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# Crwy Documentation

*1.0.5*

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# CHAPTER 1

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- Python2.7
- Works on Linux, Mac OSX

```
pip install crwy
```

1. : <https://codeload.github.com/wuyue92tree/crwy/zip/master>

2. `.crwy`,

```
python setup.py install
```

,

```
pip install -r requirements.txt
```

`crwy`



## CHAPTER 2

---

---

: crwy,

```
Crwy - no active project found!!!
```

Usage:

```
crwy <commands> [option] [args]
```

Available Commands:

|              |                                 |
|--------------|---------------------------------|
| list         | list all spider in your project |
| runspider    | run a spider                    |
| startproject | create a new project            |
| createspider | create a new spider             |
| version      | show version                    |

Use "crwy <command> -h" to see more info about a command

crwylist, runspider, startproject, createspider,?

### startproject

```
crwy startproject spidertest
```

:

```
Project start.....enjoy^.^
```

?

```
spidertest
- crwy.cfg          settings
- data              (sqlite)
```

```
|   - __init__.py
|   - __init__.pyc
- spidertest
|   - settings.py
- src
|   - __init__.py
|   - __init__.pyc
```

: spidertest, ()

## createspider

”-h”,:

```
crwy createspider -h
```

:

Usage: crwy createspider [option] [args]

Options:

```
-h, --help          show this help message and exit
-l, --list          list available spider template name
-p PREVIEW, --preview=PREVIEW
                    preview spider template
-t TEMPLATE, --tmpl=TEMPLATE
                    spider template
-n NAME, --name=NAME new spider name
```

- -l:
- -p:
- -t:
- -n:

:

```
crwy createspider -t basic -n basictest
```

src : (:crwy.cfg),

## list

```
crwy list
```

## runspider

”-h”,:

```
crwy createspider -h
```

```
Usage:  crwy runspider [option] [args]
```

Options:

```
-h, --help          show this help message and exit
-n NAME, --name=NAME spider name
-p PROCESS, --process=PROCESS
                    crawler by multi process
```

- -n:
- -p: -p

## version

crwy

```
crwy version
```



---

## basic

basic

- : html\_downloader
- : html\_parser

:

```
#!/usr/bin/env python
# -*- coding: utf-8 -*-

from __future__ import print_function

from crwy.spider import Spider

class ${class_name}Spider(Spider):
    def __init__(self):
        Spider.__init__(self)
        self.spider_name = '${spider_name}'

    def crawler_${spider_name}(self):
        try:
            url = 'http://example.com'
            response = self.html_downloader.download(url)
            soups = self.html_parser.parser(response.content)
            print(url)
            print(soups)
            self.logger.info('%s[%s] --> crawler success !!!' % (
                self.spider_name, self.worker, self.func_name()))

        except Exception as e:
            self.logger.exception('%s[%s] --> %s' % (
                self.spider_name, self.worker, e))
```

```
def run(self):
    self.crawler_${spider_name}()
```

,Spider,html\_downloaderhtml\_parser,UtillsHtml

## sqlite

sqlitesqlite

- : html\_downloader
- : html\_parser
- : sqlite

:

```
#!/usr/bin/env python
# -*- coding: utf-8 -*-

from __future__ import print_function

from sqlalchemy import Integer, Column, String
from crwy.spider import Spider
from crwy.utils.sql.db import Database, Base

class Test(Base):
    __tablename__ = "test"
    id = Column(Integer, primary_key=True, unique=True)
    title = Column(String(20))
    url = Column(String(20))

class ${class_name}Spider(Spider):
    def __init__(self):
        Spider.__init__(self)
        self.spider_name = '${spider_name}'
        self.sql = Database('sqlite:///./data/test.db')
        self.sql.init_table()

    def crawler_${spider_name}(self):
        try:
            url = 'http://example.com'
            response = self.html_downloader.download(url)
            soups = self.html_parser.parser(response.content)
            title = soups.find('title').text
            item = Test(title=title.decode('utf-8'), url=url.decode('utf-8'))
            self.sql.session.merge(item)
            self.sql.session.commit()
            print(url)
            print(soups)
            self.logger.info('%s[%s] --> crawler success !!!' % (
                self.spider_name, self.worker))

        except Exception as e:
            self.logger.exception('%s[%s] --> %s' % (
```

```

        self.spider_name, self.worker, e))

    def run(self):
        self.crawler_$(spider_name)()

