LIBPQ wrapper c++

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Class Index

2.1 Class List

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Namespace Documentation

4.1 libpqsql Namespace Reference

Classes

- struct inforowcol
- class QueryPrint

gestion parametre sql ex: select

Functions

```
    std::istream & operator>> (std::istream &is, char *t)
```

```
• char * DoubleToChar (double _X_, unsigned _precision_=0)
```

Double to char -----

constexpr unsigned long long int HashStringToInt (const char *str, unsigned long long int hash=0)
 a function to make your alphanumeric switch

• PGconn * connectDB (std::string info)

- bool qexec (PGconn *conn, std::string sql)
- PGresult * query (PGconn *conn, std::string sql, bool binary=true)
- char * fetch (PGresult *res, int row, int column)
- double fetchDbl (PGresult *res, int row, int column)
- int fetchInt (PGresult *res, int row, int column)
- int nfield (PGresult *res, std::string field)
- const char * cfield (PGresult *res, int nfield)
- int countfield (PGresult *res)
- int countrow (PGresult *res)

- bool is_Table (PGconn *conn, const char *table)
- void closeDB (PGconn *conn)
- void begin (PGconn *conn)
- void commit (PGconn *conn)
- void end (PGconn *conn)
- void rollback (PGconn *conn)
- void savpoint (PGconn *conn)
- void savpointRollback (PGconn *conn)
- void savpointRelease (PGconn *conn)
- PGresult * fetchAll (PGconn *conn, std::string sql, std::string cursor="mycursor")
- PGresult * opensql (PGconn *conn, std::string sql, std::string cursor="mycursor")
- PGresult * fechsql (PGconn *conn, std::string cursor="mycursor")

Variables

- static bool fetch0
- static bool update0
- static bool select0
- static bool delete0
- static bool insert0
- static bool fetchEOF
- struct libpqsql::inforowcol records

4.1.1 Function Documentation

```
4.1.1.1 void libpqsql::begin ( PGconn * conn )
```

full

Definition at line 438 of file libpqwrp.hpp.

4.1.1.2 const char* libpqsql::cfield (PGresult * res, int nfield)

