



Jupyter4NFDI - One Hub to Rule Them All

Like the Eye of Sauron, but helpful - one interface to access research resources

19.10.2026 | TIM KREUZER

CHAPTER 1

The Myth of Easy Collaboration

CHAPTER 1

The Myth of Easy Collaboration



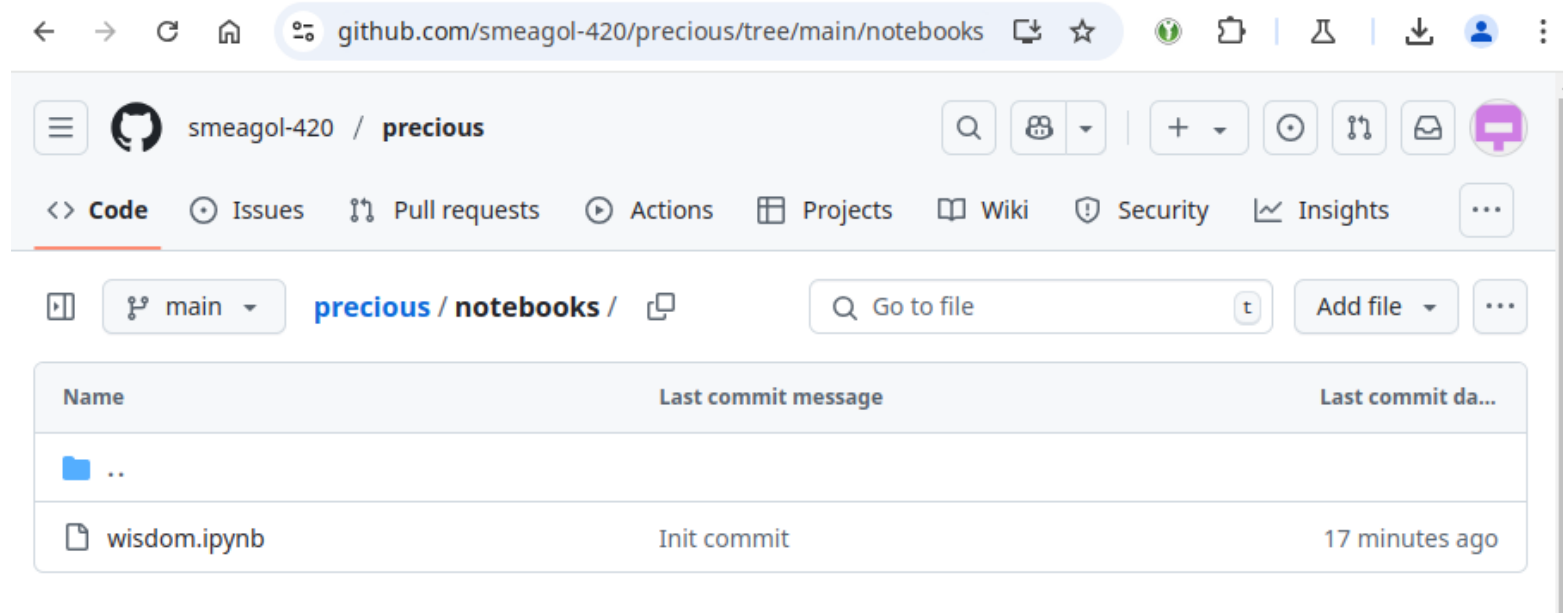
CHAPTER 1