```

:

1. classBase(sqlalchemydeclarative\_base)table
2. Databasesqlite,init\_table(), Sqlite Click
3. session.merge(),session.commit()

## queue

queue,

- ,URL
- URL
- : html\_downloader
- : html\_parser

:

```

#!/usr/bin/env python
# -*- coding: utf-8 -*-

from __future__ import print_function

import sys
import Queue
from crwy.spider import Spider

queue = Queue.Queue()

class $(class_name)Spider(Spider):
    def __init__(self):
        Spider.__init__(self)
        self.spider_name = '$(spider_name)'

    def crawler_$(spider_name)(self):
        while True:
            try:
                if not queue.empty():
                    url = 'http://example.com/%d' % queue.get()
                    response = self.html_downloader.download(url)
                    soups = self.html_parser.parser(response.content)
                    print(url)
                    print(soups)
                    print('Length of queue : %d' % queue.qsize())
                else:
                    self.logger.info('%s[%s] --> crawler success !!!' % (
                        self.spider_name, self.worker))
                    sys.exit()

```

```
        except Exception as e:
            self.logger.exception('%s[%s] --> %s' % (
                self.spider_name, self.worker, e))
            continue

    def run(self):
        for i in range(1, 10):
            queue.put(i)

        self.crawler_${spider_name}()
```

## redis\_queue

redis\_queue

- redis: RedisQueue,
- ,URL
- URL
- : html\_downloader
- : html\_parser

:

```
#!/usr/bin/env python
# -*- coding: utf-8 -*-

from __future__ import print_function

import sys
from crwy.spider import Spider
from crwy.utils.queue.RedisQueue import RedisQueue
from crwy.utils.filter.RedisSet import RedisSet

queue = RedisQueue('foo')
s_filter = RedisSet('foo')

class ${class_name}Spider(Spider):
    def __init__(self):
        Spider.__init__(self)
        self.spider_name = '${spider_name}'

    def crawler_${spider_name}(self):
        while True:
            try:
                if not queue.empty():
                    url = 'http://example.com/%s' % queue.get()
                    if s_filter.sadd(url) is False:
                        print('You got a crawled url. %s' % url)
                        continue
                    response = self.html_downloader.download(url)
                    soups = self.html_parser.parser(response.content)
                    print(url)
```

```

        print(soups)
        print('Length of queue : %s' % queue.qsize())
    else:
        self.logger.info('%s[%s] --> crawler success !!!' % (
            self.spider_name, self.worker))
        sys.exit()

    except Exception as e:
        self.logger.exception('%s[%s] --> %s' % (
            self.spider_name, self.worker, e))
        continue

def add_queue(self):
    for i in range(100):
        queue.put(i)
    print(queue.qsize())

def run(self):
    try:
        worker = sys.argv[4]
    except :
        print('No worker found!!!\n')
        sys.exit()

    if worker == 'crawler':
        self.crawler_${spider_name}()
    elif worker == 'add_queue':
        self.add_queue()
    elif worker == 'clean':
        queue.clean()
        s_filter.clean()
    else:
        print('Invalid worker <%s>!!!\n' % worker)

```

add\_queue(),,



### Html

#### html\_downloader

requests

2.12.0

- `download(url, method='GET', timeout=60)`  
url: URL  
method: GET  
timeout: (60)  
\*\*kwargs: requests
- `downloadFile(url, save_path='./data/')`  
url: URL  
save\_path:

requests: <http://www.python-requests.org/en/master/>

#### html\_parser

BeautifulSoup4

- `parser(response)`  
UTF-8
- `gbk_parser(response)`  
GBK
- `jsonp_parser(response)`

