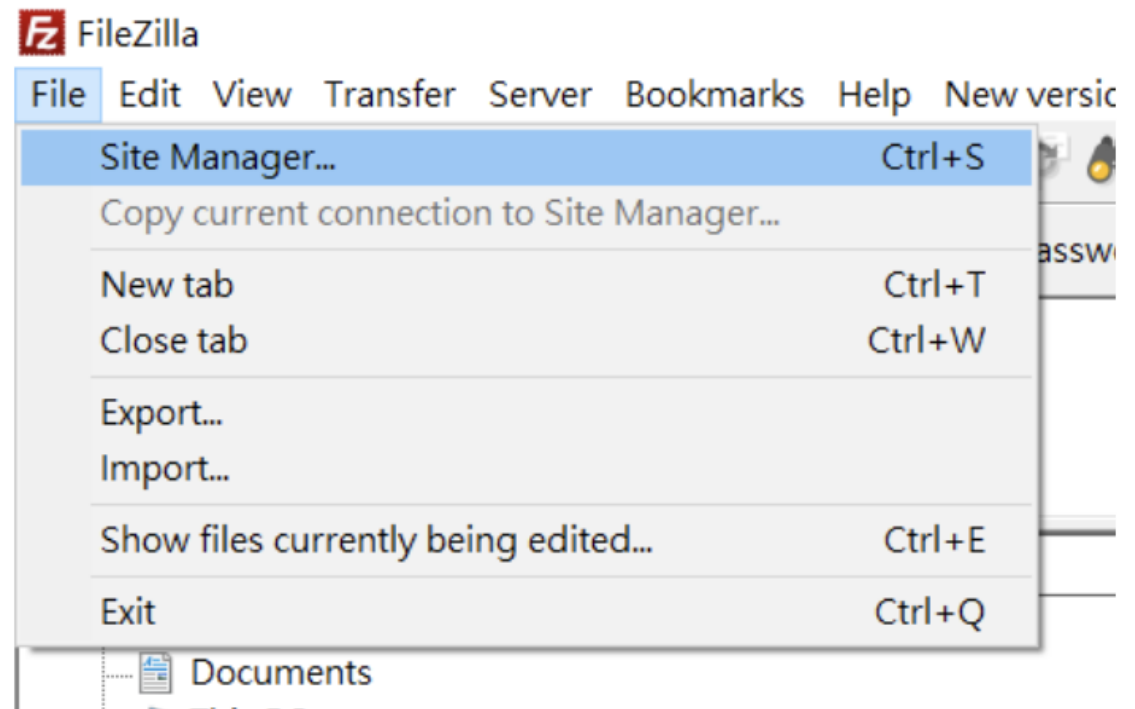
Upload and Download your data

User guide:

