Channel Setup
Oracle Banking Liquidity Management
Release 14.1.0.0.0
[May] [2018]

ORACLE
FINANCIAL SERVICES

ORACLE

Table of Contents

LIQUIDITY MANAGEMENT CHANNEL SETUP 1

1.1 INTRODUCTION 1
1.2 STEPS TO BE FOLLOWED FOR CONFIGURATION OF ADMINISTRATIVE CONSOLE 1
1.2.1 Create Managed Server 2
1.2.2 Create Machine 4
1.2.3 Connect Data Source 7
1.2.4 Build Liquidity Managements Executable Files 9
1.2.5 Deploy Liquidity Management Executable Files 13
1.2.6 Start The Server 22
1.2.7 Configure SSL 26
1.2.8 Test Channel Setup 26
1.2.9 Billing services 35
1.2.10 Swagger Setup 39

Liquidity Management Channel Setup

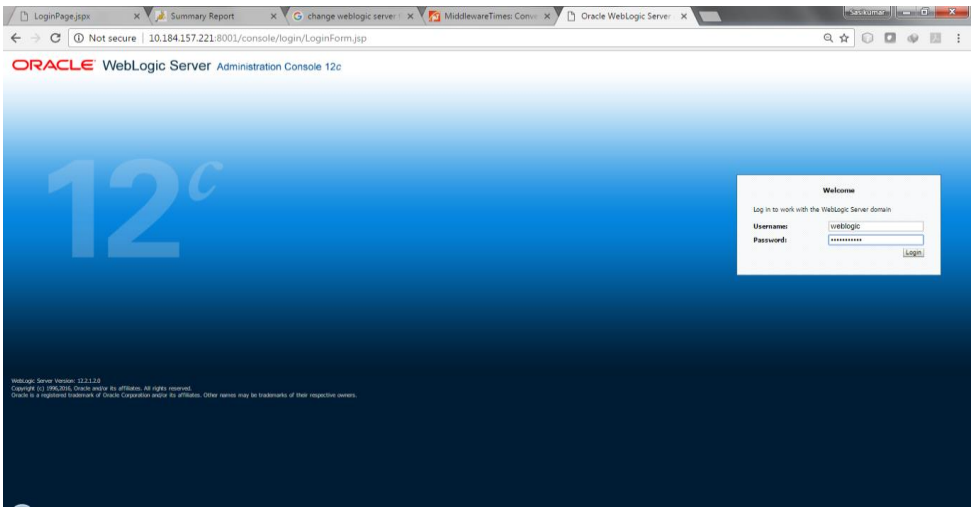
1.1 Introduction

In this part basically, we will do configuration of Weblogic Administrative console.

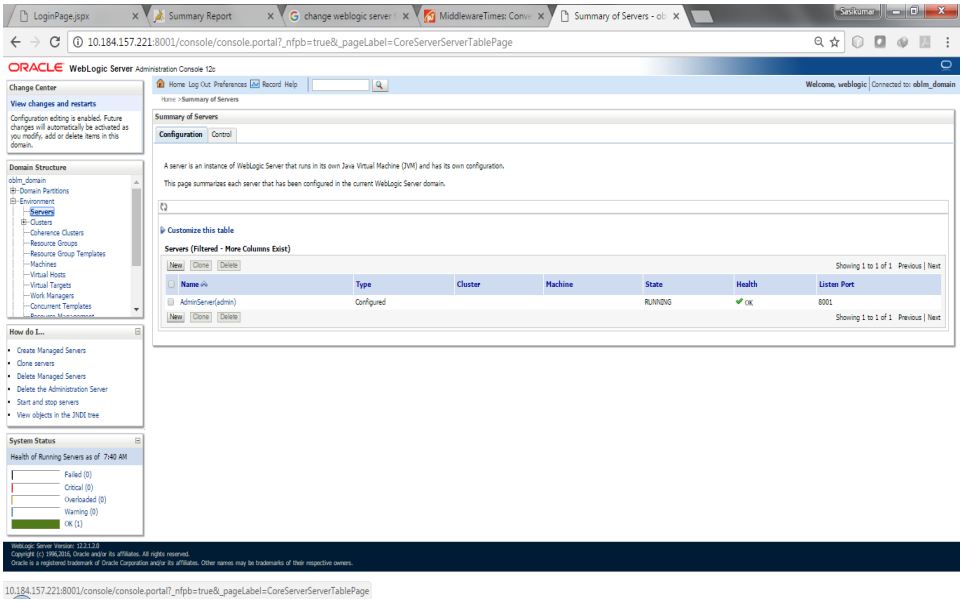
Prerequisite: Weblogic Server should be installed and oracle weblogic server domain should be installed as mentioned in "**Oracle_Banking_Liquidity_Management_12 4 0 0 0_Application_Setup.doc**".