json(key),dict

beautifulsoup4: <https://www.crummy.com/software/BeautifulSoup/>

## Sql

### db

sqlalchemy <http://docs.sqlalchemy.org/en/latest/core/engines.html>

- `__init__(db_url, **kwargs)`  
db\_url
- `init_table()`
- `drop_table()`

sqlalchemy: <http://www.sqlalchemy.org/>

---

## Redis

redis

- `__init__(name, namespace='queue', **redis_kwargs)`
  - name:
  - namespace: (queue)
  - \*\*redis\_kwargs: redis
- `qsize()`
- `empty()` True
- `put()`
- `get()`
- `get_nowait()`
- `clean()`

```
#!/usr/bin/env python
# -*- coding: utf-8 -*-
# author: wuyue92tree@163.com

import redis

class RedisQueue(object):
    """Simple Queue with Redis Backend"""

    def __init__(self, name, namespace='queue', **redis_kwargs):
        """The default connection parameters are: host='localhost', port=6379, db=0"""
        self.__db = redis.Redis(**redis_kwargs)
        self.key = '%s:%s' % (namespace, name)

    def qsize(self):
```

```
    """Return the approximate size of the queue."""
    return self.__db.llen(self.key)

def empty(self):
    """Return True if the queue is empty, False otherwise."""
    return self.qsize() == 0

def put(self, item):
    """Put item into the queue."""
    self.__db.rpush(self.key, item)

def get(self, block=True, timeout=None):
    """Remove and return an item from the queue.

    If optional args block is true and timeout is None (the default), block
    if necessary until an item is available."""
    if block:
        item = self.__db.blpop(self.key, timeout=timeout)
    else:
        item = self.__db.lpop(self.key)

    if item:
        item = item[1]
    return item

def get_nowait(self):
    """Equivalent to get(False)."""
    return self.get(False)

def clean(self):
    """Empty key"""
    return self.__db.delete(self.key)
```

## SSDB

### SSDB

- `__init__(name, **ssdb_kwargs)`  
name:  
\*\*ssdb\_kwargs: ssdb
- `qsize()`
- `empty()` True
- `put()`
- `get()`
- `clean()`

```
#!/usr/bin/env python
# -*- coding: utf-8 -*-
# author: wuyue92tree@163.com

import pyssdb
```

```

class SsdbQueue(object):
    """Simple Queue with SSDB Backend"""

    def __init__(self, name, **ssdb_kwargs):
        """The default connection parameters are: host='localhost', port=8888"""
        self.__db = pyssdb.Client(**ssdb_kwargs)
        self.key = name

    def qsize(self):
        """Return the approximate size of the queue."""
        return self.__db.qsize(self.key)

    def empty(self):
        """Return True if the queue is empty, False otherwise."""
        return self.qsize() == 0

    def put(self, item):
        """Put item into the queue."""
        self.__db.qpush(self.key, item)

    def get(self):
        """Remove and return an item from the queue.

        If optional args block is true and timeout is None (the default), block
        if necessary until an item is available."""

        item = self.__db.qpop(self.key)

        return item

    def clean(self):
        """Empty key"""
        return self.__db.qclear(self.key)

```

eg: default\_logger.conf

```

#logger.conf
#####
[loggers]
keys=root,fileLogger,rtLogger

[logger_root]
level=INFO
handlers=consoleHandler

[logger_fileLogger]
handlers=consoleHandler,fileHandler
qualname=fileLogger
propagate=0

[logger_rtLogger]
handlers=consoleHandler,rtHandler

```

```
qualname=rtLogger
propagate=0

#####
[handlers]
keys=consoleHandler,fileHandler,rtHandler

[handler_consoleHandler]
class=StreamHandler
level=INFO
formatter=simpleFmt
args=(sys.stderr,)

[handler_fileHandler]
class=FileHandler
level=DEBUG
formatter=defaultFmt
args=('./log/default.log', 'a')

[handler_rtHandler]
class=handlers.RotatingFileHandler
level=DEBUG
formatter=defaultFmt
args=('./log/default.log', 'a', 10*1024*1024, 5)

#####

[formatters]
keys=defaultFmt,simpleFmt

[formatter_defaultFmt]
format=%(asctime)s %(filename)s %(funcName)s [line:%(lineno)d] %(levelname)s
→%(message)s
datefmt=%Y-%m-%d %H:%M:%S

[formatter_simpleFmt]
format=%(name)-12s: %(levelname)-8s %(message)s
datefmt=
```

## CHAPTER 6

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FAQ

---

.....



## CHAPTER 7

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- genindex
- modindex
- search