



PERFORMANCE TESTING - WHICH TOOL I NEED TO USE?

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AGENDA

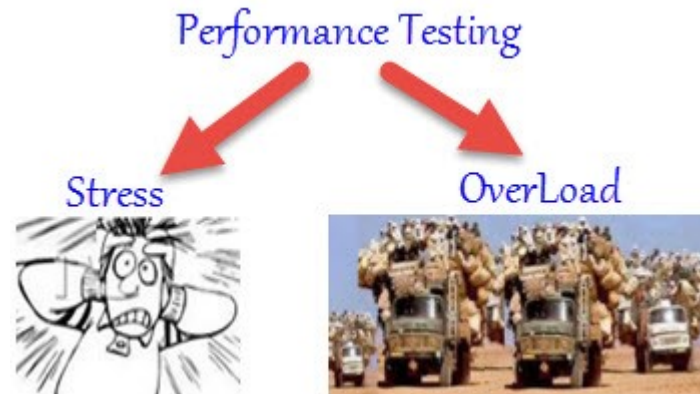
- Introduction
- Performance testing
- JMeter and making test plan
- Locust and making test plan
- Advantages of JMeter
- Advantages of Locust
- Drawbacks of JMeter and Locust
- Common pitfalls in making test plans

INTRODUCTION

- What is functional testing?
- What is non-functional testing?
- Types of non-functional testing
 - Performance testing
 - Security testing
 - Compatibility testing
 - Usability testing
 - Data conversion

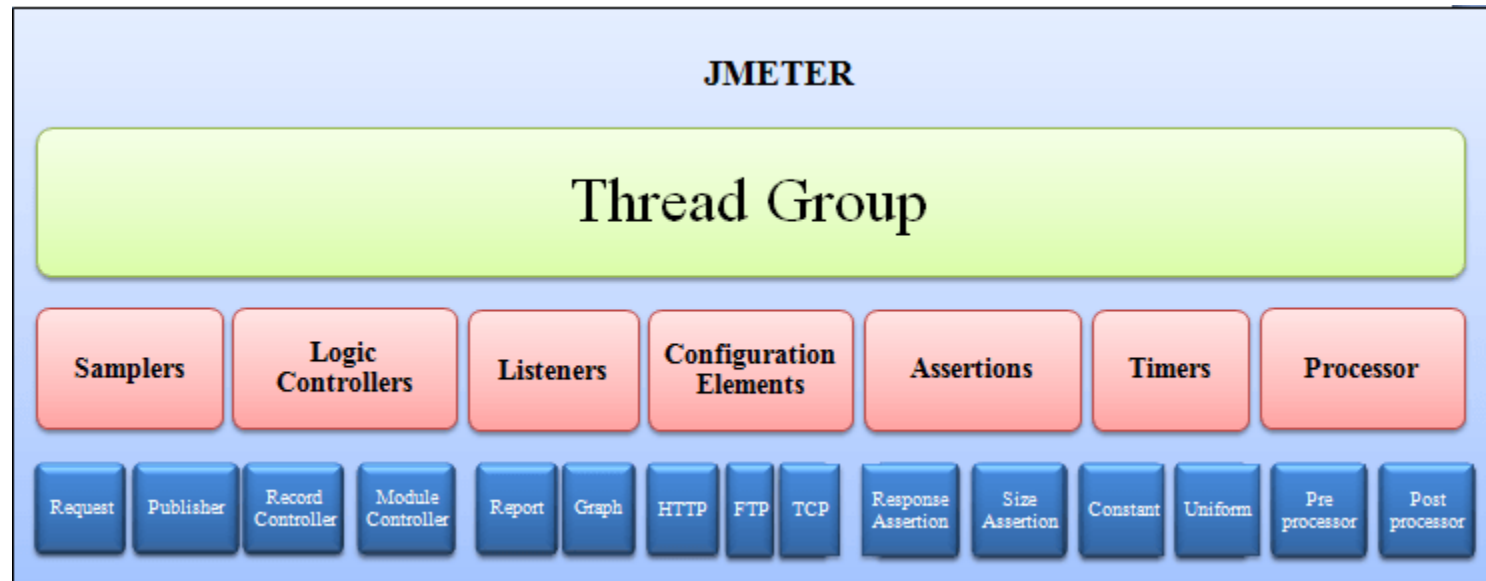
PERFORMANCE TESTING

- Performance testing is ...
- Performance testing types
- Attributes of performance testing that we watch
- Performance testing tools



