

indico



Development Bootcamp

Get ready to contribute!

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Be prepared

You just need your laptop...

Linux or macOS

Linux VM if you are on Windows

...and the dev setup guide

<https://bit.do/indico-dev>

(<https://docs.getindico.io/en/latest/installation/development/>)

Your turn!

<https://bit.do/indico-dev>

Goodie 1: db_diff

Compares your database against the models

Check whether your alembic revision worked fine

Check whether your DB is out of sync with the models

Needs apgdiff

```
sudo apt install apgdiff
```

...or download from <https://apgdiff.com>

Demo

```
Activating virtualenv /home/adrian/dev/indico/env [previously (none)]
[adrian@blackhole:~/dev/indico/src:master $]> python bin/utils/db_diff.py -v
** createdb -T indico_template indico_dbdiff
** indico db prepare
** pg_dump -s -f /tmp/dbdiff-current-uWDqev.sql indico
** pg_dump -s -f /tmp/dbdiff-fresh-KTnENT.sql indico_dbdiff
** dropdb indico_dbdiff
** apgdiff /tmp/dbdiff-current-uWDqev.sql /tmp/dbdiff-fresh-KTnENT.sql
No changes found :)
[adrian@blackhole:~/dev/indico/src:master $]> psql indico -c 'CREATE TABLE test (id serial primary key);'
CREATE TABLE
[adrian@blackhole:~/dev/indico/src:master $]> python bin/utils/db_diff.py -v
** createdb -T indico_template indico_dbdiff
** indico db prepare
** pg_dump -s -f /tmp/dbdiff-current-rwqyS2.sql indico
** pg_dump -s -f /tmp/dbdiff-fresh-wUv0XE.sql indico_dbdiff
** dropdb indico_dbdiff
** apgdiff /tmp/dbdiff-current-rwqyS2.sql /tmp/dbdiff-fresh-wUv0XE.sql
** pygmentize -l sql -f terminal256 -O style=native,bg=dark
SET search_path = public, pg_catalog;

DROP TABLE test;

DROP SEQUENCE test_id_seq;
[adrian@blackhole:~/dev/indico/src:master $]> psql indico -c 'DROP TABLE test;'
DROP TABLE
[adrian@blackhole:~/dev/indico/src:master $]> python bin/utils/db_diff.py
No changes found :)
[adrian@blackhole:~/dev/indico/src:master $]>
```

Goodie 2: db_log

See all database queries in real-time

Optimize your code (and avoid query spam!)

Debug advanced queries

Just run it (in a separate terminal)

```
python bin/utis/db_log.py
```

```
use -S to hide SELECT queries
```

Demo

```
Begin request GET https://blackhole.cern.ch/e/no-such-event/
```

Source

```
File "/home/adrian/dev/indico/src/indico/modules/events/controllers/entry.py", line 48, in event_or_shorturl
    ~Event.is_deleted)
File "/home/adrian/dev/indico/src/indico/web/flask/util.py", line 406, in __call__
    return self.app(environ, _start_response)
```

Statement

```
SELECT events.events.type AS events_events_type,
       events.events.description AS events_events_description,
       events.events.venue_name AS events_events_venue_name,
       events.events.room_name AS events_events_room_name,
       events.events.venue_id AS events_events_venue_id,
       events.events.address AS events_events_address,
       events.events.room_id AS events_events_room_id,
       events.events.no_access_contact AS events_events_no_access_contact,
       events.events.id AS events_events_id,
       events.events.is_deleted AS events_events_is_deleted,
       events.events.is_locked AS events_events_is_locked,
       events.events.creator_id AS events_events_creator_id,
       events.events.category_id AS events_events_category_id,
       events.events.series_id AS events_events_series_id,
       events.events.cloned_from_id AS events_events_cloned_from_id,
       events.events.created_dt AS events_events_created_dt,
       events.events.start_dt AS events_events_start_dt,
       events.events.end_dt AS events_events_end_dt,
       events.events.timezone AS events_events_timezone,
       events.events.visibility AS events_events_visibility,
       events.events.keywords AS events_events_keywords,
       events.events.url_shortcut AS events_events_url_shortcut,
       events.events.logo_metadata AS events_events_logo_metadata,
       events.events.stylesheet_metadata AS events_events_stylesheet_metadata,
       events.events.default_page_id AS events_events_default_page_id,
       events.events.title AS events_events_title,
       events.events.access_key AS events_events_access_key,
       events.events.protection_mode AS events_events_protection_mode
FROM events.events
WHERE lower(events.events.url_shortcut) = ?(lower_1)s
AND NOT events.events.is_deleted
```

Params

```
{'lower_1': 'u'no-such-event'}
```

Duration

```
0.001146s
```

Source

```
File "/home/adrian/dev/indico/src/indico/core/settings/models/base.py", line 121, in get_all
    for s in cls.find(**kwargs):
File "/home/adrian/dev/indico/src/indico/core/settings/util.py", line 30, in _preload_settings
    settings = cls.get_all(proxy.module, **kwargs)
File "/home/adrian/dev/indico/src/indico/core/settings/util.py", line 69, in get_setting
    setting = _preload_settings(cls, proxy, cache, **kwargs).get(name, _not_in_db)
```

Statement

```
SELECT indico.settings.id AS indico_settings_id,
       indico.settings.module AS indico_settings_module,
       indico.settings.name AS indico_settings_name,
       indico.settings.value AS indico_settings_value
FROM indico.settings
```

Duration

```
0.000421s
```

```
End request GET https://blackhole.cern.ch/e/no-such-event/ [2 queries (0.003350s) | 0.392154s]
```


indico