<https://canew.twgrid.org/ApplyAccount/howToSave2faCode.php>

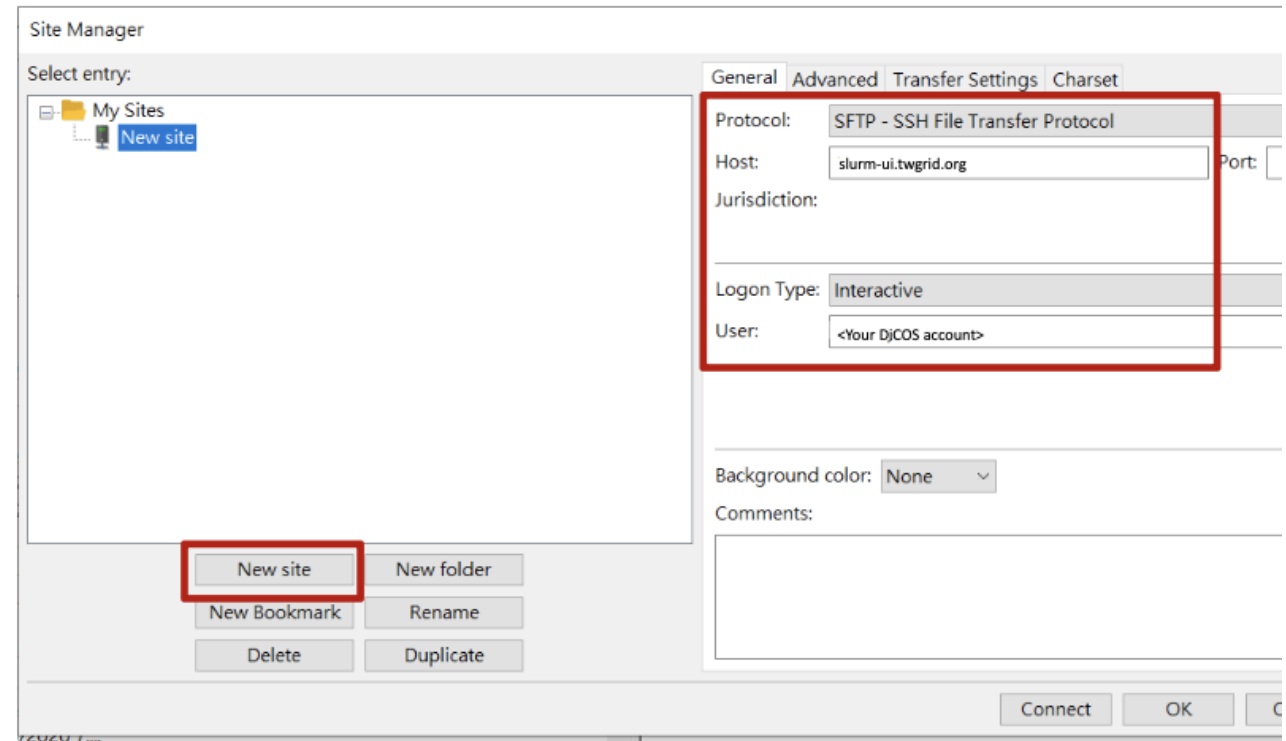
Download [FileZilla Client](#)

