
django-crontab-monitor

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CONTENTS

1	Overview	1
2	Requirements	3
2.1	Optional	3
3	Installation	5
3.1	Execute single_entry_point_of_management by crontab of Linux	5
3.2	Execute single_entry_point_of_crontab by django-crontab	5
3.3	Execute single_entry_point_of_view by some monitor services(ex: nodeping)	5
3.4	Crontab-based function example: crontab_monitor.crontabs.check_outside_web	6
4	Indices and tables	7

OVERVIEW

Store crontab-based functions in Django Model so that users can add/disable/delete crontab-based functions on API service rather than login the server to deal with system crontab configuration.

The minimal interval of the executing function is one minute as Linux crontab.

REQUIREMENTS

- Python3-3.5+
- Croniter-0.3+
- Django-2.2+
- django-guardian-2.1+
- Django-filter-2.2+
- djangorestframework-3.10+
- djangorestframework-filters-1.0+

2.1 Optional

- django-crontab-0.7+

INSTALLATION

```
pip install `<django-crontab-monitor-path>`
```

Add `'crontab_monitor'` to your `INSTALLED_APPS` setting:

```
INSTALLED_APPS = [
    ...
    'guardian',
    'rest_framework',
    'django_filters',
    'rest_framework_filters',
    'crontab_monitor',
]
```

3.1 Execute `single_entry_point_of_management` by crontab of Linux

```
* * * * * user /path/virtualenv/bin/python3 /path/your_project/manage.py \
             single_entry_point_of_management parameter1 parameter2
```

3.2 Execute `single_entry_point_of_crontab` by django-crontab

```
CRONJOBS = [
    ('* * * * *',
     'crontab_monitor.crontabs.single_entry_point_of_crontab',
     ['arg1'], {'key1': 'value1'}),
]
```

3.3 Execute `single_entry_point_of_view` by some monitor services(ex: nodeping)

Put a path into `urlpatterns` in `urls.py`:

```
urlpatterns = [
    ...
```

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```
path('what_ever_you_want/', include('crontab_monitor.urls'), name='crontab_monitor
↪'),
]
```

Then add a check with url: https://your_domain/what_ever_you_want/single_entry_point_of_view/?me=nodeping into nodeping service.

3.4 Crontab-based function example: crontab_monitor.crontabs.check_outside

After ./manage.py migrate crontab_monitor, it will create an Inspection object for you. And we can remove “#” from this inspection.cron_format to enable it.

```
Python 3.7.5 (default, Dec 8 2019, 11:41:26)
Type 'copyright', 'credits' or 'license' for more information
IPython 7.13.0 -- An enhanced Interactive Python. Type '?' for help.

In [1]: from crontab_monitor.models import *
In [2]: insp = Inspection.objects.get(name='check_outside_web',
...:                                note='An example for showing a well cron_
↪function')
In [3]: vars(insp)
{'_state': <django.db.models.base.ModelState at 0x10d8a4490>,
 'id': 1,
 'cron_format': '#* * * * *',
 'name': 'check_outside_web',
 'function_option_id': 5,
 'function_note': 'An example for showing a well cron function',
 'kwargs': 'web_urls=https://www.google.com/|https://www.ho600.com/'}
In [4]: insp.cron_format = insp.cron_format.replace('#', '')
In [5]: insp.save()
```

If you want to disable this example crontab-based function, then just put a prefix “#” in inspection.cron_format.

INDICES AND TABLES

- `genindex`
- `modindex`
- `search`