1.2 Steps to be followed for configuration of Administrative console

1. Give the credential in the console page that you have set in Administrator Account screen.



2. Now we can see home screen. In home screen in the left side you will find Domain Structure column. Go to Environment and click on sever under that.



1.2.1 Create Managed Server

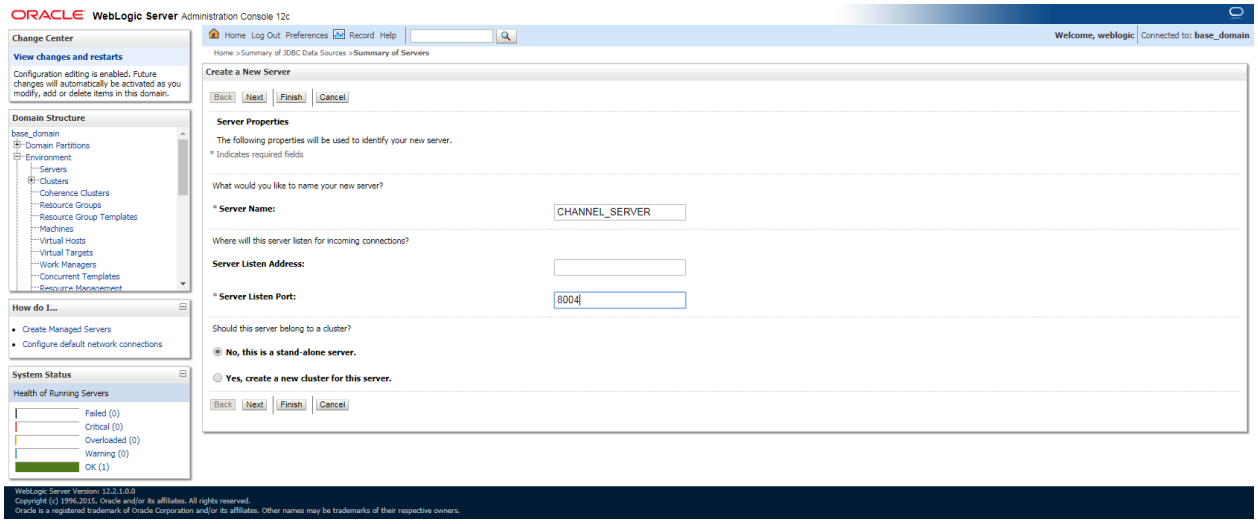
1. Click on **New** to create a new server.

   Enter the following details.

