Mindtree

Performance Test Report

For

Execution of

IDA Retrieve Identity using VID API – 200 users

Date: 20 Jun 2020

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Summary

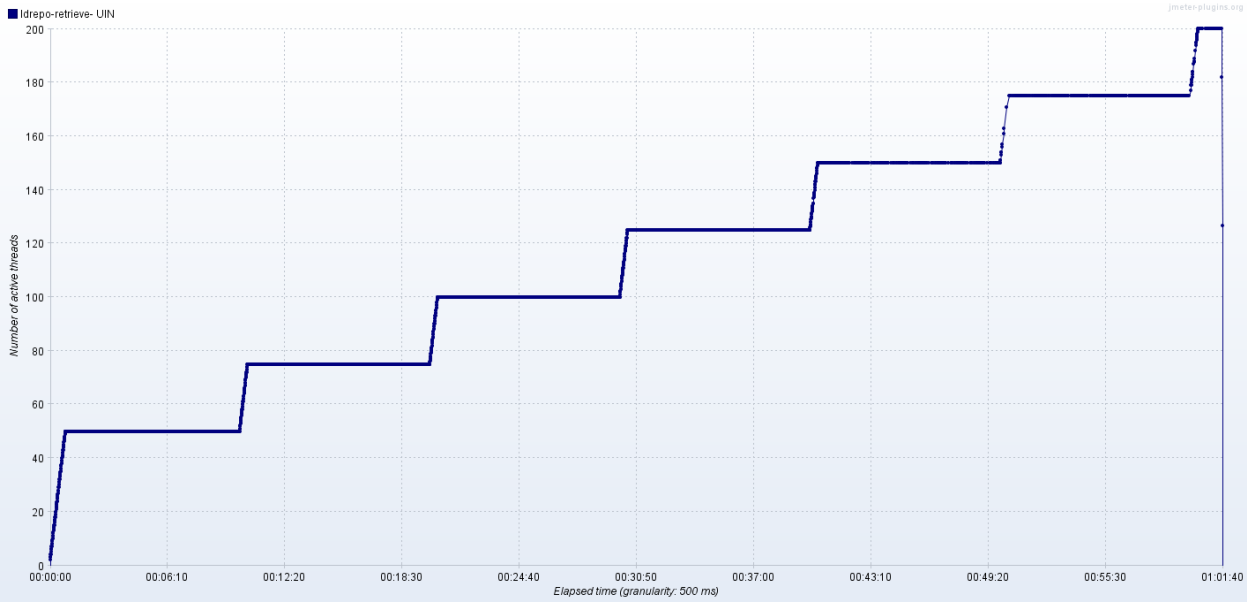
This report presents the observations and findings of the load test conducted for a load of 200 concurrent users for IDA Retrieve Identity using VID of IDAuth

The objective of this load test was to observe and record the behavior of the application when users are calling of IDA Retrieve Identity using VID of IDAuth

Below are the scenario details:

Script/Report Name	IDA Retrieve Identity using VID
Run Date	20-Jun-2019
Period	04:21 to 05:24 AM (UTC)
Number of concurrent users	200
Ramp up	See in below ramp up pattern picture
Run Duration	01:02 min (Stopped due to errors)

Ramp up profile:



The transaction response times observed were as below:

Label	# Samples	Average (ms)	90% Line (ms)	Min (ms)	Max (ms)	Error %	Throughput (sec)
TR_idrepo_retrieve_identity-vid	170256	1465	1517	0	60206	8.02%	46.01706

