

# **Performance Test Report**

## **For**

## **Execution of**

### **IDA Retrieve Identity using UIN API – 200 users**

Date: 19 Jun 2020

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#### **Summary**

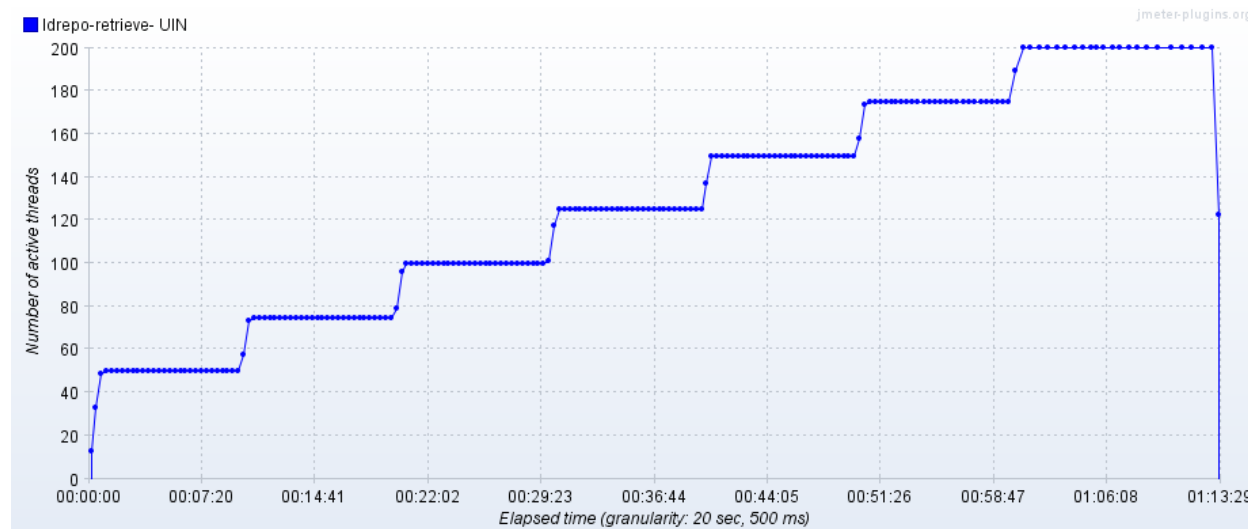
This report presents the observations and findings of the load test conducted for a load of 200 concurrent users for IDA Retrieve Identity using UIN API of IDAuth

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 UIN API of IDAuth

Below are the scenario details:

<b>Script/Report Name</b>	IDA Retrieve Identity using UIN
<b>Run Date</b>	19-Jun-2019
<b>Period</b>	05:23 to 06:38 AM (UTC)
<b>Number of concurrent users</b>	200
<b>Ramp up</b>	See in below ramp up pattern picture
<b>Run Duration</b>	01:13 min

