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# **task\_processing Documentation**

*Release LATEST\_RELEASE*

**Yelp Inc**

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Interfaces and shared infrastructure for generic task processing @ Yelp



## 1.1 task\_processing

### 1.1.1 task\_processing package

#### Subpackages

`task_processing.interfaces` package

#### Submodules

#### `task_processing.interfaces.event` module

```
class task_processing.interfaces.event.Event
```

```
    Bases: pyrsistent._precord.PRecord
```

```
        static validate_task_event (r)
```

```
task_processing.interfaces.event.control_event (**kwargs)
```

```
task_processing.interfaces.event.json_deserializer (dct)
```

```
task_processing.interfaces.event.json_serializer (o)
```

```
task_processing.interfaces.event.task_event (**kwargs)
```

#### `task_processing.interfaces.runner` module

```
class task_processing.interfaces.runner.Runner
```

```
    Bases: object
```

```
        TASK_CONFIG_INTERFACE
```

```
            alias of task_processing.interfaces.task_executor.DefaultTaskConfigInterface
```

**kill** (*task\_id*)

**run** (*task\_config*)

### task\_processing.interfaces.task\_executor module

**class** task\_processing.interfaces.task\_executor.**DefaultTaskConfigInterface**  
Bases: pyrsistent.\_precord.PRecord

**class** task\_processing.interfaces.task\_executor.**TaskExecutor**  
Bases: object

The core interface for Task Processing This is the class you want to implement to add a new TaskExecutor

#### **TASK\_CONFIG\_INTERFACE**

The interface, specified as a PRecord of objects that you will be passing as task\_configs to run  
alias of *DefaultTaskConfigInterface*

**get\_event\_queue** ()  
Get queue of events

**Returns** TBD

**kill** (*task\_id*)  
Kill the specified task

**Parameters** **task\_id** (*str*) – The task that you want to kill

**run** (*task\_config*)  
Run the supplied task

**Parameters** **task\_config** – An object satisfying the TASK\_CONFIG\_INTERFACE

The executor should start running the provided task and return the task id.

**Returns** **str task\_id** Callers get the id of the task that was run

to check status or kill it later

**stop** ()  
Stop the executor stack

## Module contents

task\_processing.plugins package

## Subpackages

task\_processing.plugins.mesos package

## Submodules

task\_processing.plugins.mesos.execution\_framework module

task\_processing.plugins.mesos.mesos\_executor module

task\_processing.plugins.mesos.translator module

## Module contents

## Module contents

task\_processing.runners package

## Submodules

task\_processing.runners.async module

**class** task\_processing.runners.async.**Async** (*executor, callbacks=None*)

Bases: *task\_processing.interfaces.runner.Runner*

**callback\_loop** ()

**kill** (*task\_id*)

**run** (*task\_config*)

**stop** ()

**exception** task\_processing.runners.async.**AsyncError**

Bases: *Exception*

**class** task\_processing.runners.async.**EventHandler** (*predicate, cb*)

Bases: *tuple*

**cb**

Alias for field number 1

**predicate**

Alias for field number 0

task\_processing.runners.promise module

**class** task\_processing.runners.promise.**Promise** (*executor, futures\_executor*)

Bases: *task\_processing.interfaces.runner.Runner*

**kill** (*task\_id*)

**run** (*task\_config*)

Schedules execution of the supplied task

**Parameters** **task\_config** – An object satisfying the TASK\_CONFIG\_INTERFACE

**Returns** A Future object representing the execution of the task.

**stop** ()

### task\_processing.runners.subscription module

**class** task\_processing.runners.subscription.**Subscription** (*executor, queue*)

Bases: *task\_processing.interfaces.runner.Runner*

**event\_producer** ()

**kill** (*task\_id*)

**run** (*task\_config*)

**stop** ()

### task\_processing.runners.sync module

**class** task\_processing.runners.sync.**Sync** (*executor*)

Bases: *task\_processing.interfaces.runner.Runner*

**kill** (*task\_id*)

**run** (*task\_config*)

**stop** ()

## Module contents

## Module contents

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