

Interfaçage aux SGBD en **perl**, **python** et **ruby**

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Perl DBI

Installation et test du module DBI

```
$ perl -MCPAN -e shell
cpan[1]> install DBI
cpan[2]> install DBD::MySQL
cpan[3]> install DBD::SQLite
cpan[4]> ^D
```

```
use DBI;
use Data::Dumper ;

@drivers = DBI->available_drivers() ;
print Dumper \@drivers ;
```

```
$VAR1 = [
    'SQLite',
    'mysql'
];
```

select SQL

```
# data source
$ds = 'DBI:mysql:mabase' ;

# database handler
$dbh = DBI->connect($ds, $user, $pwd, { ... => ... , ... => ... })
                                     or die DBI->errstr() ;

# statement handler
$ssth = $dbh->prepare('SELECT * FROM tbl WHERE name = ?')
                                             or die $dbh->errstr() ;

$ssth->execute($a_name) or die $ssth->errstr() ;

# result
while (@data = $ssth->fetchrow_array())
{
    for $field (@data)
    {
        ...
    }
}

$ssth->finish() ;
$dbh->disconnect() ;
```

autres requêtes SQL

```
$sth = $dbh->prepare("INSERT INTO tbl(foo,bar,baz) VALUES (?, ?, ?)")  
                        or die $dh->errstr ;  
  
while (...)  
{  
    $sth->execute($foo,$bar,$baz ) or die $sth->errstr;  
}
```

```
# directement, sans statement_handler  
$dbh->do("UPDATE your_table SET foo = foo + 1");
```

Python et bases de données

Bases Berkeley

```
import anydbm

db = anydbm.open('mabase', 'c')
db['cle'] = 'valeur'

for k in db.keys():
    print(k, f[k])
db.close()
```

Bases SQL

```
# sqlite
import sqlite3
db=sqlite3.connect('mabase')

# mysql
import pymysql
db=pymysql.connect('monserveur', 'user', 'password', 'base')
```


Bases SQL

```
# Ce qui suit est générique

c=db.cursor()
c.execute('SELECT * FROM tab')
for line in c:
    print(line)

try:
    c.execute("DELETE FROM tab WHERE nom='user'")
    db.commit()
except:
    db.rollback()

table=[('Jean', 'Dupont'), ('Jacques', 'Dufour')]
for user in table:
    c.execute("INSERT INTO tab(prenom,nom) VALUES (?,?)",user)
    # remplacer les ? par des %s avec mysql...
c.close()

db.close()
```