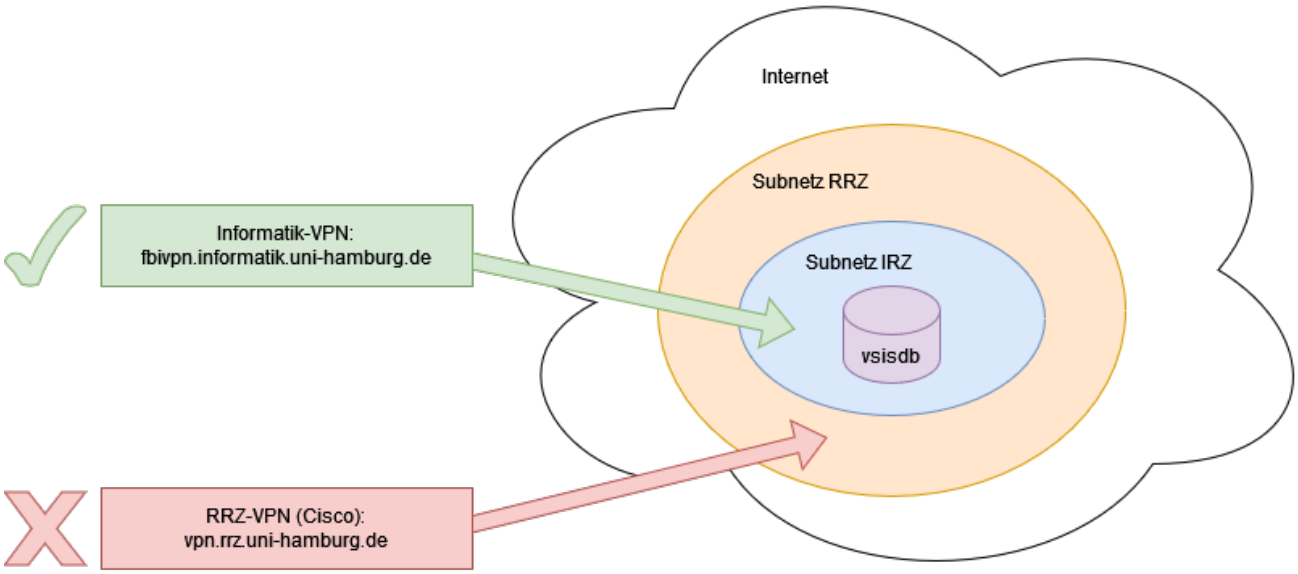
	Course	**Databases and Information Systems**		2025
	Exercise Sheet	**1**		
	Points	–		
	Release Date	**April 15th 2025**	Due Date	–

1 PostgreSQL Warm-Up

Notes:

- Find a partner to work with. (Two persons per team)
- For this task, you need access to the informatikum network. If you are not using a pool-PC, either connect to the university network via informatik-vpn (See: `https://www.inf.uni-hamburg.de/en/inst/irz/it-services/private-devices/vpn-clients.html`) or connect via ssh (`https://www.inf.uni-hamburg.de/en/inst/irz/it-services/private-devices/ssh-service.html`).
  - If you want to use the VPN variant,
    connect to the Informatics VPN and not to the RRZ VPN (see Fig. 1)
- Each team has its own interdependent database access. The credentials will be provided by the tutors.
- This *(and only this)* sheet has no due date and does not have to be presented.
- All other sheets must be presented to a tutor no later than the due date.



1.1 PostgreSQL interactive terminal (psql)

Use an environment of your choice. Either install locally the PostgreSQL-client(Linux or WSL[1]) or download the binaries (`https://www.postgresql.org/download/`).

a) Establish an interactive connection to the database `dis-2025`:

```
psql -h vsisdb.informatik.uni-hamburg.de -U <username> -W dis-2025
Password: <password - no feedback while typing>
```

b) Find and open the command-line interface help in psql.

c) Create a table with at least three columns of different data types.

d) Disconnect from database `dis-2025` using the command `\q`

e) Create a script that inserts 3 records of your choice into the newly created table. First, save the script in a text-based file and then run it.

1.2 GUI

Connect with a GUI to your database. You can use software of your choice to connect with the database. (DataGrip(free for Students), DBeaver, pgAdmin) For this example, we will work with DBeaver.

a) Download DBeaver for your system `https://dbeaver.io/download/` and start it.

b) Set up a connection to database `dis-2025` by clicking the + button in the upper left. In the pop-up window select postgreSQL and enter the following values:

```
Serverhost: vsisdb.informatik.uni-hamburg.de
Port:       5432          User Name:  <username>
Database:   dis-2025      Password:   <password>
```

c) If you are not connected to the VPN, enter your ssh credentials in the SSH tab.

d) Confirm the settings and make yourself comfortable with the environment

e) Select the `SQL` tab, design a `SELECT` query against the table you created before and run the query.

f) Select your schema in the `Objects` tab which lets you show the content of your table and change any of the records.

g) Delete the created table, including all records.

h) Quit DBeaver.

[1] Windows Subsystem for Linux