JMETER

- Introduction to JMeter
- Starting JMeter and its elements
- Making test plan in JMeter (demo)



Thread Group

Name: Thread Group

Comments:

Action to be taken after a Sampler error

Continue Start Next Thread Loop Stop Thread Stop Test Stop Test Now

Thread Properties

Number of Threads (users): 1

Ramp-Up Period (in seconds): 1

Loop Count: Forever 1

Delay Thread creation until needed

Scheduler

Scheduler Configuration

Duration (seconds)

Startup delay (seconds)

Start Time 2016/05/06 13:16:48

End Time 2016/05/06 13:16:48

LOCUST

- Introduction to Locust
- Starting Locust
- Making test plan in Locust (demo)



LOCUST

Below is a quick little example of a simple **locustfile.py**:

```
from locust import HttpLocust, TaskSet

def login(l):
    l.client.post("/login",
{"username":"ellen_key", "password":"education"})

def index(l):
    l.client.get("/")

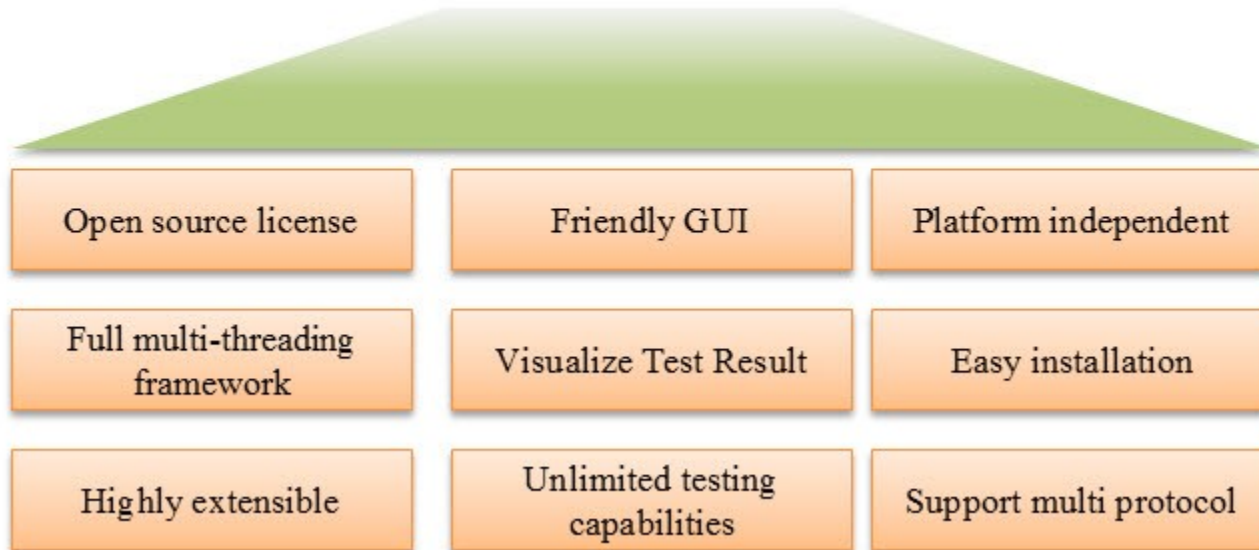
def profile(l):
    l.client.get("/profile")

class UserBehavior(TaskSet):
    tasks = {index: 2, profile: 1}

    def on_start(self):
        login(self)

class WebsiteUser(HttpLocust):
    task_set = UserBehavior
    min_wait = 5000
    max_wait = 9000
```

ADVANTAGES OF JMETER



ADVANTAGES OF LOCUST

LOCUST

Open source licence	Simple Python code	Platform independent
Based on co-routine	Uses a sync approach	Reusable code
Highly customizable	Supports specific functionality	Web-based UI

DRAWBACKS OF JMETER & LOCUST

JMETER

- complex terminology
- confusing graphic representation of results
- remote machines must be declared in a property file before starting application
- necessary to start remote machine one by one

LOCUST

- no many forums, blogs
- doesn't support recording scripts
- lack of good presentation of results
- gevent's performance under Windows is poor



CONCLUSIONS

- **Pay your attention on non-functional testing**
- **Learn, search and explore**
- **Decision is yours**
- **There is no best tool**

PITFALLS IN MAKING TEST PLANS



QUESTIONS



***Every ending is really
just a new beginning!***