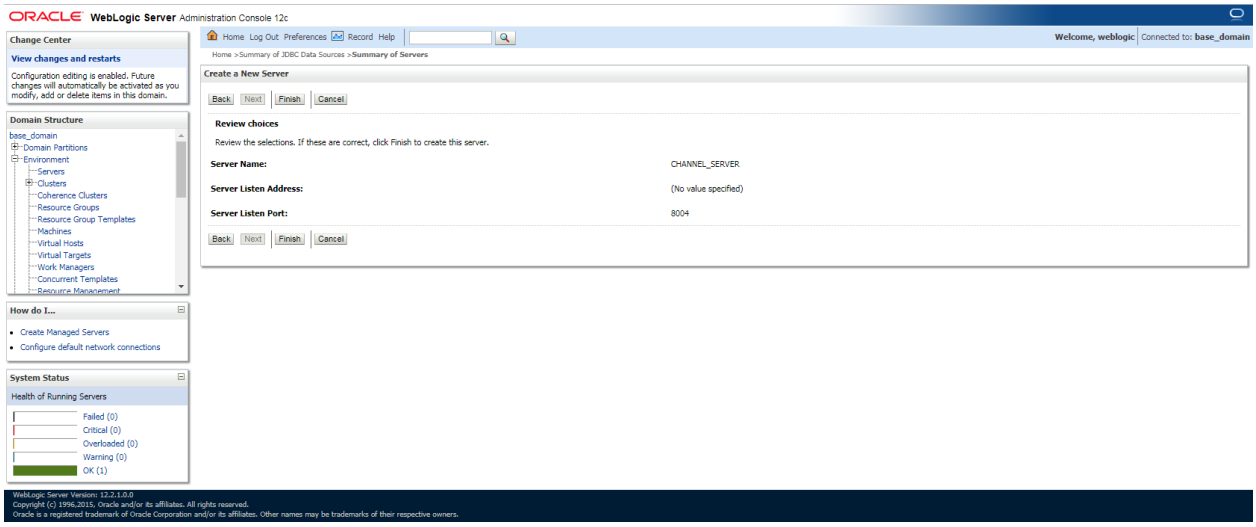
   Server Name : CHANNEL_SERVER

   Server Listen Port: 8004

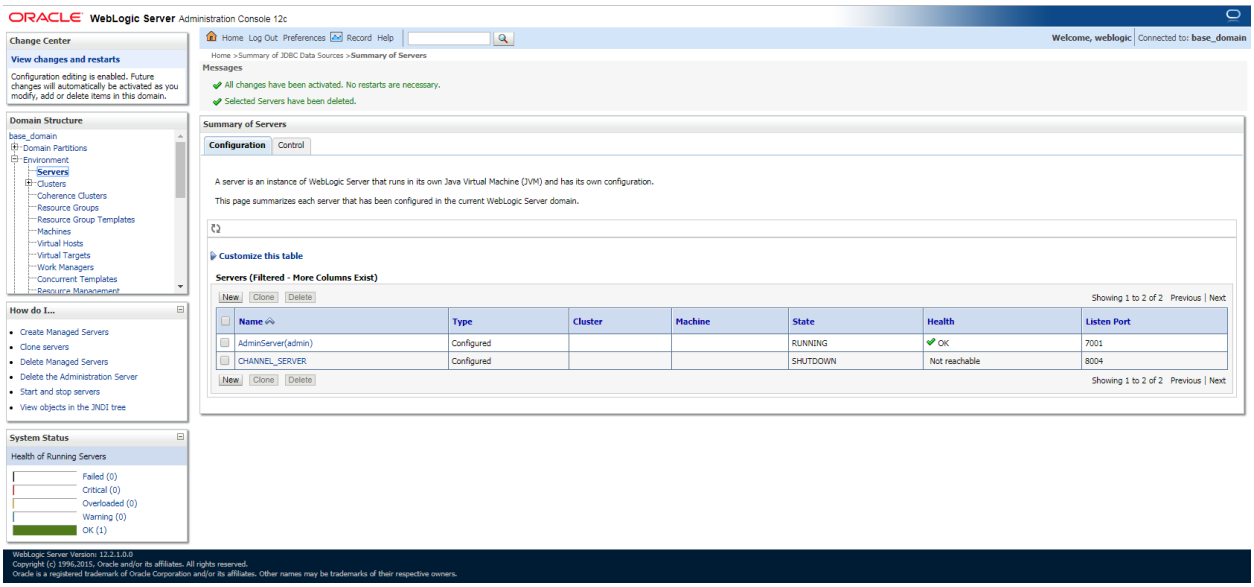
   Leave other fields as it is.