### 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-uin	298483	878	708	9	60965	5.80%	67.69696



## Performance Test Execution Details

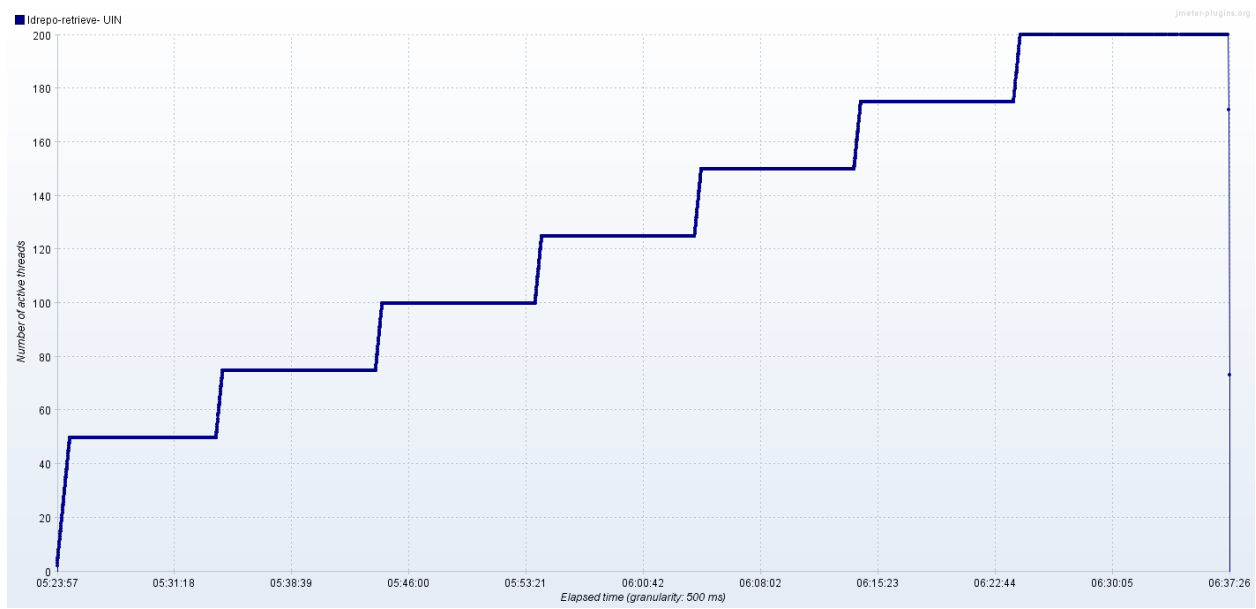
TR\_idrepo\_retrieve\_identity-uin API's transactions average response times were less than 2 sec

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

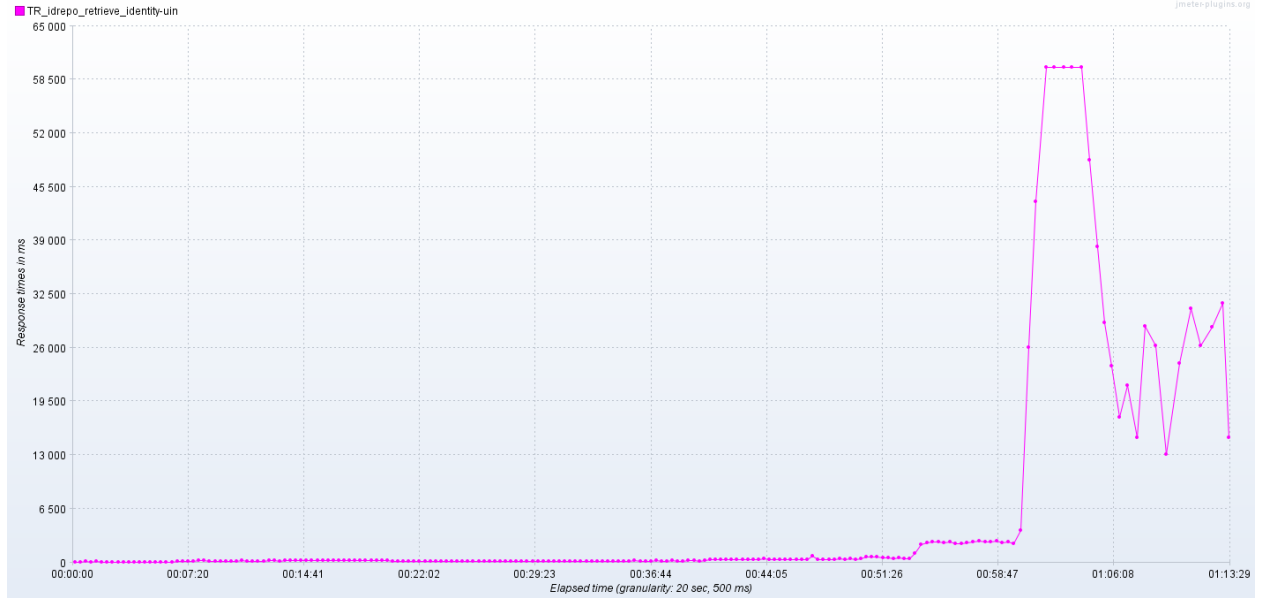
Transactions	Error %
TR_idrepo_retrieve_identity-uin	5.80%