1. Chosse “Site Manager”



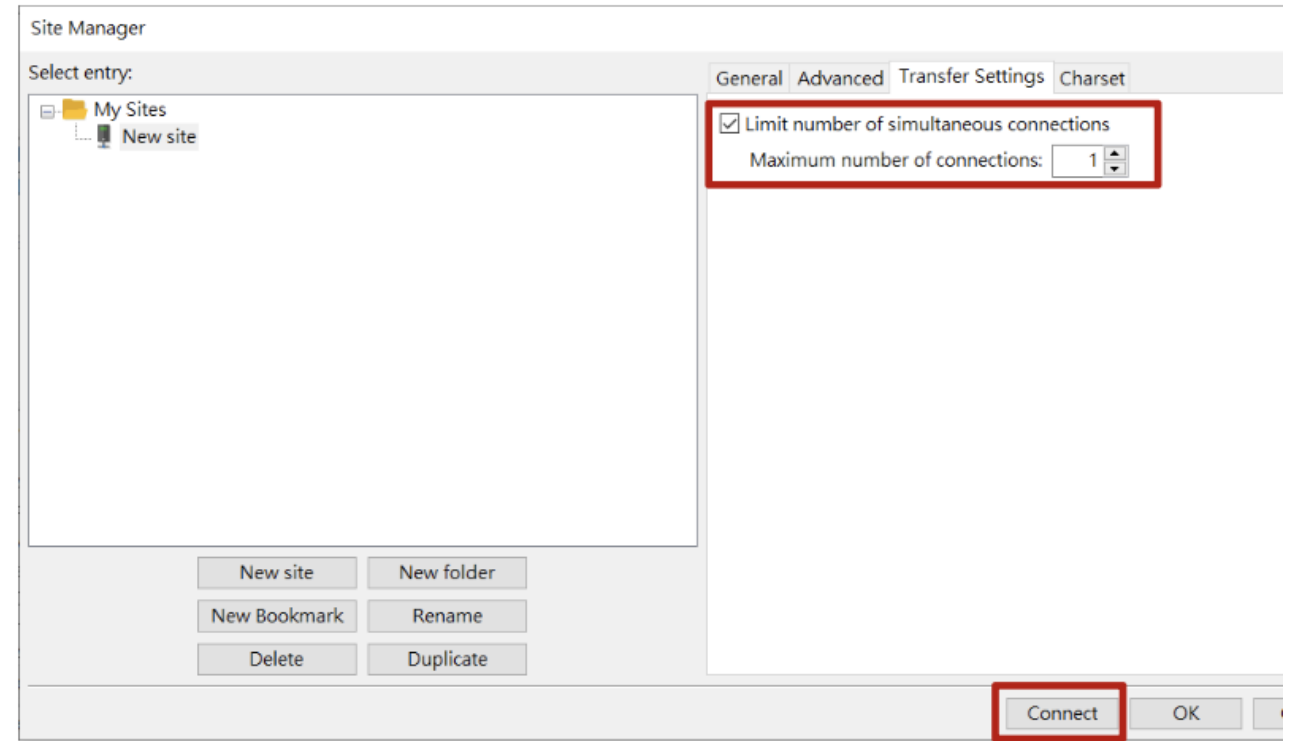
Upload and Download your data

2. Click “New site” ->
choose Protocol to “SFTP”->
enter Host “slurm-ui.twgrid.org”
-> choose Logon Type to
“Interactive” -> enter your
DiCOS account to User field



Upload and Download your data

Click “Transfer Settings” ->
enable “Limit number of
simultaneous connections”
and check “Maximum
number of connections:” is 1
-> click “Connect”



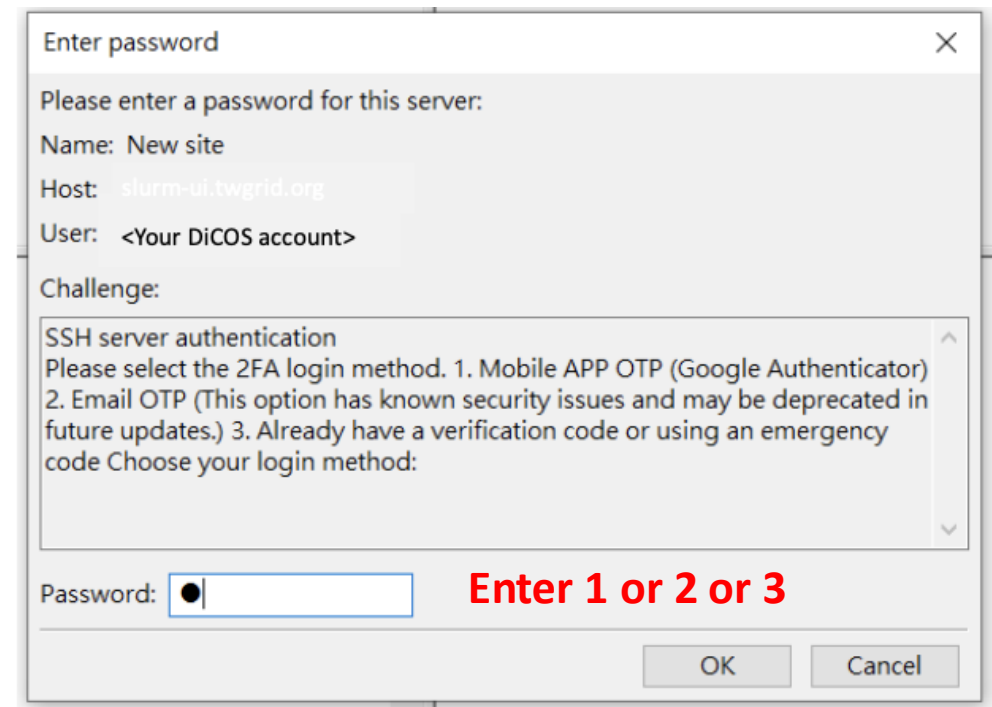
Upload and Download your data

3. After connect, the first pop-up window please select the 2FA method

3.1 Obtain a 6-digit verification code shown in your Google Authenticator app

3.2 Obtain a 8-digit OTP code in the E-mail

3.3 If you have not used the OTP code within 10 minutes or if you remember your emergency code, you can use this option to log in.