2. Click Next. The following screen will come.

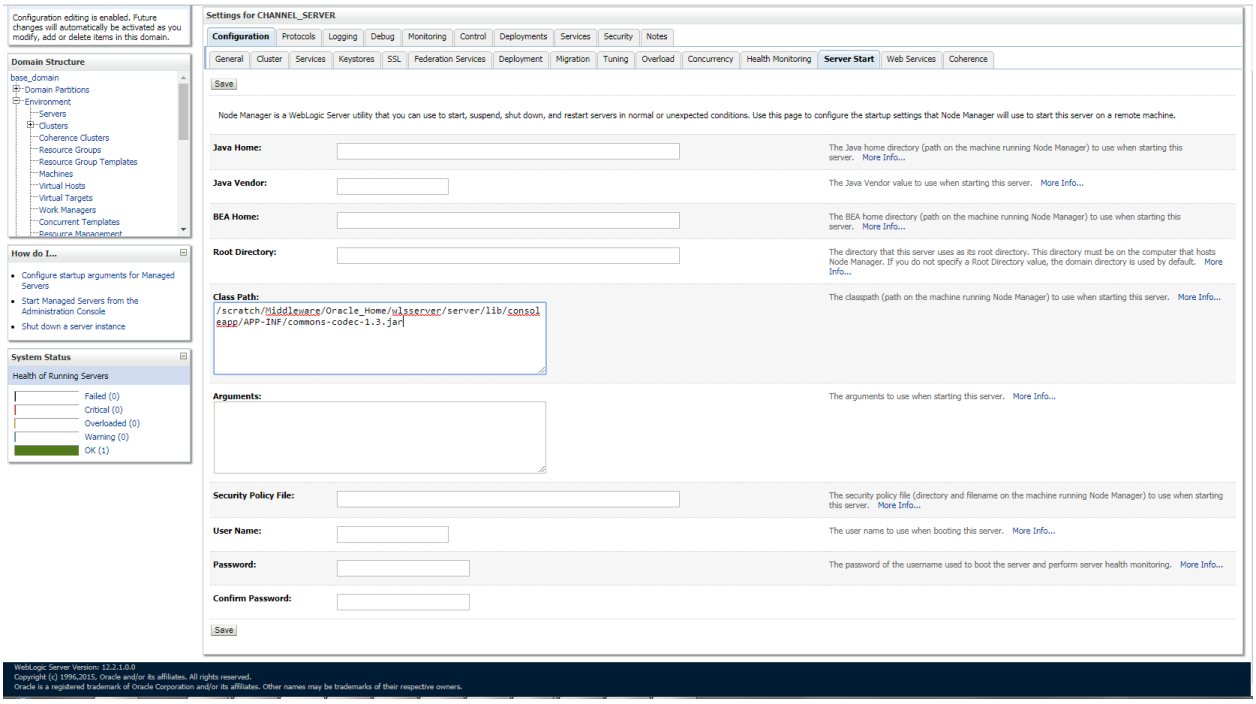


3. Click on **finish**. The following screen will come.



4. **Click** CHANNEL_SERVER, Under **Configuration** click the **Server Start** Menu,