The Myth of Easy Collaboration



CHAPTER 1

The Myth of Easy Collaboration

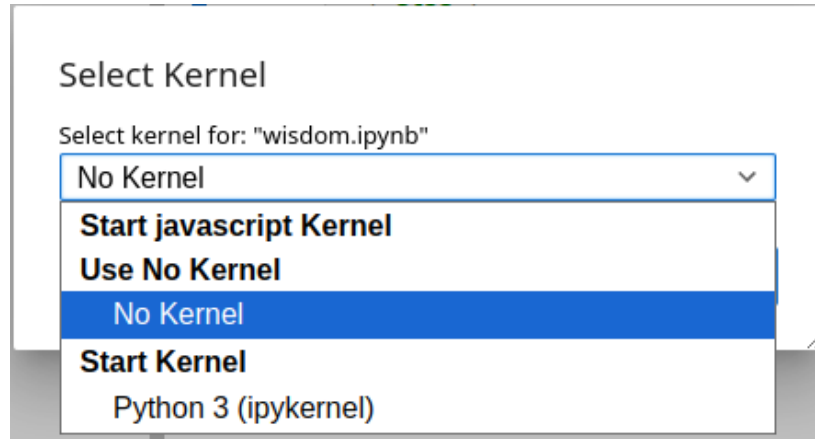


CHAPTER 2

The First Hurdle

CHAPTER 2

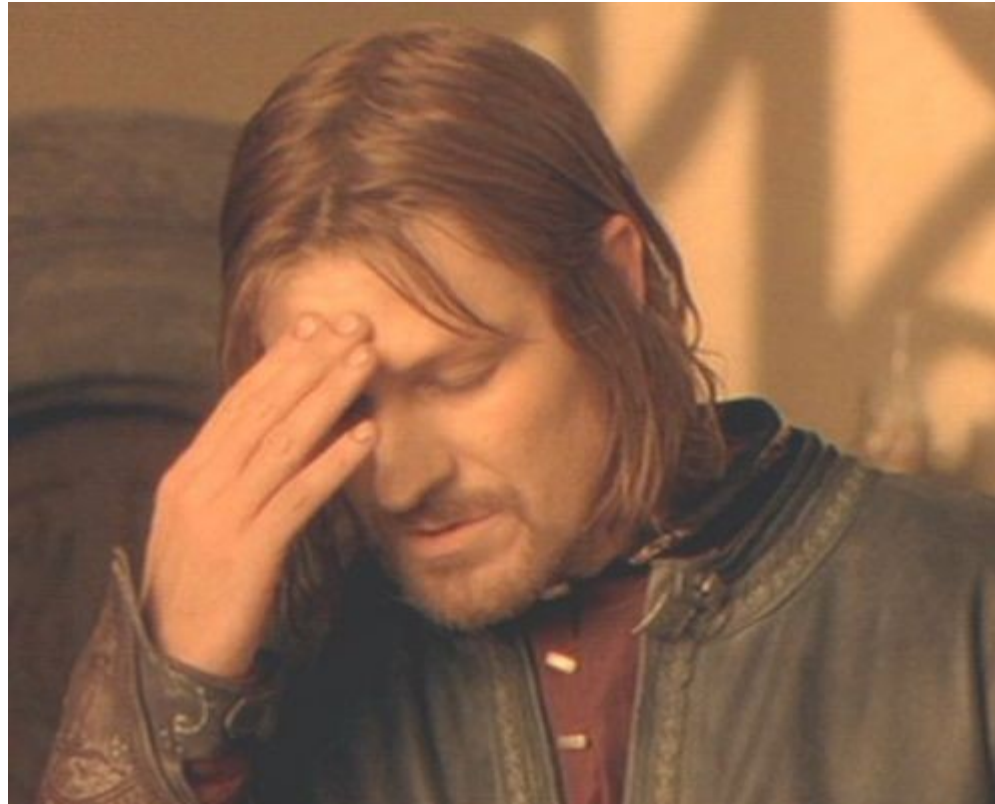
The First Hurdle



```
Cell In[1], line 1
    let fs = require('fs');
           ^
SyntaxError: invalid syntax
```