Performance Test Execution Details

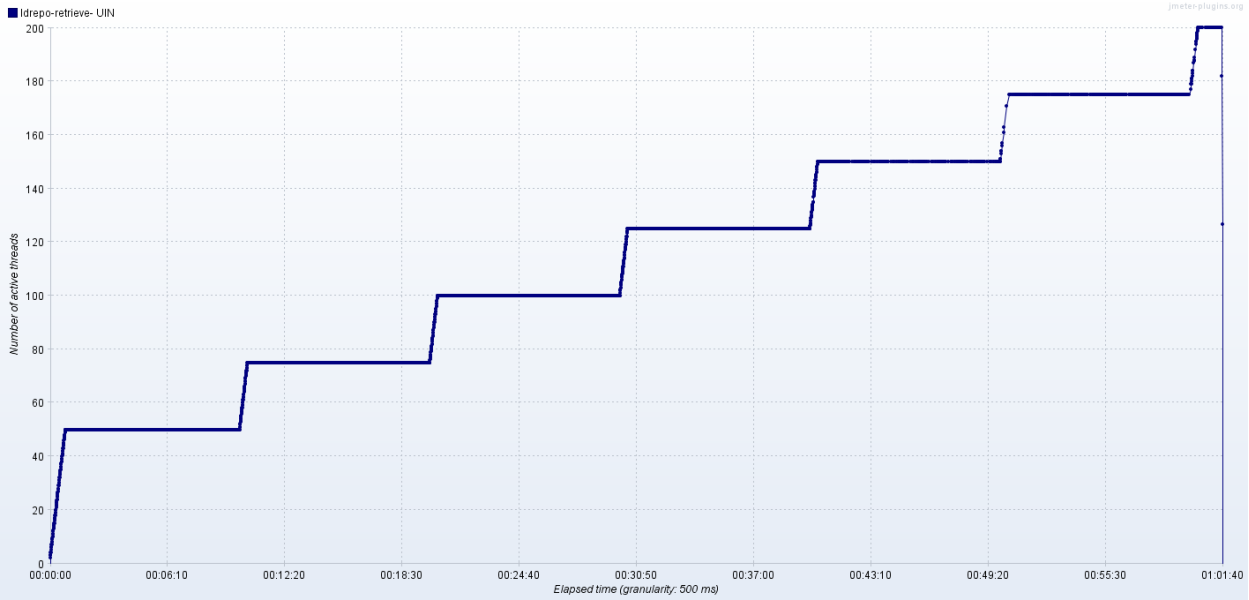
TR_idrepo_retrieve_identity-vid transaction average response times was less than 2 sec

The error rate for below transactions are more than 1%:

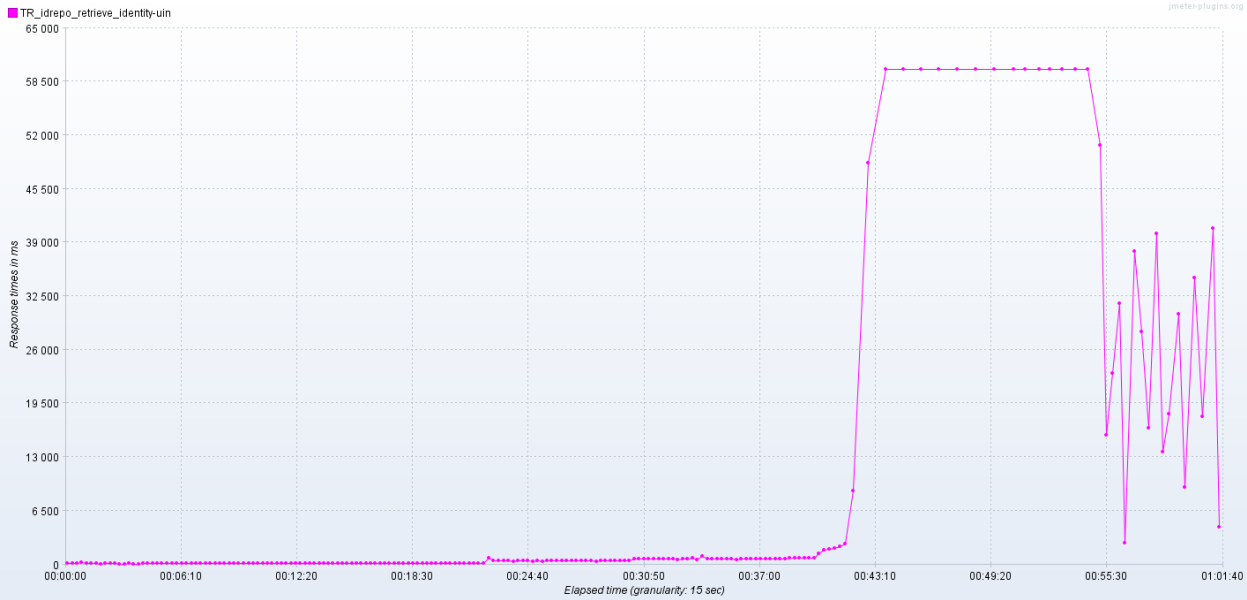
Transactions	Error %
TR_idrepo_retrieve_identity-vid	8.02%

