- 目录
- Python教程
  - Python入门
  - 安装Python
  - 第一个Python程序
  - 使用文本编辑器
  - 运行
  - 语法简介
  - 数据类型
  - 变量
  - 字符串和编码
  - 使用list和tuple
  - 条件判断
  - 模式匹配
  - 循环
  - 使用dict和set
  - 函数的调用和定义
  - 函数的参数
  - 递归函数
  - 切片
  - 迭代
  - 列表生成式
  - 生成器
  - 迭代器
  - 函数式编程
  - 正则表达式
  - 常用内建模块
  - 常用第三方模块
  - virtualenv
  - 面向对象
  - 类和实例
  - 继承和多态
  - 错误处理
  - 调试
  - 单元测试
  - 文档测试
  - IO编程
  - 进程和线程
  - 分布式进程
  - 协程
  - 异步IO
  - 实战
    - Day 1 - 搭建开发环境
    - Day 2 - 编写MVC之Hello World
    - Day 3 - 开发一个博客
    - Day 4 - 编写Web App骨架
    - Day 5 - 编写ORM
    - Day 6 - 编写Web框架
    - Day 7 - 编写配置文件
    - Day 8 - 编写MVC
    - Day 9 - 开发模板语言
    - Day 10 - 编写Web App
    - Day 11 - 开发MVC Web App
    - Day 12 - 开发REST API
    - Day 13 - 编写前端App
    - Day 14 - 完整的Web App
    - Day 15 - 部署Web App
    - Day 16 - 编写Web App的总结
  - FAQ
  - 参考资料

关于作者

廖雪峰 | 分享成功
Python
廖雪峰老师
Python商业爬虫全解码
以天下流氓术开发的教程！
Python爬虫 + 数据分析
Java高级架构 + 微服务
Python爬虫 + 数据分析
Java高级架构 + 微服务
抗摩雪峰老师
廖雪峰老师
自己的Python课程
Python商业爬虫全解码
以天下流氓术开发的教程！
Python爬虫 + 数据分析
Java高级架构 + 微服务
抗摩雪峰老师
廖雪峰老师
自己的Java课程
更专业 更权威
源自官方平台 广受高度肯定与好评
高薪就业 实战项目 大厂面试
抗摩雪峰老师
腾讯云学生
服务器10元/月
腾讯云服务器限时10元/年
国内、国外、香港、美国、韩国、日本、新加坡、欧洲、北美、南美、澳大利亚等地区
海外用户可选择香港、美国、韩国、日本、新加坡
UNICOF
一个不一样的文具店
三合纸坊
手工纸品 文具 礼品
纸品DIY体验 企业定制

Day 12 - 编写somethingelse的Task

编辑 2016

现在我们可以开始写一个简单的task，这个task会定期发送一条消息给broker，例如，以不管任何Worker的消息，例如，向所有Worker广播一条消息：

celery.py 的最后一行加上一段代码，用来写一个简单的任务：

```
# celery.py:
app.conf.update(
    CELERYBEAT_SCHEDULE = {
        'add-every-30-seconds': {
            'task': 'tasks.add',
            'schedule': timedelta(seconds=30),
            'args': (16, 16),
        },
        'multiply-every-30-seconds': {
            'task': 'tasks.multiply',
            'schedule': timedelta(seconds=30),
            'kwargs': {'x': 10, 'y': 10},
        },
        'ping-every-30-seconds': {
            'task': 'tasks.ping',
            'schedule': timedelta(seconds=30),
            'relative': True,
        },
        'send-notification-every-30-seconds': {
            'task': 'tasks.send_notification',
            'schedule': timedelta(seconds=30),
            'kwargs': {'msg': 'Hello, World!'},
        },
    }
)

# tasks.py:
from celery import celery, log, conf, app, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
__all__ = (
    'add',
    'multiply',
    'ping',
    'send_notification',
)

@app.task
def add(x, y):
    log.info('add(%d, %d)...', x, y)
    return x + y

@app.task
def multiply(x, y):
    log.info('multiply(%d, %d)...', x, y)
    return x * y

@app.task
def ping():
    log.info('ping...')

@app.task
def send_notification(msg):
    log.info('send_notification(%s)...', msg)
    return msg
```

