banco_pa004

June 26, 2023

```python
import pandas as pd
from sqlalchemy import create_engine, __version__

print("Pandas Version:", pd.__version__)
print("SQLAlachemy Version:", __version__)
```
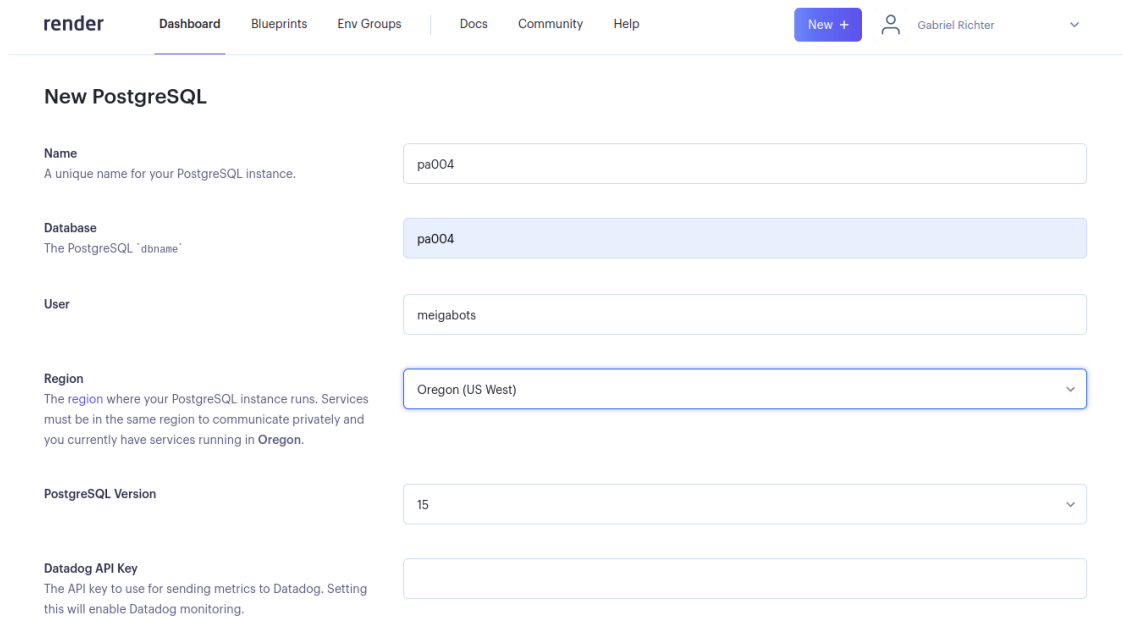
```
Pandas Version: 2.0.0
SQLAlachemy Version: 1.4.47
```

Para subir o banco, basta entrar em: https://dashboard.render.com/new/database

Credenciais

Configurações da base

Depois disso, so clicar em dashboard e vai estar o seu banco criado, as credenciais ficam dentro do banco.


```
[ ]: creds = {
         'PG_DB': 'pa004',
         'PG_USER': 'meigabots',
         'PG_HOST': 'dpg-cicqrsd9aq03rjg3605g-a.oregon-postgres.render.com',
         'PG_PSWD': 'GG7VzQDxZY6DJuzOfSsKVNmxu7OnWCgW',
     }
```

```python
string_con = f"postgresql://{creds['PG_USER']}:
 ↳{creds['PG_PSWD']}@{creds['PG_HOST']}/{creds['PG_DB']}"

engine = create_engine(string_con)
con = engine.connect()

# Para desconectar do banco
# con.close()

# Para matar a engine
# engine.dispose()
```

```
[ ]: # Inserir o CSV dentro do Banco

     test = pd.read_csv("/home/grc/arep/test/db/test.csv")
     train = pd.read_csv("/home/grc/arep/test/db/train.csv")

     # Vou carregar tudo em varchar (object) mesmo.
     test = test.astype('object')
     train = train.astype('object')

     # COlunas em uppercase
     test.columns = [k.upper() for k in test.columns]
     train.columns = [k.upper() for k in train.columns]

     # Enfiar dentro do banco em uma nova tabela
     # que vai ser automaticamente criada pelo pandas.
     test.to_sql('train_table', con=con, if_exists='replace', index=False)
     test.to_sql('test_table', con=con, if_exists='replace', index=False)
```

```
[ ]: # Ler uma do banco por uma query
     df_train = pd.read_sql_query('select * from train_table', con=con)
     df_train.head()
```

```
[ ]:    ID  GENDER  AGE  DRIVING_LICENSE  REGION_CODE  PREVIOUSLY_INSURED
     0   1    Male   44                1         28.0                   0  \
     1   2    Male   76                1          3.0                   0
     2   3    Male   47                1         28.0                   0
     3   4    Male   21                1         11.0                   1
     4   5  Female   29                1         41.0                   1

       VEHICLE_AGE VEHICLE_DAMAGE  ANNUAL_PREMIUM  POLICY_SALES_CHANNEL  VINTAGE
     0   > 2 Years            Yes         40454.0                  26.0      217  \
     1    1-2 Year             No         33536.0                  26.0      183
     2   > 2 Years            Yes         38294.0                  26.0       27
     3    < 1 Year             No         28619.0                 152.0      203
     4    < 1 Year             No         27496.0                 152.0       39
```

```
     RESPONSE
0           1
1           0
2           1
3           0
4           0
```

```
[ ]: df_test = pd.read_sql_query('select * from test_table', con=con)
     df_test.head()
```

```
[ ]:        ID GENDER  AGE  DRIVING_LICENSE  REGION_CODE  PREVIOUSLY_INSURED
     0  381110   Male   25                1         11.0                   1  \
     1  381111   Male   40                1         28.0                   0
     2  381112   Male   47                1         28.0                   0
     3  381113   Male   24                1         27.0                   1
     4  381114   Male   27                1         28.0                   1

        VEHICLE_AGE VEHICLE_DAMAGE  ANNUAL_PREMIUM  POLICY_SALES_CHANNEL  VINTAGE
     0     < 1 Year             No         35786.0                 152.0       53
     1     1-2 Year            Yes         33762.0                   7.0      111
     2     1-2 Year            Yes         40050.0                 124.0      199
     3     < 1 Year            Yes         37356.0                 152.0      187
     4     < 1 Year             No         59097.0                 152.0      297
```

```
[ ]: con.close()
     engine.dispose()
```