Test Environment : **Sandbox Preprod environment**

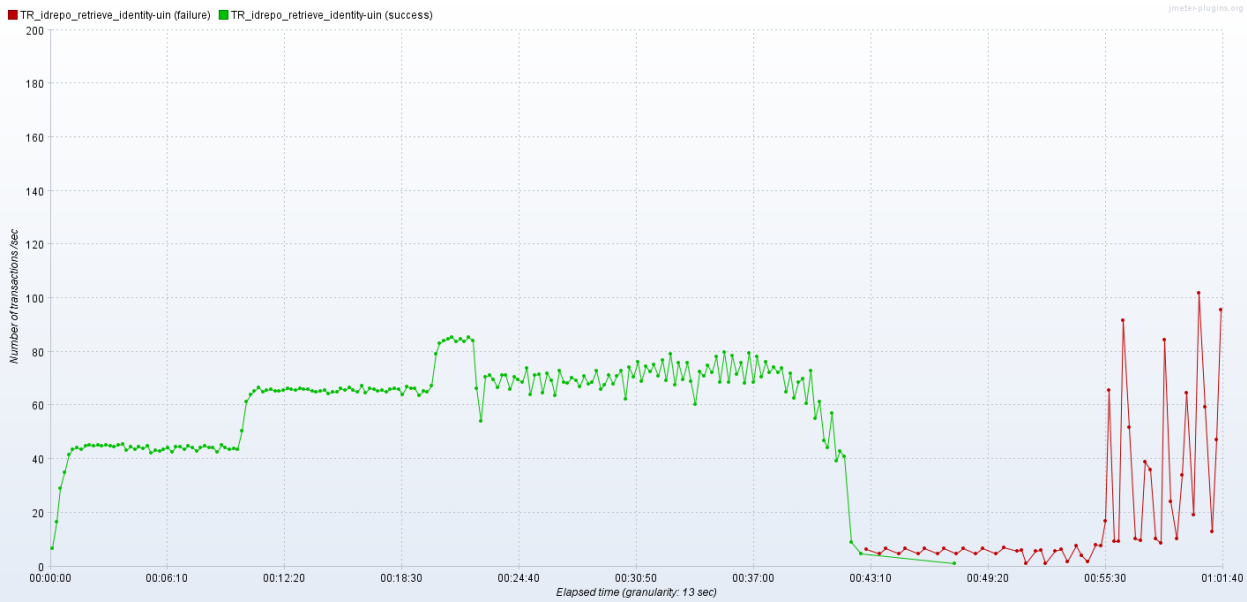
Active threads over Time:



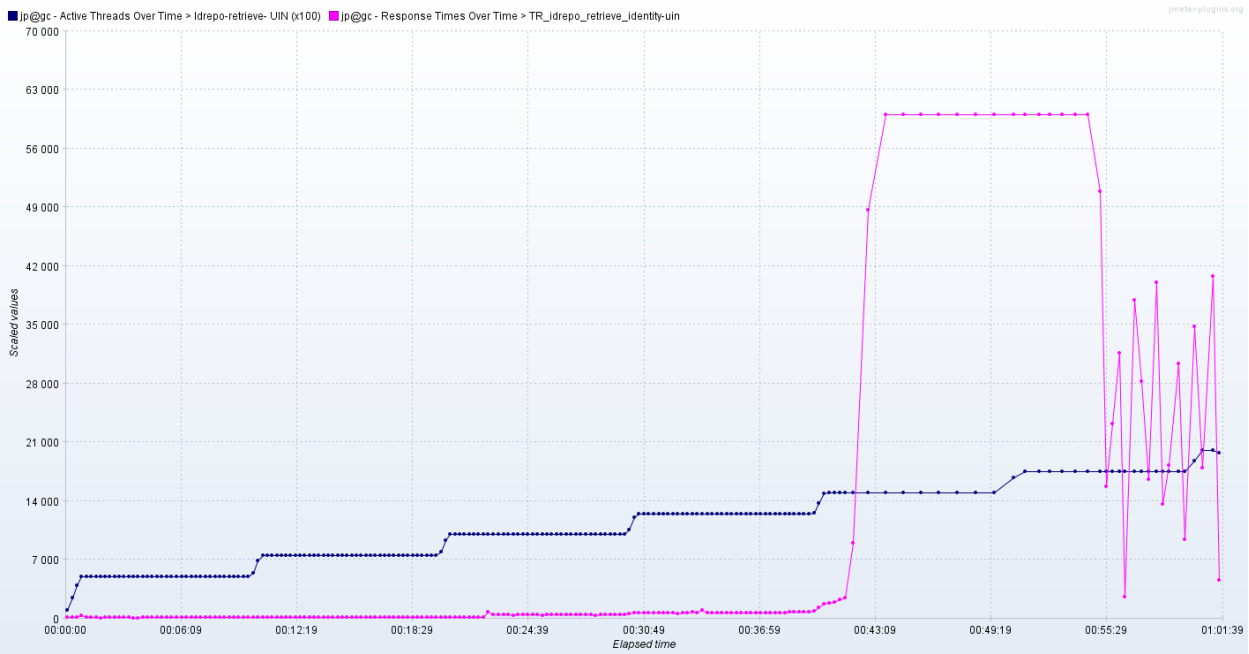
Response Time Graph



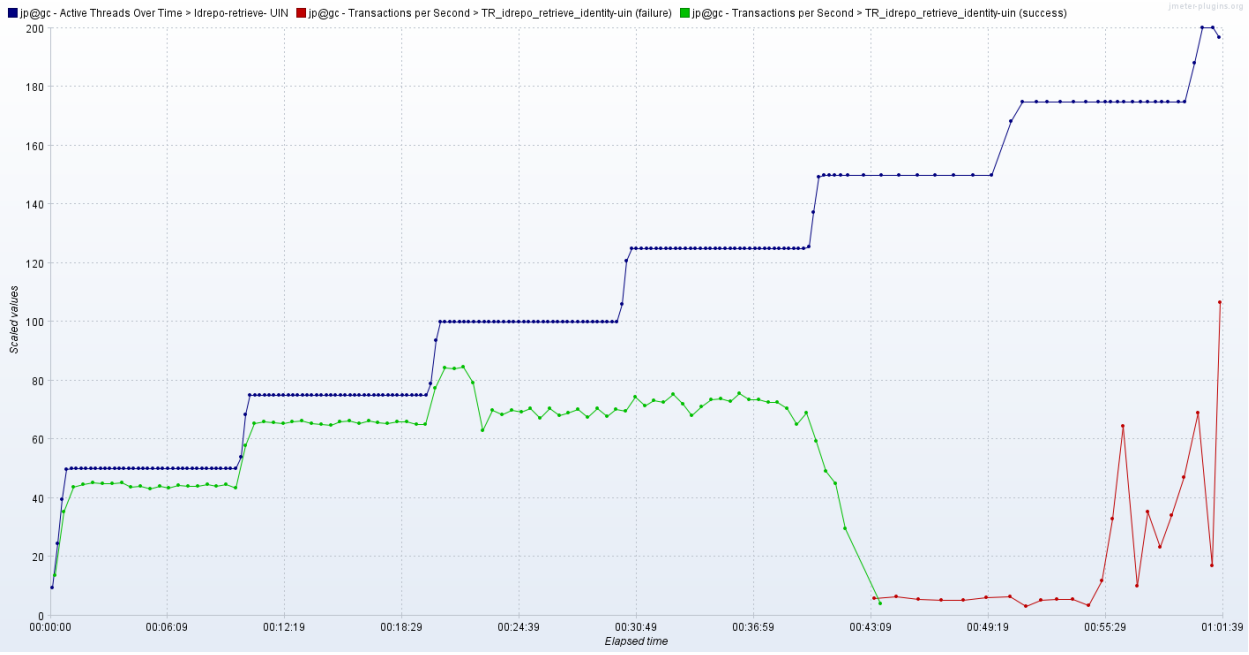
Transactions per second:



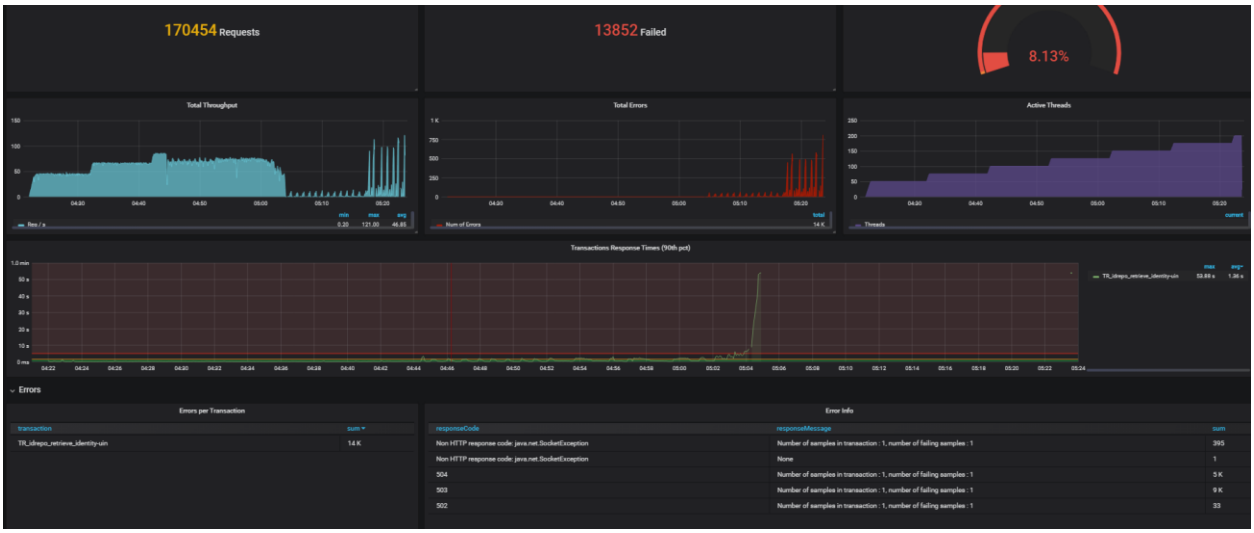
Active threads vs response times over time:



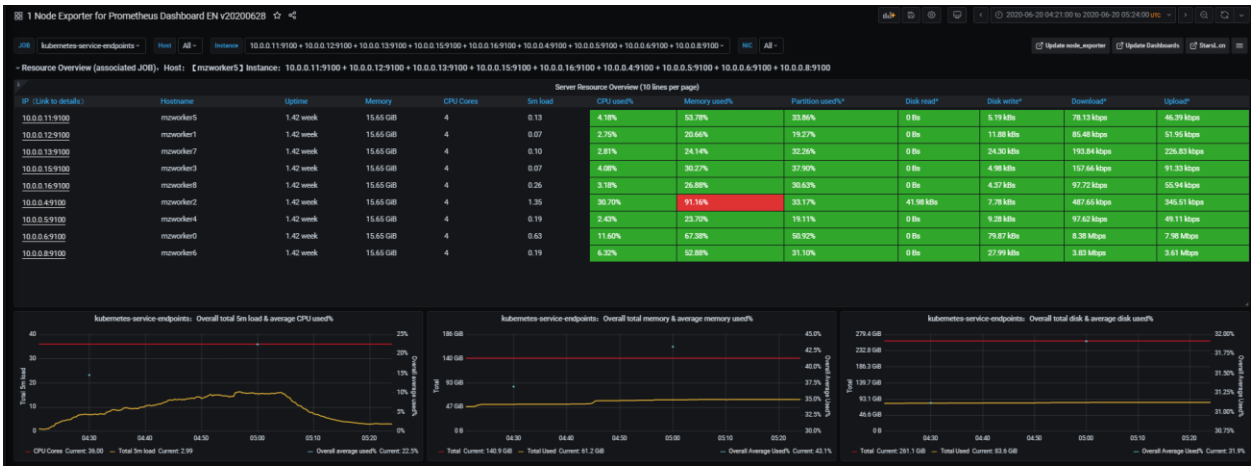
Active threads vs transactions per sec:



Jmeter Dashboard:



MZ worker threads monitoring:



Obsevations:

1. **Observed average response times spiked from 0.4 sec to 65 sec when concurrent users reached to 150 and high response times stayed 65 sec till end of the run**
2. **Observed continuous spike of 30 to 40 count errors HTTP 503/504 errors for the IDrepo retrieve identity api using VID beyond 150 concurrent users**
3. **Maximum transactions per sec (TPS) achieved was 84/sec for the IDrepo retrieve identity api**
4. **Below are the error messages in IDRepo identity service pod log**

http://kernel-auth-service/v1/authmanager/authorize/admin/validateToken
java.lang.OutOfMemoryError: Java heap space
at java.nio.HeapByteBuffer.<init>(HeapByteBuffer.java:57)
at java.nio.ByteBuffer.allocate(ByteBuffer.java:335)
at org.apache.coyote.http11.Http11OutputBuffer.<init>(Http11OutputBuffer.java:111)
at org.apache.coyote.http11.Http11Processor.<init>(Http11Processor.java:241)
at org.apache.coyote.http11.AbstractHttp11Protocol.createProcessor(AbstractHttp11Protocol.java:864)
at org.apache.coyote.AbstractProtocol$ConnectionHandler.process(AbstractProtocol.java:778)
at org.apache.tomcat.util.net.NioEndpoint$SocketProcessor.doRun(NioEndpoint.java:1468)
at org.apache.tomcat.util.net.SocketProcessorBase.run(SocketProcessorBase.java:49)

at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149)

at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624)
at org.apache.tomcat.util.threads.TaskThread$WrappingRunnable.run(TaskThread.java:61)
at java.lang.Thread.run(Thread.java:748)
java.lang.OutOfMemoryError: Java heap space
at java.nio.HeapByteBuffer.<init>(HeapByteBuffer.java:57)
at java.nio.ByteBuffer.allocate(ByteBuffer.java:335)
at org.apache.coyote.http11.Http11OutputBuffer.<init>(Http11OutputBuffer.java:111)
at org.apache.coyote.http11.Http11Processor.<init>(Http11Processor.java:241)
at org.apache.coyote.http11.AbstractHttp11Protocol.createProcessor(AbstractHttp11Protocol.java:864)

at org.apache.coyote.AbstractProtocol$ConnectionHandler.process(AbstractProtocol.java:778)

at org.apache.tomcat.util.net.NioEndpoint$SocketProcessor.doRun(NioEndpoint.java:1468)
at org.apache.tomcat.util.net.SocketProcessorBase.run(SocketProcessorBase.java:49)
at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1149)
at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:624)

at org.apache.tomcat.util.threads.TaskThread$WrappingRunnable.run(TaskThread.java:61)

at java.lang.Thread.run(Thread.java:748)
Exception in thread "http-nio-8090-exec-203" java.lang.OutOfMemoryError: Java heap space
Exception in thread "http-nio-8090-exec-205" java.lang.OutOfMemoryError: Java heap space
2020-06-20 05:04:57,131 [http-nio-8090-exec-197] INFO
[i.m.k.a.a.h.AuthHandler].getKeycloakValidatedUserResponse.189 : url http://kernel-auth-service/v1/authmanager/authorize/admin/validateToken
Exception in thread "http-nio-8090-exec-204" java.lang.OutOfMemoryError: Java heap space

2020-06-20 05:05:01,794 [http-nio-8090-exec-18] INFO [i.m.k.a.a.h.AuthHandler].retrieveUser.122 : user service-account-mosip-ida-client
Exception in thread "http-nio-8090-exec-207" Exception in thread "http-nio-8090-exec-211" java.lang.OutOfMemoryError: Java heap space
Exception in thread "http-nio-8090-exec-210" java.lang.OutOfMemoryError: Java heap space
Exception in thread "http-nio-8090-exec-209" java.lang.OutOfMemoryError: Java heap space
Exception in thread "http-nio-8090-exec-206" java.lang.OutOfMemoryError: Java heap space

5. **Below is the error message for the API request**

nginx error!
The page you are looking for is temporarily unavailable. Please try again later.
Website Administrator
Something has triggered an error on your website. This is the default error page for nginx that is distributed with Fedora. It is located /usr/share/nginx/html/50x.html

You should customize this error page for your own site or edit the error_page directive in the nginx configuration file /etc/nginx/nginx.conf.