修改完成后，执行：

```
$ celery -A tasks worker -l info
$ celery -A tasks beat -l info
```

修改完成后，执行：$ celery -A tasks beat -l info 报错如下：

```
Traceback (most recent call last):
  File "/usr/local/bin/celery", line 11, in <module>
    sys.exit(main())
  File "/usr/local/lib/python2.7/site-packages/celery/bin/celery.py", line 14, in main
    from celery.bin.celery import main as _main
  File "/usr/local/lib/python2.7/site-packages/celery/bin/celery.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/__init__.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/__init__.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/base.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/utils.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
ImportError: cannot import name Celery
```

修改完成后，执行：$ celery -A tasks beat -l info 报错如下：

```
Traceback (most recent call last):
  File "/usr/local/bin/celery", line 11, in <module>
    sys.exit(main())
  File "/usr/local/lib/python2.7/site-packages/celery/bin/celery.py", line 14, in main
    from celery.bin.celery import main as _main
  File "/usr/local/lib/python2.7/site-packages/celery/bin/celery.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/__init__.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/__init__.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/base.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/utils.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
ImportError: cannot import name Celery
```

修改完成后，执行：$ celery -A tasks worker -l info 报错如下：

```
Traceback (most recent call last):
  File "/usr/local/bin/celery", line 11, in <module>
    sys.exit(main())
  File "/usr/local/lib/python2.7/site-packages/celery/bin/celery.py", line 14, in main
    from celery.bin.celery import main as _main
  File "/usr/local/lib/python2.7/site-packages/celery/bin/celery.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/__init__.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/__init__.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/base.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/utils.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
ImportError: cannot import name Celery
```

修改完成后，执行：$ celery -A tasks worker -l info 报错如下：

```
Traceback (most recent call last):
  File "/usr/local/bin/celery", line 11, in <module>
    sys.exit(main())
  File "/usr/local/lib/python2.7/site-packages/celery/bin/celery.py", line 14, in main
    from celery.bin.celery import main as _main
  File "/usr/local/lib/python2.7/site-packages/celery/bin/celery.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/__init__.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/__init__.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/base.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
  File "/usr/local/lib/python2.7/site-packages/celery/app/utils.py", line 1, in <module>
    from celery import Celery, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
ImportError: cannot import name Celery
```

现在，我们以为celery.py的内容如下：

```
# celery.py:
app.conf.update(
    CELERYBEAT_SCHEDULE = {
        'add-every-30-seconds': {
            'task': 'tasks.add',
            'schedule': timedelta(seconds=30),
            'args': (16, 16),
        },
        'multiply-every-30-seconds': {
            'task': 'tasks.multiply',
            'schedule': timedelta(seconds=30),
            'kwargs': {'x': 10, 'y': 10},
        },
        'ping-every-30-seconds': {
            'task': 'tasks.ping',
            'schedule': timedelta(seconds=30),
            'relative': True,
        },
        'send-notification-every-30-seconds': {
            'task': 'tasks.send_notification',
            'schedule': timedelta(seconds=30),
            'kwargs': {'msg': 'Hello, World!'},
        },
    }
)

# tasks.py:
from celery import celery, log, conf, app, Task, current_app, current_task, utils, cmd, bin, exceptiones, ping, send_notification, add, multiply
__all__ = (
    'add',
    'multiply',
    'ping',
    'send_notification',
)

@app.task
def add(x, y):
    log.info('add(%d, %d)...', x, y)
    return x + y

@app.task
def multiply(x, y):
    log.info('multiply(%d, %d)...', x, y)
    return x * y

@app.task
def ping():
    log.info('ping...')

@app.task
def send_notification(msg):
    log.info('send_notification(%s)...', msg)
    return msg
```