

2.11. Logging/Monitoring

It is possible to use [pymongo.monitoring](#) to monitor the driver events (e.g: queries, connections, etc). This can be handy if you want to monitor the queries issued by MongoEngine to the driver.

To use *pymongo.monitoring* with MongoEngine, you need to make sure that you are registering the listeners **before** establishing the database connection (i.e calling *connect*):

The following snippet provides a basic logging of all command events:

```

import logging
from pymongo import monitoring
from mongoengine import *

log = logging.getLogger()
log.setLevel(logging.DEBUG)
logging.basicConfig(level=logging.DEBUG)

class CommandLogger(monitoring.CommandListener):

    def started(self, event):
        log.debug("Command {0.command_name} with request id "
                  "{0.request_id} started on server "
                  "{0.connection_id}".format(event))

    def succeeded(self, event):
        log.debug("Command {0.command_name} with request id "
                  "{0.request_id} on server {0.connection_id} "
                  "succeeded in {0.duration_micros} "
                  "microseconds".format(event))

    def failed(self, event):
        log.debug("Command {0.command_name} with request id "
                  "{0.request_id} on server {0.connection_id} "
                  "failed in {0.duration_micros} "
                  "microseconds".format(event))

monitoring.register(CommandLogger())

class Jedi(Document):
    name = StringField()

connect()

log.info('GO!')

log.info('Saving an item through MongoEngine...')
Jedi(name='Obi-Wan Kenobii').save()

log.info('Querying through MongoEngine...')
obiwan = Jedi.objects.first()

log.info('Updating through MongoEngine...')
obiwan.name = 'Obi-Wan Kenobi'
obiwan.save()

```

Executing this prints the following output:

```
INFO:root:GO!
INFO:root:Saving an item through MongoEngine...
DEBUG:root:Command insert with request id 1681692777 started on server ('localhost',
27017)
DEBUG:root:Command insert with request id 1681692777 on server ('localhost', 27017)
succeeded in 562 microseconds
INFO:root:Querying through MongoEngine...
DEBUG:root:Command find with request id 1714636915 started on server ('localhost',
27017)
DEBUG:root:Command find with request id 1714636915 on server ('localhost', 27017)
succeeded in 341 microseconds
INFO:root:Updating through MongoEngine...
DEBUG:root:Command update with request id 1957747793 started on server ('localhost',
27017)
DEBUG:root:Command update with request id 1957747793 on server ('localhost', 27017)
succeeded in 455 microseconds
```

More details can of course be obtained by checking the *event* argument from the *CommandListener*.