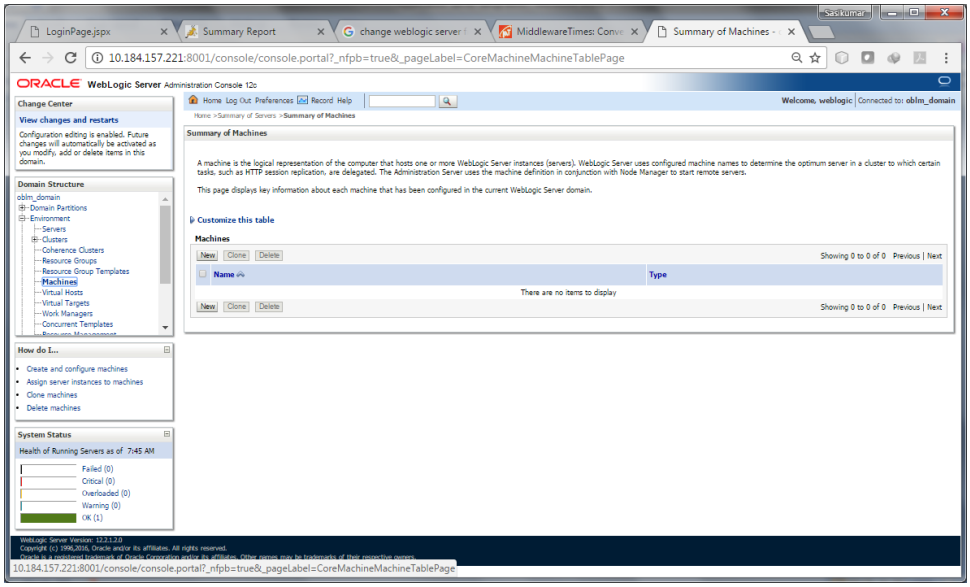
In **Class Path** field add the following Jar path **/<<weblogic home>>/wlserver/server/lib/consoleapp/APP-INF/lib/commons-codec-1.3.jar**



5. Click on **Save**.

1.2.2Create Machine

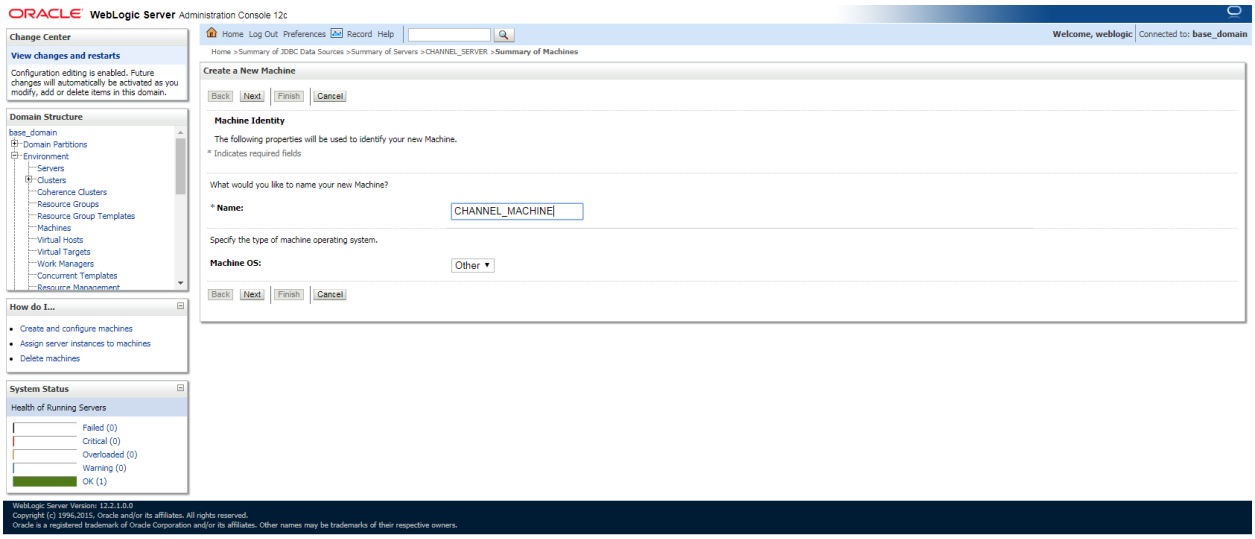
1. Under **Environment** click on **Machine** then following screen will come. Click on **New**.



