

CUBRID backend for Django

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CUBRID™

MOTTO

*“Writing a whole new database backend from scratch
is left as an exercise to the reader.”*

(from docs.djangoproject.com)



TECHNOLOGIES



CUBRID™

```
#include <stdio.h>
int main(void)
{
    printf("Hello World!\n");
    return 0;
}
```


C/C++



django



TASKS

- **Database backend**
 - **MySQL <-> CUBRID**
 - **Python driver**
 - **Testing**
- 

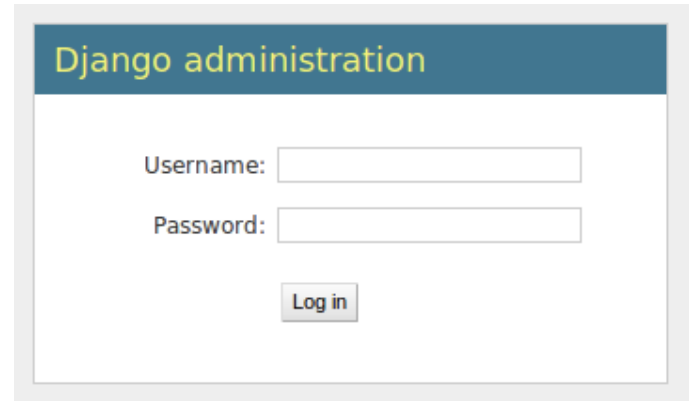
WHERE DID THAT COME FROM?

```
Traceback (most recent call last):
  File "manage.py", line 11, in <module>
    execute_manager(settings)
  File "/usr/lib/pymodules/python2.7/django/core/management/__init__.py", line 438, in execute_manager
    utility.execute()
  File "/usr/lib/pymodules/python2.7/django/core/management/__init__.py", line 379, in execute
    self.fetch_command(subcommand).run_from_argv(self.argv)
  File "/usr/lib/pymodules/python2.7/django/core/management/__init__.py", line 261, in fetch_command
    klass = load_command_class(app_name, subcommand)
  File "/usr/lib/pymodules/python2.7/django/core/management/__init__.py", line 67, in load_command_class
    module = import_module('%s.management.commands.%s' % (app_name, name))
  File "/usr/lib/pymodules/python2.7/django/utils/importlib.py", line 35, in import_module
    __import__(name)
  File "/usr/lib/pymodules/python2.7/django/core/management/commands/syncdb.py", line 7, in <module>
    from django.core.management.sql import custom_sql_for_model, emit_post_sync_signal
  File "/usr/lib/pymodules/python2.7/django/core/management/sql.py", line 6, in <module>
    from django.db import models
  File "/usr/lib/pymodules/python2.7/django/db/__init__.py", line 77, in <module>
    connection = connections[DEFAULT_DB_ALIAS]
  File "/usr/lib/pymodules/python2.7/django/db/utils.py", line 92, in __getitem__
    backend = load_backend(db['ENGINE'])
  File "/usr/lib/pymodules/python2.7/django/db/utils.py", line 50, in load_backend
    raise ImproperlyConfigured(error_msg)
django.core.exceptions.ImproperlyConfigured: 'django.db.backends.cubrid' isn't an available database backend.
Try using django.db.backends.XXX, where XXX is one of:
  'cubrid', 'dummy', 'mysql', 'oracle', 'postgresql', 'postgresql_psycopg2', 'sqlite3'
Error was: No module named cubrid.base
```

A LITTLE FLAVOUR OF THINGS WE HAD TO FIX

```
Traceback (most recent call last):
  File "manage.py", line 11, in <module>
    execute_manager(settings)
  File "/usr/lib/pymodules/python2.7/django/core/management/__init__.py", line 438, in execute_manager
    utility.execute()
    .
    .
    .
  File "/usr/lib/pymodules/python2.7/django/db/backends/cubrid/base.py", line 39, in execute
    return self.cursor.execute(query, args)
  File "/usr/local/lib/python2.7/dist-packages/CUBRIDdb/cursors.py", line 51, in execute
    r = self._cs.execute()
cubrid.Error: (-1, 'ERROR: DBMS, -493, Syntax: Cannot coerce host var to type smallint. ')
    .
    .
    .
  File "/usr/lib/pymodules/python2.7/django/db/backends/cubrid/base.py", line 40, in execute
    return self.cursor.execute(query, args)
  File "/usr/local/lib/python2.7/dist-packages/CUBRIDdb/cursors.py", line 47, in execute
    self._cs.prepare(query)
_cubrid.Error: (-1, "ERROR: DBMS, -493, Syntax: syntax error, unexpected REFERENCES, expecting ',' or ')")
    .
    .
    .
  File "/usr/lib/pymodules/python2.7/django/db/backends/cubrid/base.py", line 40, in execute
    return self.cursor.execute(query, args)
  File "/usr/local/lib/python2.7/dist-packages/CUBRIDdb/cursors.py", line 51, in execute
    r = self._cs.execute()
_cubrid.Error: (-1, 'ERROR: DBMS, -181, Cannot coerce value of domain "numeric" to domain "bigint".')
```

AFTER BUG FIXES



A screenshot of the Django administration poll management page. The header is dark blue with "Django administration" on the left and "Welcome, **camelia**. Change password / Log out" on the right. Below the header is a breadcrumb trail: "Home > Polls > Polls". The main content area is titled "Select poll to change" and includes an "Add poll +" button. There is an "Action:" dropdown menu and a "Go" button, with "0 of 2 selected" displayed. A table lists two polls:

<input type="checkbox"/>	Question	Date published	Was published today
<input type="checkbox"/>	test2	2011-12-16 18:27:25.000	(None)
<input type="checkbox"/>	test	2011-12-10 12:57:37.000	(None)

Below the table, it says "2 polls". On the right side, there is a "Filter" sidebar with the following options:

- By date published
 - Any date
 - Today
 - Past 7 days
 - This month
 - This year

MEANWHILE, IN CLI :

```
camelia@gallifrey ~/Projects/Cubrid-main/mysite $ python manage.py runserver
Validating models...
0 errors found

Django version 1.2.5, using settings 'mysite.settings'
Development server is running at http://127.0.0.1:8000/
Quit the server with CONTROL-C.
[16/Dec/2011 10:22:54] "GET / HTTP/1.1" 404 1910
[16/Dec/2011 10:22:58] "GET /admin HTTP/1.1" 301 0
[16/Dec/2011 10:22:59] "GET /admin/ HTTP/1.1" 200 1882
█
```

Hurray !!!

It's working :P

ÎNTREBĂRI?



Vă mulțumim !