name of the field

Definition at line 384 of file libpqwrp.hpp.

```
4.1.1.3 void libpqsql::closeDB ( PGconn * conn )
close to the database
Definition at line 428 of file libpqwrp.hpp.
4.1.1.4 void libpqsql::commit ( PGconn * conn )
full
Definition at line 446 of file libpqwrp.hpp.
4.1.1.5 PGconn* libpqsql::connectDB ( std::string info )
connect to the database
Definition at line 269 of file libpqwrp.hpp.
4.1.1.6 int libpqsql::countfield ( PGresult * res )
number of columns
Definition at line 397 of file libpqwrp.hpp.
4.1.1.7 int libpqsql::countrow ( PGresult * res )
number of rows
Definition at line 404 of file libpowrp.hpp.
4.1.1.8 char* libpqsql::DoubleToChar ( double _X_, unsigned _precision_ = 0 )
Double to char -----.
Definition at line 102 of file libpqwrp.hpp.
4.1.1.9 void libpqsql::end ( PGconn * conn )
full
Definition at line 453 of file libpqwrp.hpp.
```

```
4.1.1.10 PGresult* libpqsql::fechsql ( PGconn * conn, std::string cursor = "mycursor" )
fetch record use openSQL read a line record only
end of row or without row
close cursor
no end of row
Definition at line 584 of file libpqwrp.hpp.
4.1.1.11 char* libpqsql::fetch ( PGresult * res, int row, int column )
get the value of the row and the column
Definition at line 329 of file libpqwrp.hpp.
4.1.1.12 PGresult* libpqsql::fetchAll ( PGconn * conn, std::string sql, std::string cursor = "mycursor" )
   ----- process complex
fetch ALL include requete lecture full records ??? memory
end of row or without row
close cursor
no end of row
Definition at line 495 of file libpqwrp.hpp.
4.1.1.13 double libpqsql::fetchDbl ( PGresult * res, int row, int column )
get the value of the row and the column
Definition at line 342 of file libpqwrp.hpp.
4.1.1.14 int libpqsql::fetchInt ( PGresult * res, int row, int column )
get the value of the row and the column
Definition at line 356 of file libpgwrp.hpp.
4.1.1.15 constexpr unsigned long long int libpqsql::HashStringToInt ( const char * str, unsigned long long int hash = 0 )
a function to make your alphanumeric switch
Definition at line 124 of file libpqwrp.hpp.
```

```
4.1.1.16 bool libpqsql::is_Table ( PGconn * conn, const char * table )
if exist table of the database -> fasle = does not exist false for return value count
Definition at line 411 of file libpqwrp.hpp.
4.1.1.17 int libpqsql::nfield ( PGresult * res, std::string field )
column of the field
Definition at line 370 of file libpgwrp.hpp.
4.1.1.18 PGresult* libpqsql::opensql ( PGconn * conn, std::string sql, std::string cursor = "mycursor" )
query for fetchsql record / record end of row or without row
close cursor
no end of row
read a line record only
Definition at line 543 of file libpgwrp.hpp.
4.1.1.19 std::istream& libpqsql::operator>> ( std::istream & is, char *t )
dumy
Definition at line 85 of file libpqwrp.hpp.
4.1.1.20 bool libpqsql::qexec ( PGconn * conn, std::string sql )
PQexec
Definition at line 284 of file libpqwrp.hpp.
4.1.1.21 PGresult* libpqsql::query ( PGconn * conn, std::string sql, bool binary = true )
PQquery
Definition at line 301 of file libpqwrp.hpp.
4.1.1.22 void libpqsql::rollback ( PGconn * conn )
full
Definition at line 460 of file libpqwrp.hpp.
```

```
4.1.1.23 void libpqsql::savpoint ( PGconn * conn )
point de sauvegarde
Definition at line 467 of file libpqwrp.hpp.
4.1.1.24 void libpqsql::savpointRelease ( PGconn * conn )
delete savepoint
Definition at line 481 of file libpqwrp.hpp.
4.1.1.25 void libpqsql::savpointRollback ( PGconn * conn )
roolback sur savepoint
Definition at line 474 of file libpgwrp.hpp.
4.1.2 Variable Documentation
4.1.2.1 bool libpqsql::delete0 [static]
Definition at line 64 of file libpqwrp.hpp.
4.1.2.2 boollibpqsql::fetch0 [static]
Definition at line 61 of file libpqwrp.hpp.
4.1.2.3 bool libpqsql::fetchEOF [static]
Definition at line 66 of file libpqwrp.hpp.
4.1.2.4 boollibpqsql::insert0 [static]
Definition at line 65 of file libpowrp.hpp.
4.1.2.5 struct libpqsql::inforowcol libpqsql::records
4.1.2.6 boollibpqsql::select0 [static]
Definition at line 63 of file libpqwrp.hpp.
4.1.2.7 boollibpqsql::update0 [static]
Definition at line 62 of file libpqwrp.hpp.
```

Class Documentation

5.1 libpqsql::inforowcol Struct Reference

```
#include <libpqwrp.hpp>
```

Public Attributes

- int rows
- · int cols

initialise par les requetes

• int Xrow

initialise par les requetes

int Xcol

variable de traitement

5.1.1 Detailed Description

Definition at line 68 of file libpqwrp.hpp.

5.1.2 Member Data Documentation

5.1.2.1 int libpqsql::inforowcol::cols

initialise par les requetes

Definition at line 71 of file libpqwrp.hpp.

5.1.2.2 int libpqsql::inforowcol::rows

Definition at line 70 of file libpqwrp.hpp.

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5.1.2.3 int libpqsql::inforowcol::Xcol

variable de traitement

Definition at line 74 of file libpqwrp.hpp.

5.1.2.4 int libpqsql::inforowcol::Xrow

initialise par les requetes

Definition at line 73 of file libpowrp.hpp.

The documentation for this struct was generated from the following file:

• libpqwrp.hpp

5.2 libpqsql::QueryPrint Class Reference

```
gestion parametre sql ex: select
```

```
#include <libpqwrp.hpp>
```

Public Member Functions

```
    template < typename Head, typename... Args >
    std::string prepare (std::string const & format, Head & & head, Args & & ....args)
    error not parameter query result
```

std::stringstream result (PGresult *res)
 formatting the query with parameters

Protected Member Functions

- unsigned count_format_specifiers (std::string const &format)
- void prepare (std::string const &format)

count the number of parameters in the format

• void resultctrl (PGresult *res)

format without parameters causes an error

Private Attributes

- std::stringstream sql
- bool first = true
- std::string fin_stage

Static Private Attributes

• static constexpr char FORMAT SPECIFIER = '?'

5.2.1 Detailed Description

gestion parametre sql ex: select

Definition at line 136 of file libpqwrp.hpp.