Upload and Download your data

4. Enter your DiCOS account password



A screenshot of a standard Linux SSH authentication dialog box. The window title is "Enter password". It contains the following text: "Please enter a password for this server:", "Name: New site", "Host: slurm-ui.twgrid.org", "User: <Your DiCOS account>", and "Challenge:". Below the challenge text is a scrollable area containing "SSH server authentication" and "Password:". At the bottom, there is a "Password:" label followed by a text input field. The input field contains ten black dots, and a red rectangular box highlights the text "<Your DiCOS password>" which is visible to the right of the dots. At the bottom right of the dialog are "OK" and "Cancel" buttons.

Enter password

Please enter a password for this server:

Name: New site

Host: slurm-ui.twgrid.org

User: <Your DiCOS account>

Challenge:

SSH server authentication

Password:

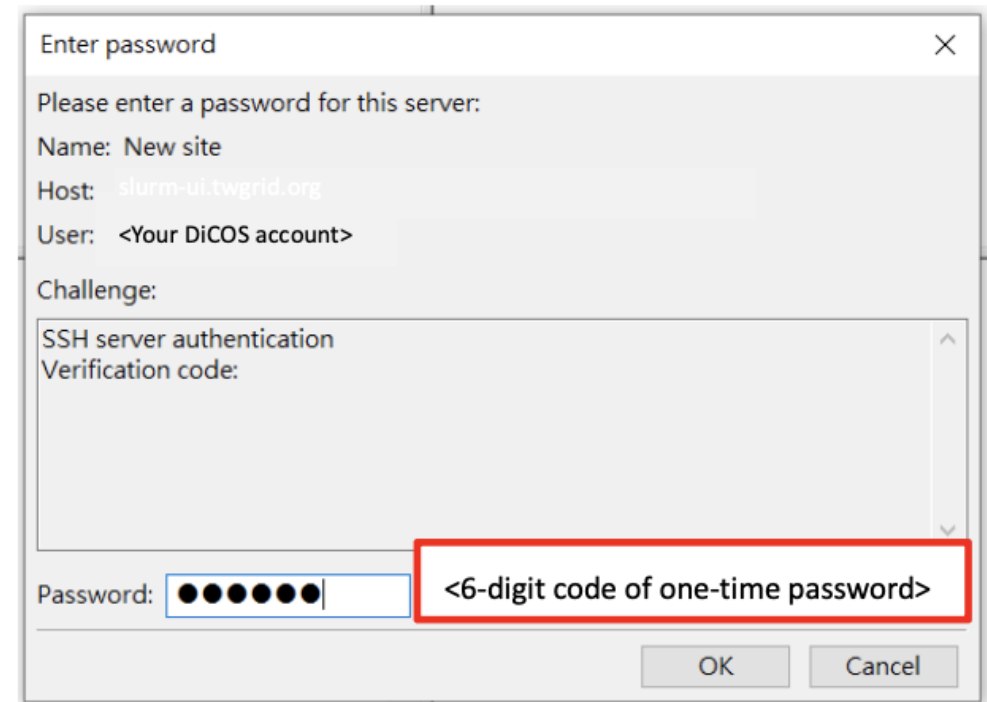
Password: ●●●●●●●●●● <Your DiCOS password>

OK Cancel

Upload and Download your data

5. Verification Code

5.1. If you choose 1 option please enter 6-digit code of OTP shows on Google authenticator



A screenshot of an SSH authentication dialog box titled "Enter password". The dialog contains the following text: "Please enter a password for this server:", "Name: New site", "Host: slurm-ui.twgrid.org", "User: <Your DiCOS account>", and "Challenge:". Below the challenge text is a text area containing "SSH server authentication" and "Verification code:". At the bottom, there is a "Password:" label followed by a text input field with six black dots. To the right of this field is a red rectangular box containing the text "<6-digit code of one-time password>". At the bottom right of the dialog are "OK" and "Cancel" buttons.