CHAPTER 2

The First Hurdle



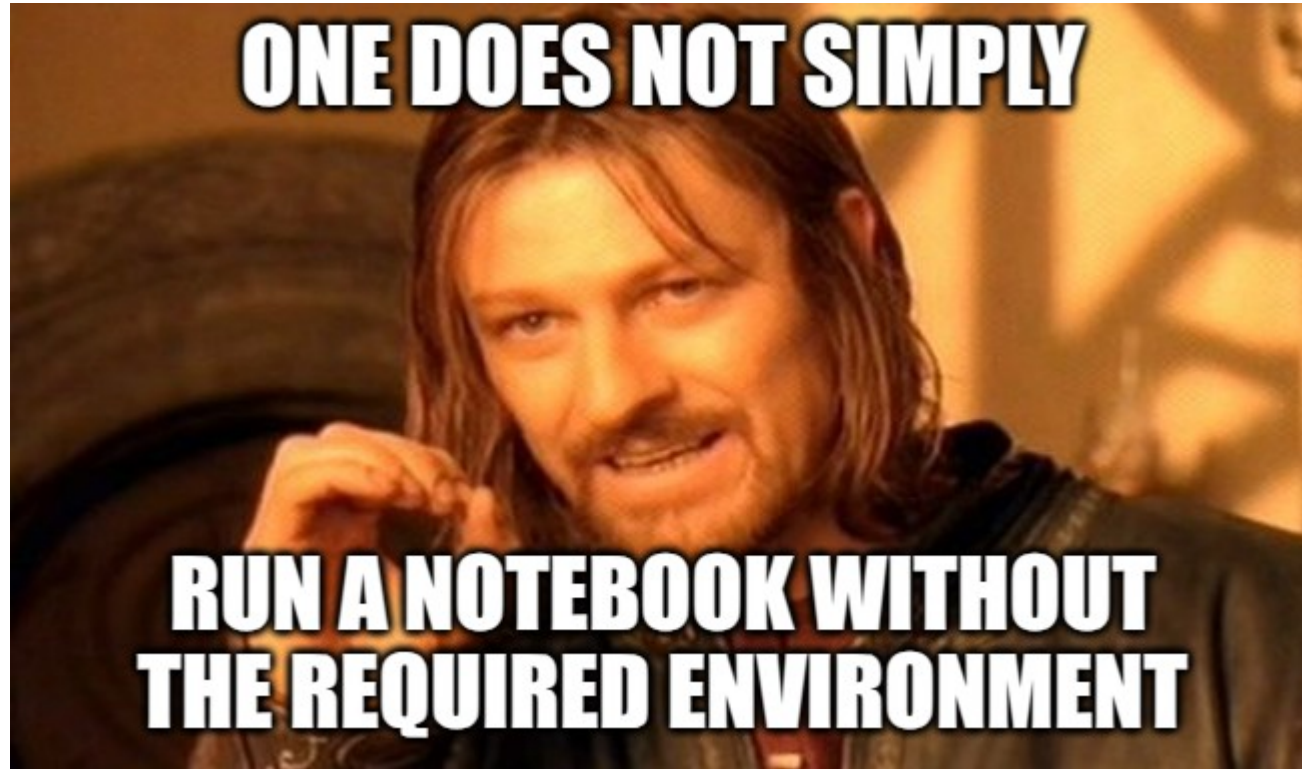
CHAPTER 2

The First Hurdle



CHAPTER 2

The First Hurdle



CHAPTER 2

The First Hurdle



CHAPTER 2

The First Hurdle



CHAPTER 2

The First Hurdle

jupyter-client.readthedocs.io/en/latest/kernels.html

🏠 > Making kernels for Jupyter

Making kernels for Jupyter

A 'kernel' is a program that runs and introspects the user's code. IPython includes a kernel