**Test Environment :** Sandbox Preprod environment

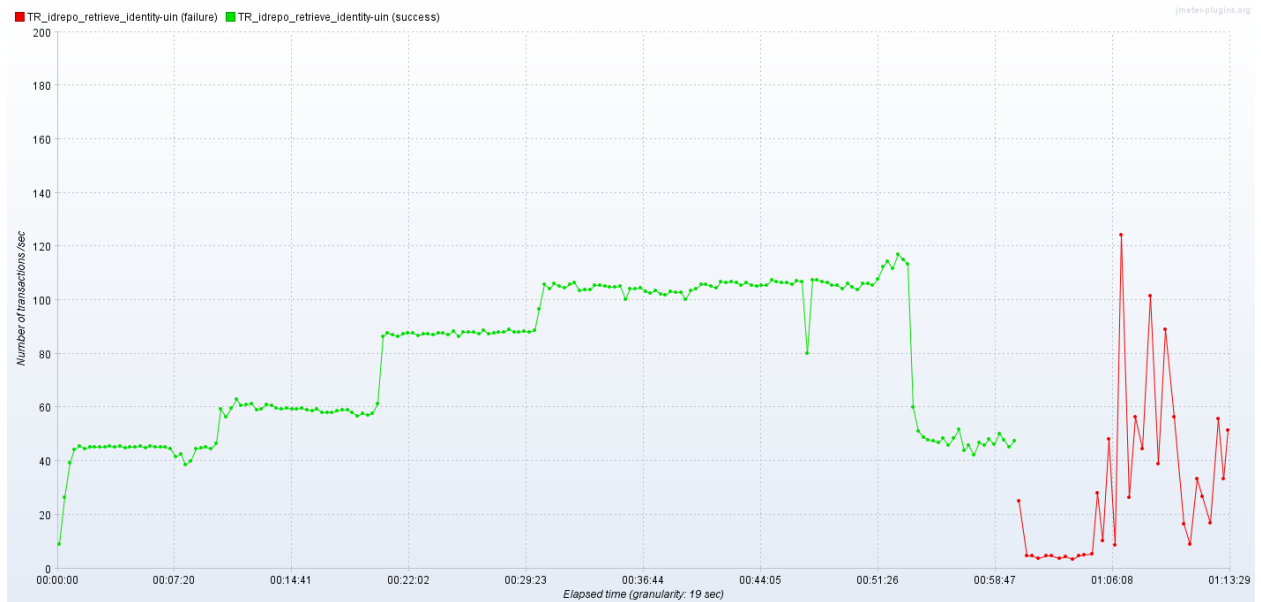
## Active threads over Time:



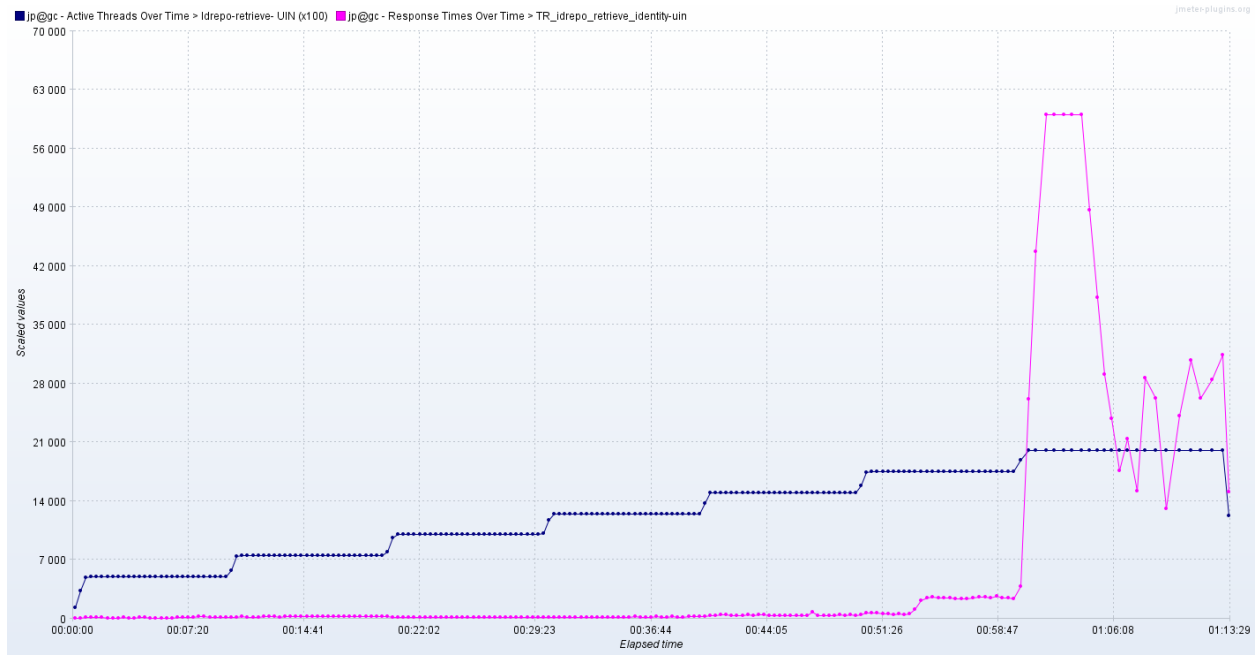
## Response Time Graph



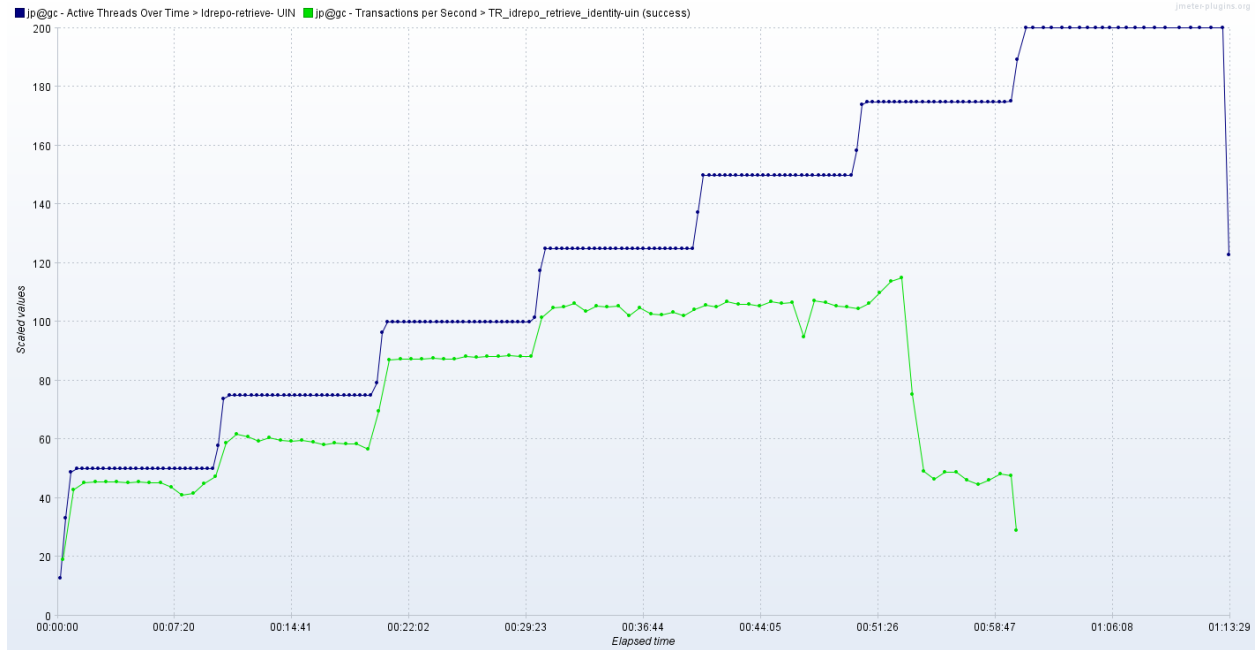
## Transactions per second:



## Active threads vs response times over time:



## Active threads vs transactions per sec:



## JMeter Dashboard:



## Worker VM's resource metrics:



## Observations:

Sample API request: [GET https://preprod.southindia.cloudapp.azure.com/idrepository/v1/identity/uin/6024079562](https://preprod.southindia.cloudapp.azure.com/idrepository/v1/identity/uin/6024079562)

1. Observed average response times spiked from 0.4 sec to 2.5 sec when concurrent users reached to 175 and spiked avg responsetime from 2.5 to 60 sec beyond 200 concurrent user and high response times stayed 60 sec for next 3 min again dropped to 35 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 UIN beyond 200 concurrent users
3. Maximum transactions per sec (TPS) achieved was 102/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)*

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*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.*