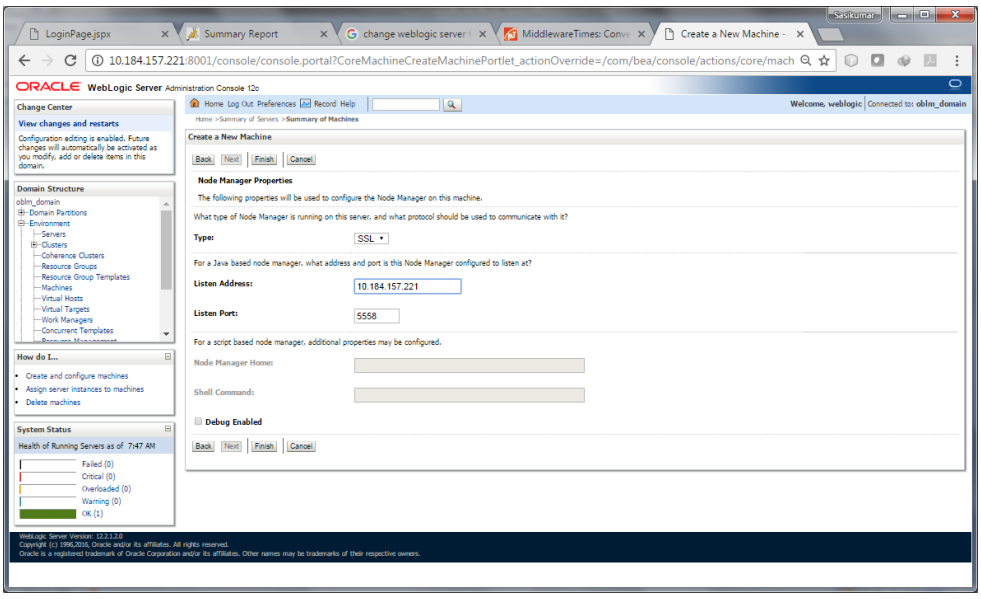
2. Give the following details.