for Python code, and people have written kernels for [several other languages](#).

```
apt-get update && apt-get install -y \
curl \
build-essential \
&& curl -fsSL https://deb.nodesource.com/setup_18.x | bash - \
&& apt-get install -y nodejs \
&& apt-get clean \
&& rm -rf /var/lib/apt/lists/*

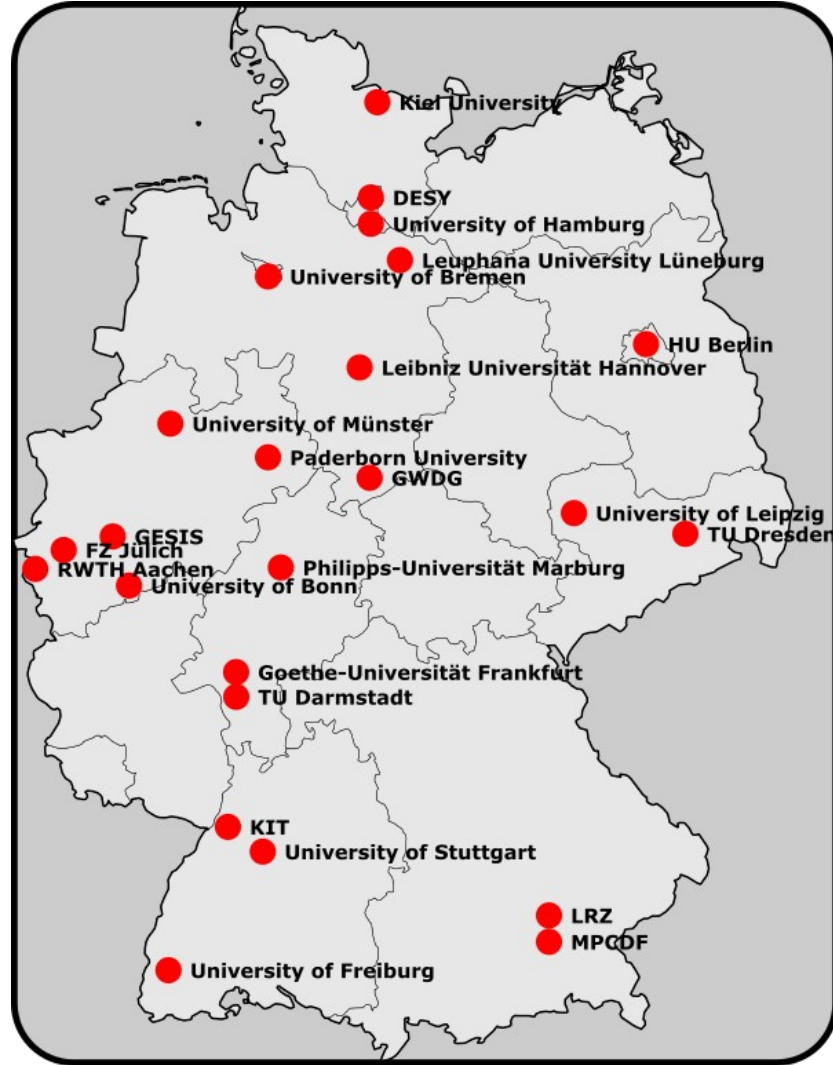
# Install ijavascript globally
npm install -g ijavascript && ijsinstall --install=global
```

