

15th May | Sprint 2 Stress Testing

Stress Testing for Sending New Messages

We use JMeter to simulate a user sending 5000 messages in a chat, to see if our server can withstand this amount of load.

API to make request to: https://api.chatengine.io/chats/{{chat_id}}/messages/

HEADERS	VALUE
Project-ID	{{project_id}}
User-Name	{{user_name}}
User-Secret	{{user_secret}}

Body

```
{
  "text": "Hello world!",
  "custom_json": { "gif": "https://giphy.com/clips/ufc-4eZuG5kNYvDrGc6gYk" }
}
```

JMeter Component Structure

- Sprint 2 Test Plan
 - Message Threads { Number of Threads: 5000, Ramp-up period (seconds): 1, Loop Count: 1 }
 - CSV Data Set Config { Filename: message.csv, Variable Names: MESSAGE }
 - Loop Controller
 - HTTP - Create Message { Body Data: Specified in body, Method: POST }
 - HTTP - Header Manager { Headers: Specified in HEADERS }
 - View Results Tree
 - Graph Results
 - Summary Report

Success Rate

```
import pandas as pd

# Stress Testing for creating messages
df_message = pd.read_csv("../Message/Message-Report.csv")
msg_request_num = len(df_message)
print("Total number of request:", msg_request_num)
msg_code_list = df_message.responseCode.to_list()
valid_response = 0

for code in msg_code_list:
    if code == '201':
        valid_response += 1

print("Number of successful request:", valid_response)
print("Success rate:", valid_response/msg_request_num)
```

Total number of request: 4193

Number of successful request: 1945

Success rate: 46.39%

Sample Message Report

TimeStamp	Elapsed	ResponseCode	ResponseMessage	ThreadName	Success	Bytes	SentBytes	GrpThreads	AllThreads	URL	Latency	IdleTime	Connect
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162122735 8690	9494	201	Created	User Threads 1-212	TRUE	1034	408	3665	3665	https://api.chatengine.io/chats/16729/messages/	9494	0	8
162122736 3042	5184	201	Created	User Threads 1-957	TRUE	1034	408	3684	3684	https://api.chatengine.io/chats/16729/messages/	5184	0	0
162122735 8380	9880	201	Created	User Threads 1-70	TRUE	1033	407	3701	3701	https://api.chatengine.io/chats/16729/messages/	9880	0	0
162122735 8467	9804	201	Created	User Threads 1-127	TRUE	1034	408	3708	3708	https://api.chatengine.io/chats/16729/messages/	9804	0	1
162122736 3263	5041	Non HTTP response code: javax.net.ssl.SSLException	Non HTTP response message: Connection reset	User Threads 1-1050	FALSE	3724	0	3729	3729	https://api.chatengine.io/chats/16729/messages/	0	0	0
162122736 3210	5095	Non HTTP response code: javax.net.ssl.SSLException	Non HTTP response message: Connection reset	User Threads 1-1022	FALSE	3724	0	3729	3729	https://api.chatengine.io/chats/16729/messages/	0	0	1