Enter password

Please enter a password for this server:

Name: New site

Host: slurm-ui.twgrid.org

User: <Your DiCOS account>

Challenge:

SSH server authentication

Verification code:

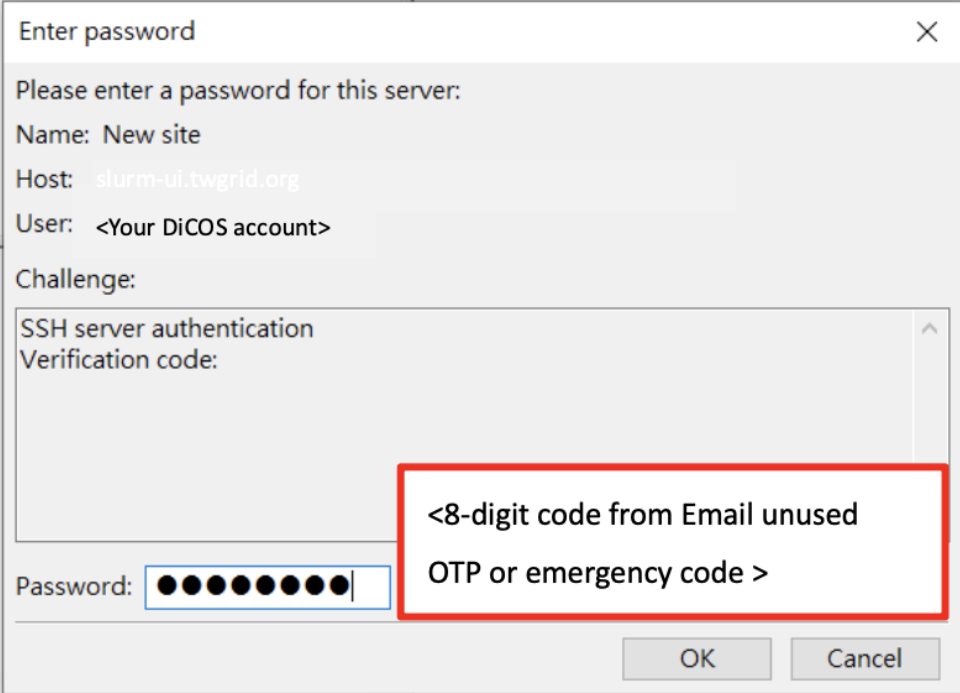
Password: ●●●●●●

<6-digit code of one-time password>

OK Cancel

Upload and Download your data

5.2. If 2 option please enter 8-digit code of OTP shows on Email



A screenshot of an SSH authentication dialog box titled "Enter password". The dialog contains the following text: "Please enter a password for this server:", "Name: New site", "Host: slurm-ui.twgrid.org", "User: <Your DiCOS account>", and "Challenge:". Below the challenge text is a text area containing "SSH server authentication" and "Verification code:". At the bottom, there is a "Password:" label followed by a text input field with eight black dots. To the right of the password field, a red rectangular box highlights the text "<8-digit code from Email unused OTP or emergency code >". At the bottom right of the dialog are "OK" and "Cancel" buttons.

Enter password

Please enter a password for this server:

Name: New site

Host: slurm-ui.twgrid.org

User: <Your DiCOS account>

Challenge:

SSH server authentication

Verification code:

