Load testing report

Purpose

This document describes testing activities performed to identify performance of www.deezer.com/en/ web application.

Goal

Goal of load testing in current iteration: get performance metrics for scenarios which are mostly accessed by the users while using application

Software/hardware configuration

Testing activities is performed to production configuration of software and hardware

Load generator configuration

CPU: Intel Core i5-5257U CPU Frequency: 2,7-3,1

Cores: 2 RAM: 8 GB

Load testing tool

Apache Jmeter 3.2

Load profile

User type	Action	~Think time(s)		
Logged in user				
	Open login page	15		
	Login	5		
	Search for artist	1		

Open artist page	5	
Select album	1	
Play track	selected track duration	

Load test type

Scenario based- actions are executed consecutively

Load model

- number of concurrent users: 50

- test duration: 900s

- ramp-up: 250s

Testing metrics

- Response time
 - avg
 - median
 - 90,95,99 percentile
- Error rate
- Throughput

User scenario

User scenario consists of next actions:

- Navigating to www.deezer.com/en/
- Login
- Search for artist
- Open artist's page
- Select random album
- Play all tracks consecutively

Login action is executed once at first iteration, all other actions are executed at each loop iteration.

Test results

Label	# Samples	Average ms	Median ms	90% line ms	95% line ms	99% line ms	Min ms	Max ms	Error %	Through put 1/sec
Naviga te to login page	144	1472	1490	2112	2500	5196	586	6165	0.0	0.16
Login	50	3019	2888	3421	3838	4600	2611	4600	0.0	0.20
Search for artist	143	826	676	1050	1567	3364	529	5645	0.0	0.16
Open artist's page	143	1296	1241	1826	2104	7832	394	11010	0.0	0.16
Select album	143	1479	1686	2125	2320	2948	447	4468	0.0	0.16
Play first song	142	349	312	419	554	1207	118	5366	0.0	0.16
Play next song	2587	231	169	353	462	1116	107	5828	0.0	3.88

Summary

The goal of load testing was successfully achieved. An Apache Jmeter test script was created. It sends http requests according to scenario described in User Scenario section of this report. User actions consists of http requests to deezer.com, all other requests such as static data load, analytics requests etc. were omitted. All requests were executed with 0% error rate(with no errors). Response time median for actions in ms:

Navigate to login page - 1490

Login - 2888
Search for artist - 676
Open artist's page - 1241
Select album - 1686
Play first song - 312
Play next song - 169

The worst response time is for Login action - 2888 ms. It may decrease user satisfaction level as mostly user want response time <2s.