

BIODATABASE: Loading metadata

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1- Connect to the database

```
drv <- dbDriver("PostgreSQL")
con_emotion3_local <- dbConnect(drv, user = "postgres", dbname = "emotion3", host = "localhost")
```

2- Read metadata from spreadsheet

```
ddd <- data.table(read.xlsx("../XLS/DDD_Database.xlsx", sheet = "DDD"))
### Save in temp to allow for insertion in the database
write.table(ddd, file = "/tmp/ddd.csv", row.names = FALSE, sep = "\t", na = "")
```

3- Load data dictionary design

Create or replace the metadata table

```
create.metadata.ddd <- dbSendQuery(con_emotion3_local, paste0("
DROP TABLE IF EXISTS metadata.ddd;
CREATE TABLE metadata.ddd (
entity character varying(255),
variable character varying(255),
data_type character varying(255),
unit character varying(255),
basic_checks character varying(255),
description character varying(2500),
variable_type integer,
```

```
views_level integer
);
ALTER TABLE metadata.ddd OWNER TO \"dbaEmotion\";\",
sep = \"\")
```

Delete the contents of the metadata table

```
delete.contents.metadata.ddd <- dbSendQuery(con_emotion3_local, paste0(\"DELETE FROM metadata.ddd\"))
```

Insert into metadata table

```
insert.metadata.ddd <- dbSendQuery(con_emotion3_local, paste0(\"COPY metadata.ddd FROM '/tmp/ddd.csv' WITH DELIMITER E'\\t' CSV HEADER\"))
```

4- Create analysis tracers details

```
create.metadata.analysis.tracers.details <- dbSendQuery(con_emotion3_local, paste0(\"
DROP TABLE IF EXISTS metadata.analysis_tracers_details CASCADE;
CREATE TABLE metadata.analysis_tracers_details AS
SELECT entity AS analysis_type,
variable AS tracer_name,
unit AS standard_unit,
description AS tracer_description,
views_level
FROM metadata.ddd
WHERE variable_type = 1
ORDER BY analysis_type,tracer_name;\",
sep = \"\"))
```

```
-- Connect to the database with psql
psql -d emotion3 -h localhost -U postgres
-- Save the metadata csv file
\copy (SELECT * FROM metadata.analysis_tracers_details) TO
```

```
'/home/stagiaire/Emotion3/CSV/metadata/analysis_tracers_details.csv'  
WITH DELIMITER E'\t' CSV HEADER
```

5- Create fish measurements details

```
create.metadata.fish.measures.details <- dbSendQuery(con_emotion3_local, paste0("  
DROP TABLE IF EXISTS metadata.fish_measures_details;  
CREATE TABLE metadata.fish_measures_details AS  
SELECT variable AS measure_name,  
unit AS standard_unit,  
description AS measure_description  
FROM metadata.ddd  
WHERE variable_type = 2  
ORDER BY measure_name;",  
      sep = " "))
```

```
-- Connect to the database with psql  
psql -d emotion3 -h localhost -U postgres  
-- Save the metadata csv file  
\copy (SELECT * FROM metadata.fish_measures_details)  
TO '/home/stagiaire/Emotion3/CSV/metadata/fish_measures_details.csv'  
WITH DELIMITER E'\t' CSV HEADER -->
```