CHAPTER 3

The Vault

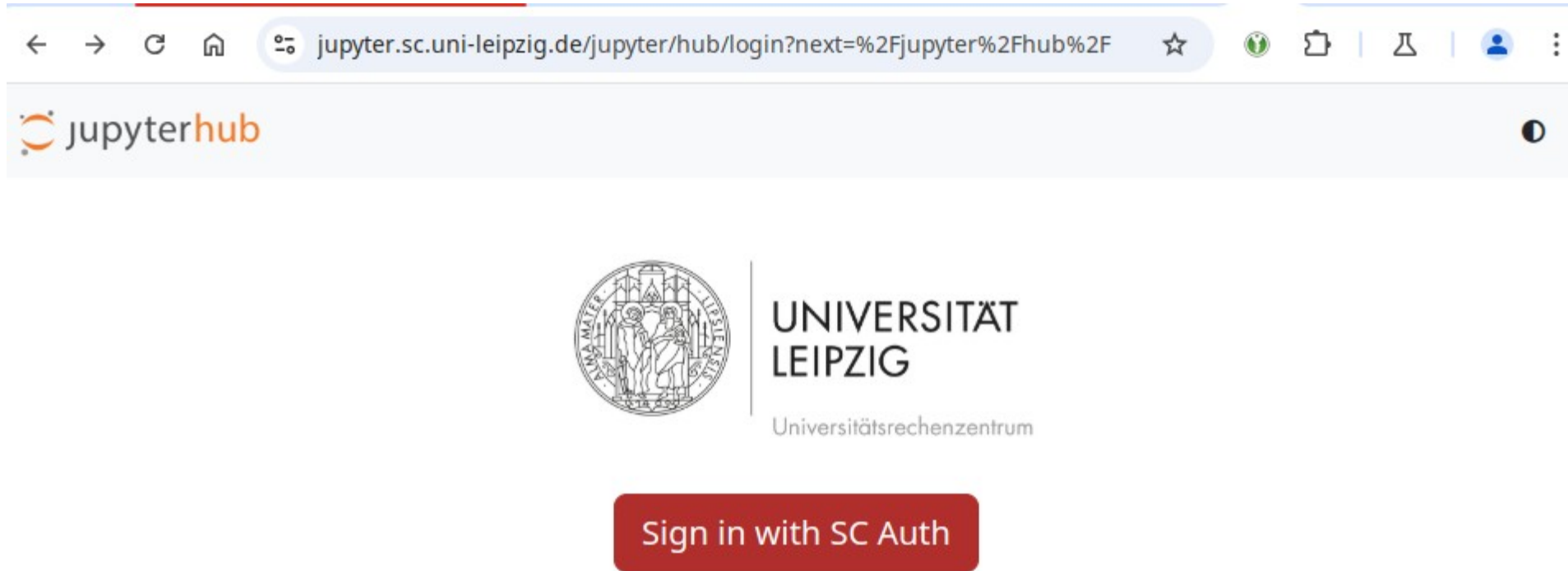
CHAPTER 3

The Vault



CHAPTER 3

The Vault



CHAPTER 3

The Vault



CHAPTER 3

The Vault



CHAPTER 3

The Vault



CHAPTER 3

The Vault



CHAPTER 4

The Temptation of Binder

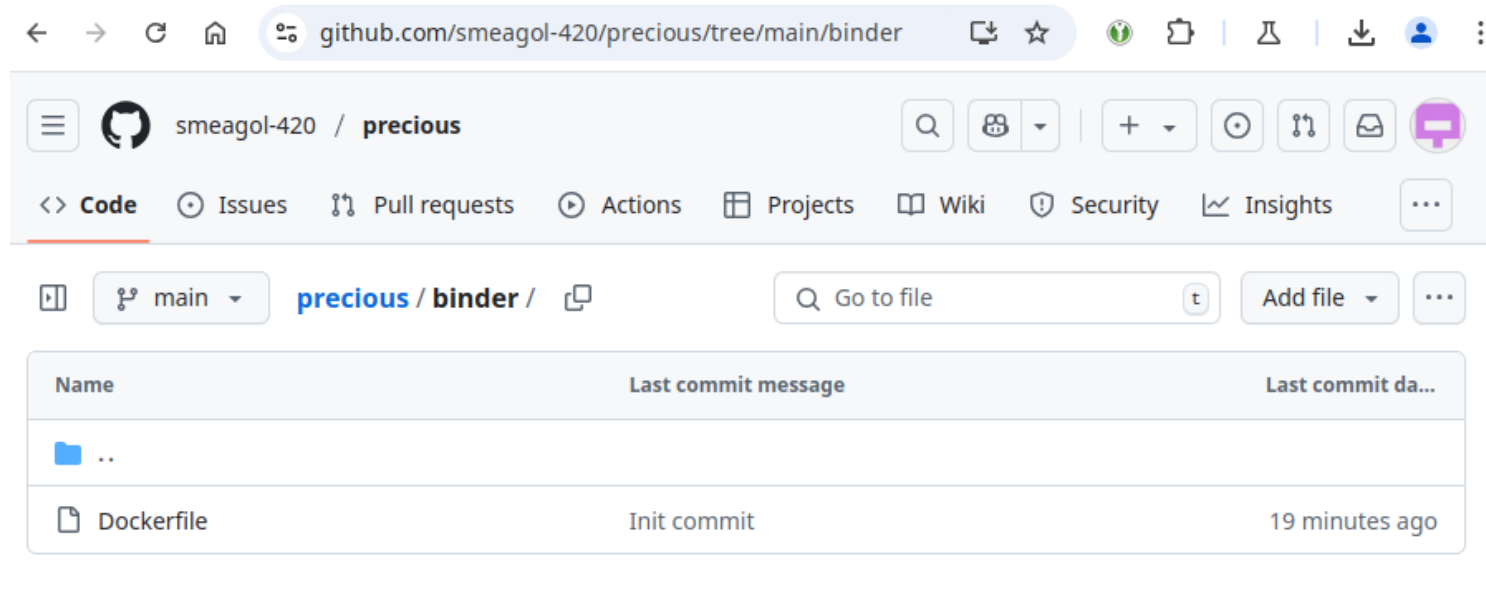
CHAPTER 4

The Temptation of Binder



CHAPTER 4

The Temptation of Binder



<https://mybinder.org/v2/gh/smeagol-420/precious/HEAD>

CHAPTER 4

The Temptation of Binder



CHAPTER 5

The Gates of Jupyter4NFDI

CHAPTER 5

The Gates of Jupyter4NFDI



CHAPTER 5

The Gates of Jupyter4NFDI



CHAPTER 5

The Gates of Jupyter4NFDI

Lab Config

Storage

Logs

Name	My Precious	
Select Version	Repo2docker (Binder) ▾	
Systems	deNBI-Cloud ▾	
Direct Link for this configuration	https://hub.nfdi-jupyter.de/v2/gh/smeagol-420/precious/HEAD?labpath=notebooks%2Fwisdo 	
Repository Type	GitHub ▾	
GitHub repository name or URL	smeagol-420/precious	
Git ref (branch, tag, or commit)	HEAD	
Open notebook or path (optional)	☒	notebooks/wisdom.ipynb