5.2.2 Member Function Documentation

5.2.2.1 unsigned libpqsql::QueryPrint::count_format_specifiers (std::string const & format) [protected]

Definition at line 163 of file libpqwrp.hpp.

5.2.2.2 void libpqsql::QueryPrint::prepare (std::string const & format) [protected]

count the number of parameters in the format

Definition at line 182 of file libpqwrp.hpp.

5.2.2.3 template<typename Head , typename... Args> std::string libpqsql::QueryPrint::prepare (std::string const & format, Head && head, Args &&... args)

error not parameter query result

returns to initial position

Definition at line 191 of file libpgwrp.hpp.

5.2.2.4 std::stringstream libpqsql::QueryPrint::result (PGresult * res)

formatting the query with parameters

Definition at line 222 of file libpqwrp.hpp.

5.2.2.5 void libpqsql::QueryPrint::resultctrl (PGresult * res) [protected]

format without parameters causes an error

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5.2.3 Member Data Documentation

5.2.3.1 std::string libpqsql::QueryPrint::fin_stage [private]

Definition at line 143 of file libpqwrp.hpp.

5.2.3.2 bool libpqsql::QueryPrint::first = true [private]

Definition at line 142 of file libpqwrp.hpp.

5.2.3.3 constexpr char libpqsql::QueryPrint::FORMAT_SPECIFIER = '?' [static], [private]

Definition at line 139 of file libpqwrp.hpp.

5.2.3.4 std::stringstream libpqsql::QueryPrint::sql [private]

Definition at line 141 of file libpqwrp.hpp.

The documentation for this class was generated from the following file:

· libpqwrp.hpp

File Documentation

6.1 libpqwrp.hpp File Reference

```
#include <iostream>
#include <ostream>
#include <iomanip>
#include <sstream>
#include <stdexcept>
#include <string>
#include <libpq-fe.h>
#include <cstdlib>
```

Classes

- struct libpqsql::inforowcol
- · class libpqsql::QueryPrint

gestion parametre sql ex: select

Namespaces

libpqsql

Macros

- #define DeLiMiTaTioN ' \sim '
- #define NAMEOF(variable) ((void)variable, #variable)

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Functions

```
    std::istream & libpqsql::operator>> (std::istream &is, char *t)
    char * libpqsql::DoubleToChar (double _X_, unsigned _precision_=0)
```

Double to char -----

• constexpr unsigned long long int libpqsql::HashStringToInt (const char *str, unsigned long long int hash=0) a function to make your alphanumeric switch

PGconn * libpqsql::connectDB (std::string info)

- bool libpqsql::qexec (PGconn *conn, std::string sql)
- PGresult * libpqsql::query (PGconn *conn, std::string sql, bool binary=true)
- char * libpqsql::fetch (PGresult *res, int row, int column)
- double libpqsql::fetchDbl (PGresult *res, int row, int column)
- int libpqsql::fetchInt (PGresult *res, int row, int column)
- int libpqsql::nfield (PGresult *res, std::string field)
- const char * libpqsql::cfield (PGresult *res, int nfield)
- int libpqsql::countfield (PGresult *res)
- int libpqsql::countrow (PGresult *res)
- bool libpqsql::is_Table (PGconn *conn, const char *table)
- void libpqsql::closeDB (PGconn *conn)
- void libpqsql::begin (PGconn *conn)
- void libpqsql::commit (PGconn *conn)
- void libpqsql::end (PGconn *conn)
- void libpqsql::rollback (PGconn *conn)
- void libpqsql::savpoint (PGconn *conn)
- void libpqsql::savpointRollback (PGconn *conn)
- void libpqsql::savpointRelease (PGconn *conn)
- PGresult * libpqsql::fetchAll (PGconn *conn, std::string sql, std::string cursor="mycursor")
- PGresult * libpqsql::opensql (PGconn *conn, std::string sql, std::string cursor="mycursor")
- PGresult * libpqsql::fechsql (PGconn *conn, std::string cursor="mycursor")

Variables

- static bool libpqsql::fetch0
- static bool libpqsql::update0
- static bool libpqsql::select0
- static bool libpqsql::delete0
- static bool libpqsql::insert0
- static bool libpqsql::fetchEOF
- struct libpqsql::inforowcol libpqsql::records

6.1.1 Macro Definition Documentation

6.1.1.1 #define DeLiMiTaTioN $'\sim'$

Definition at line 52 of file libpqwrp.hpp.

6.1.1.2 #define NAMEOF(variable) ((void)variable, #variable)

Definition at line 130 of file libpqwrp.hpp.

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