Name: **CHANNEL_MACHINE**

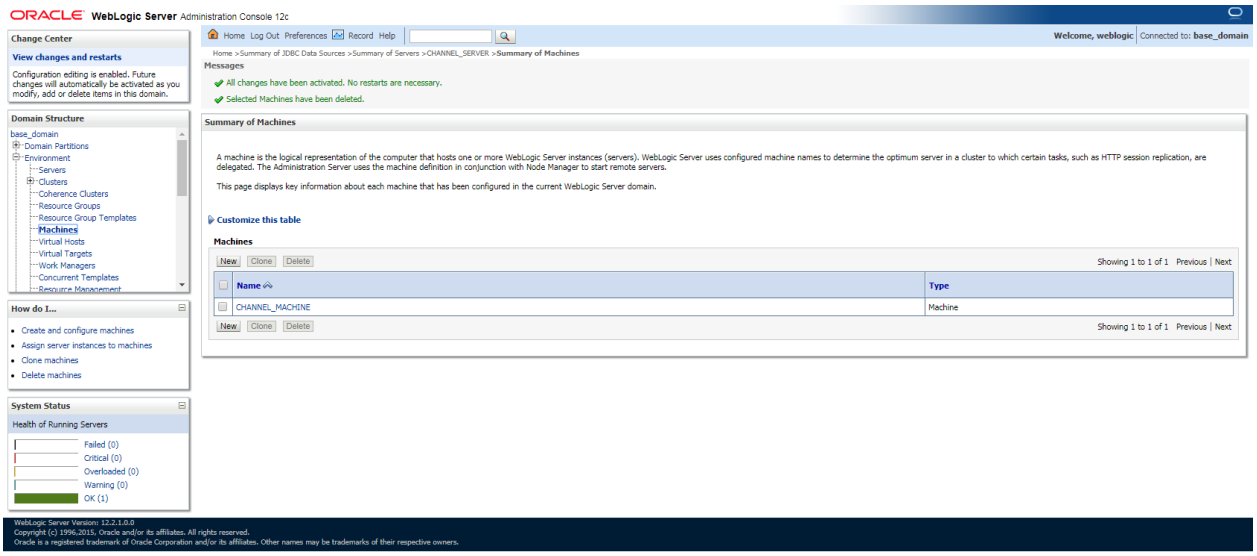
Machine OS: **others**



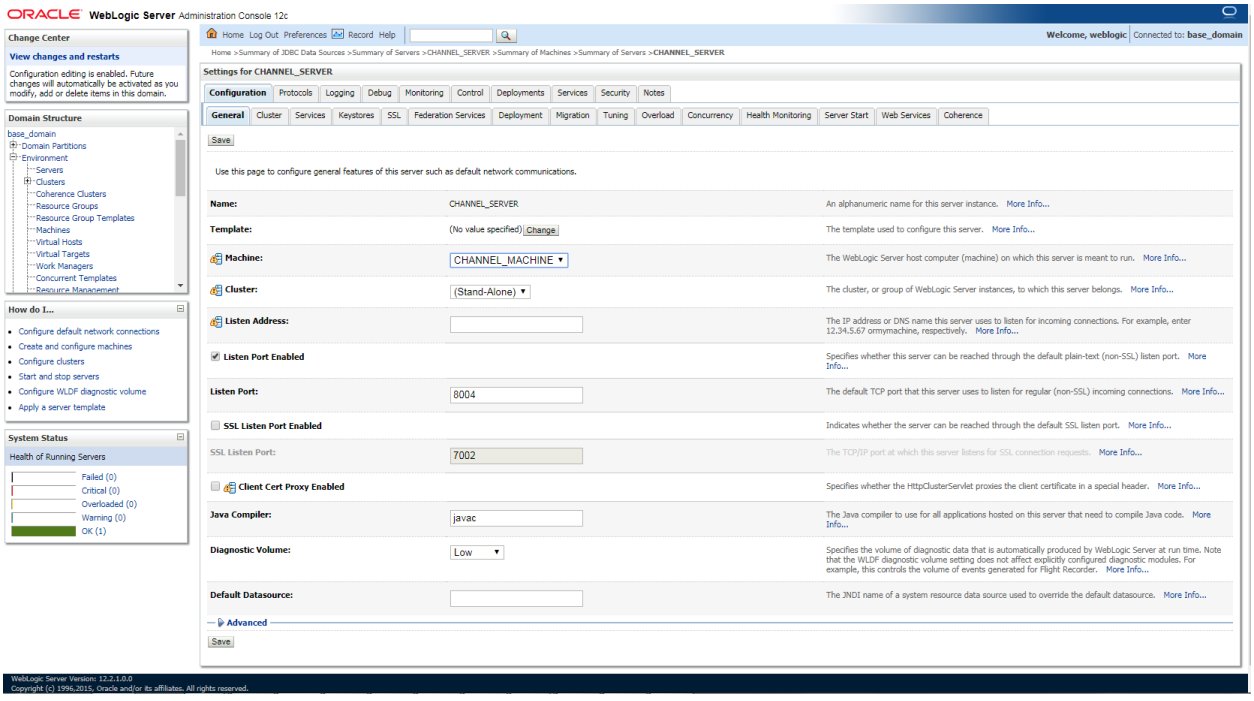
3. Click on **Next**. Enter "**localhost"** or the I.P. Address of the system as Listen **Address.** Click on **Finish.**