Notebook Type	File ▾	
Mount user data	☒	/home/jovyan/work
Flavor	2GB RAM, 1VCPU, 2 hours ▾	

 Share

 Save

 Reset

 Delete

CHAPTER 5

The Gates of Jupyter4NFDI

Lab Config

Storage

Logs

Add Storage Mount +

	Template	Action
▼	B2Drop	
▼	Webdav	
^	AWS	
Template AWS Relative Mount Path aws Read Only ☒ Bucket Name myawsbucket4545/subdir Region EU (Stockholm) (eu-north-1) Username AKIA6G75D3GPNTBN2VXV Password		
▼	S3 Compliant Storage Provider	

CHAPTER 6

The Link of Power

CHAPTER 6

The Link of Power



CHAPTER 6

The Link of Power

Lab Config

Storage

Logs

Name	My Precious	
Select Version	Repo2docker (Binder) ▾	
Systems	deNBI-Cloud ▾	
Direct Link for this configuration	https://hub.nfdi-jupyter.de/v2/gh/smeagol-420/precious/HEAD?labpath=notebooks%2Fwisdo 	
Repository Type	GitHub ▾	
GitHub repository name or URL	smeagol-420/precious	
Git ref (branch, tag, or commit)	HEAD	
Open notebook or path (optional)	☒	notebooks/wisdom.ipynb
Notebook Type	File ▾	
Mount user data	☒	/home/jovyan/work
Flavor	2GB RAM, 1VCPU, 2 hours ▾	

