

Accessing data hosted on the SAFE database cluster

Catalina Maria Lauer Zegarra
SAFE Research Data Center*

Last Update: December 11, 2023

Due to security, you can only connect to the SAFE database cluster from Uni Network (from home [Cisco Anyconnect VPN](#) is required), through the SAFE computational cluster. The credentials to authenticate with the database cluster are provided by the SAFE Data Center.

Contents

1	Contact	1
2	Jupyter lab	1

1 Contact

If you encounter any difficulties or just want general information, do not hesitate to contact us.

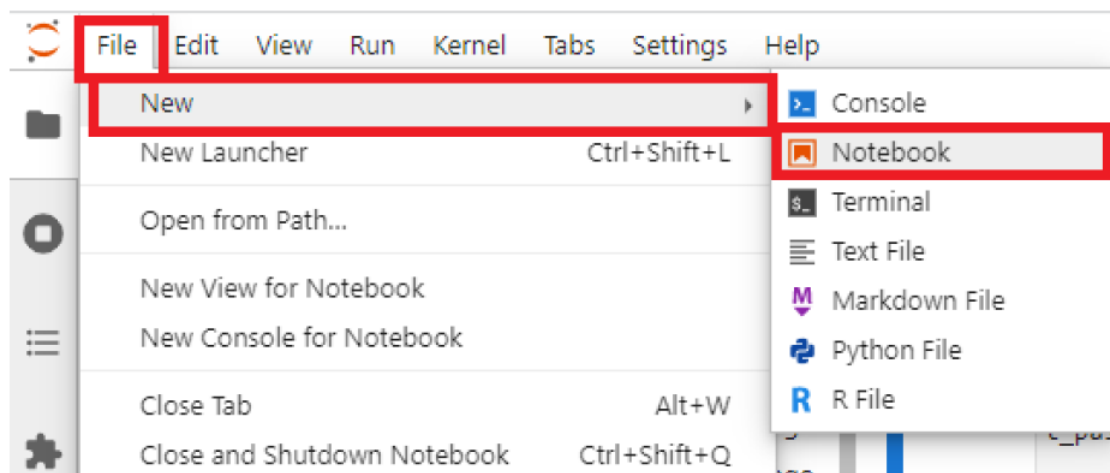
SAFE Research Data Center: datacenter@safe-frankfurt.de

More information about the SAFE Research Data Center, and further guides can be found [here](#), and [here](#).

2 Jupyter lab

1. Please find a link to Jupyter lab at <https://compute.safe-frankfurt.de>, authenticate with HRZ credentials. You are now connected to the SAFE computational cluster.
2. From menu select “File → New → Notebook” to create a new “ipynb” empty file

*lauer@safe-frankfurt.de



- Here is a sample Python snippet for establishing a database connection and retrieving data into a Pandas dataframe. Substitute the placeholders `<database_user>` and `<database_user_password>` with your Safe-HRZ credentials. Also, replace `<database_name>` and `<schema>.<table>` with the relevant database name and the specific data query, such as `SELECT var1, var2, var2 FROM <schema>.<table> [LIMIT 5]`, based on your requirements.

```
1 import pandas as pd
2 from sqlalchemy import create_engine
3 engine = create_engine('postgresql://<database_user>:<database_user_password>@compute.safe-frankfurt.de:5432/<database_name>')
4 df = pd.read_sql_query("SELECT var1, var2, var2 FROM <schema>.<table> [LIMIT 5]", engine)
```

```
import pandas as pd
from sqlalchemy import create_engine
from sqlalchemy.sql import text

engine = create_engine('postgresql://fds_read:***@compute.safe-frankfurt.de:5432/fds')

df = pd.read_sql_query("SELECT * FROM fds.tv_v2_tv_coverage LIMIT 5", engine)

df
```

	tv_org_id	tv_instrument_id	tv_organization_status	tv_org_name	tv_ticker	tv_iso_country	tv_ownership_flag	tv_instrument_status	tv_parent_company	tv_id
0	000051a2-c1a1-4829-b1fa-e72408467760	3b78b1cc-2d93-4093-bdcd-8e6fca61b942	UNL	Footage Firm, Inc.	None	US	0	UNL	None	0948546ddef3a34814f3e3d4660881b
1	0002c46f-98ff-457e-83e0-47b466746572	503ccfac-df64-4bae-a0ce-ce5db8158321	LIS	Luminex Corp	LMNX	US	1	LIS	None	2d0326b5c8f5c20fe1a6a26102cbeb2d
2	0004b878-94d8-4038-99c7-05df88b9d0c25	6a563f62-8a81-4839-88c7-421f93790b01	LIS	Bay Area Gold Group Ltd	1194	HK	1	LIS	None	930e52458712576288db8117ed6945e4
3	00048dcf896-4f06-a5ab-28a5a2a24e54	a8e39866-65ba-41e7-9351-48a1a4cb0295	LIS	KG Chemical Corporation	001390	KR	1	LIS	None	13c8055034cf9d25d768f7a2cfe33cc4
4	0008971a-99ba-4a43-a841-e0f9298d400a	34964e07-9f7a-4c83-b330-825998403d72	LIS	Offin Education Technology Co Ltd	002607	CN	1	LIS	None	891f52ee304811a213252039a9673dff