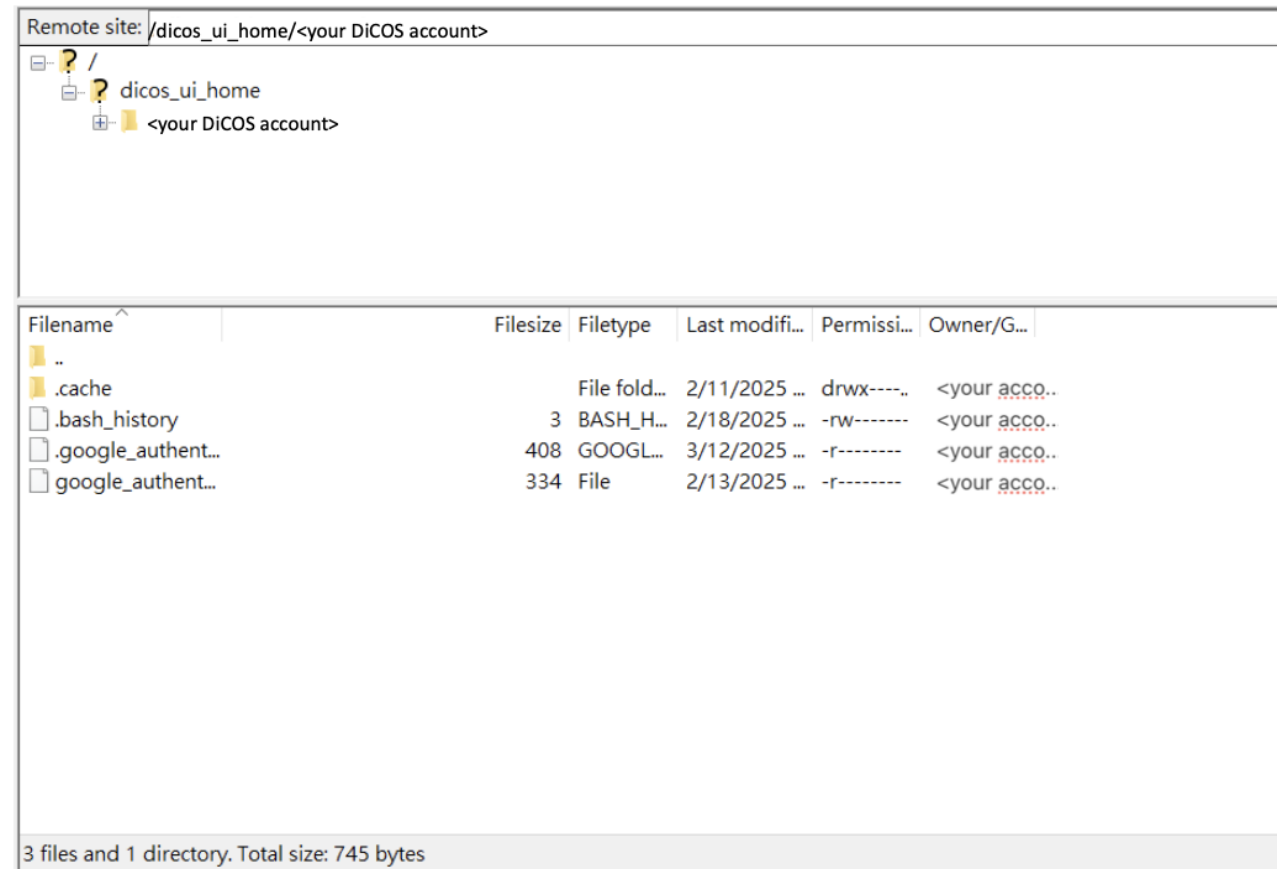
Password: ●●●●●●●●

<8-digit code from Email unused
OTP or emergency code >

OK Cancel

Upload and Download your data

6. After two authentication succussed,
you can see the right window
list your DiCOS home directory



Filename ^	Filesize	Filetype	Last modifi...	Permissi...	Owner/G...
..					
.cache		File fold...	2/11/2025 ...	drwx----	<your acco..
.bash_history	3	BASH_H...	2/18/2025 ...	-rw-----	<your acco..
.google_authent...	408	GOOGL...	3/12/2025 ...	-r-----	<your acco..
google_authent...	334	File	2/13/2025 ...	-r-----	<your acco..

3 files and 1 directory. Total size: 745 bytes



Thank you

Q&A and Feedback

DiCOS Support E-Mail: DiCOS-Support@twgrid.org