 Share

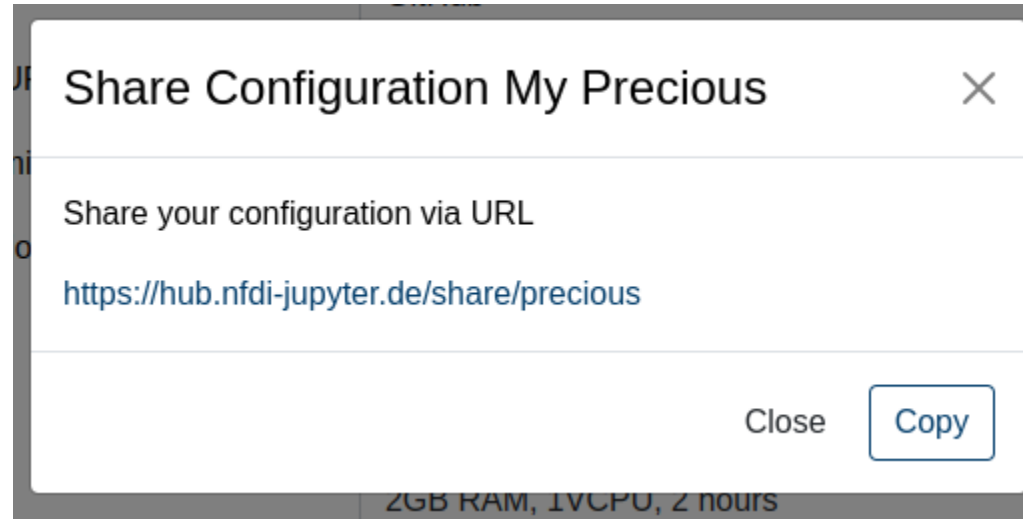
 Save

 Reset

 Delete

CHAPTER 6

The Link of Power



CHAPTER 6

The Link of Power

←

→

↺

🏠

🌐

https://hub.nfdi-jupyter.de/share/precious

👤

🔒

🔧

👤

⋮

	Name	Configuration	Status	Action
+	My Precious	System deNBI-Cloud	Shared jupyterlab Shared configuration (precious).	📄 ▶ Start

Lab Config

Storage

Logs

Add Storage Mount

+

	Template	Action
▼	B2Drop	🗑
▼	Webdav	🗑
^	AWS	🗑

Template

AWS

Relative Mount Path

aws

Read Only

✓

Bucket Name

myawsbucket4545/subdir

Region

EU (Stockholm) (eu-north-1)

Username

AKIA6G75D3GPNTBN2VXV

Password

hiddenSecret

👁

▼

S3 Compliant Storage Provider

🗑

CHAPTER 6

The Link of Power



CHAPTER 6

The Link of Power



[About NFDI-AAI](#) | [FAQ](#) | [Help](#) | [Data Privacy](#)

Select your NFDI Community / Virtual Home Organisation

In order to access this service please select or search the NFDI Community you are affiliated with.

Gast-Zugang / Guest Access

☐ Remember selection for this web browser session.

This Infrastructure Service is part of the [NFDI-AAI](#).



[Tutorial](#) [Documentation](#) [FAQ](#)

Sign in using your institutional account (or Github, Google, ORCID)

Search

- HELLENIC AGRICULTURAL ORGANIZATION - DI...
- Institute of Engineering Seismology and Earthqu...
- UNIVERSIDAD TECNOLÓGICA DE PEREIRA
- University of Jinan
- 29 Mayis University
- A*STAR - Agency for Science, Technology and R...



CHAPTER 6

The Link of Power



CHAPTER 6

The Link of Power



EPILOGUE

The End of the Old Ways

EPILOGUE

The End of the Old Ways

- Repo2Docker Features
 - Set up environment from Git Repo
- IAM4NFDI
 - Access for everyone
- Share Link
 - One Click solution to relive your precious work
- Bringing together resources from across Germany
- Interactive Demo:
<https://hub.nfdi-jupyter.de/share/openscienceweek>
- HPC Access? Use <https://jupyter.jsc.fz-juelich.de>