4. **CHANNEL_MACHINE** is created



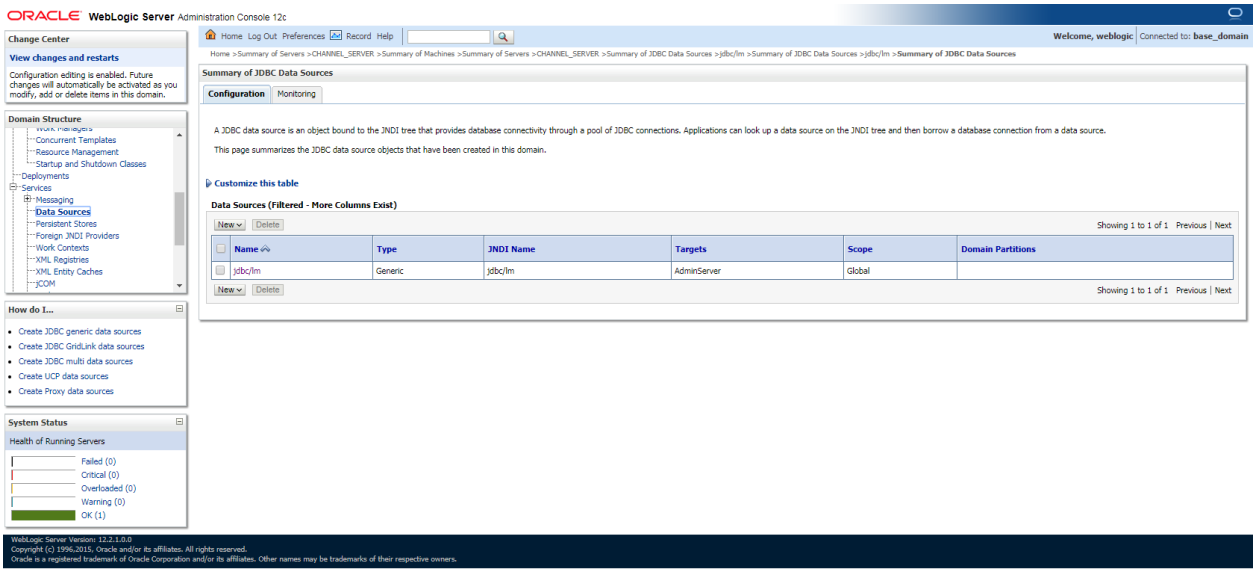
5. Map **CHANNEL_SERVER** to **CHANNEL_MACHINE**



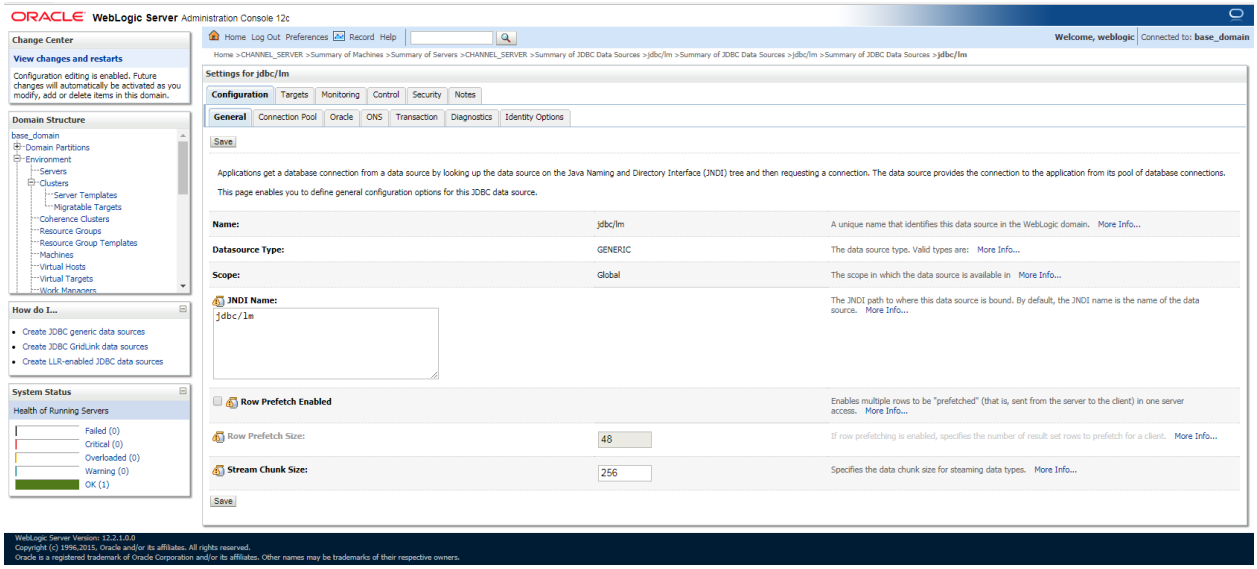
1.2.3 Connect Data Source

1.2.3.1 Connect LM Data source

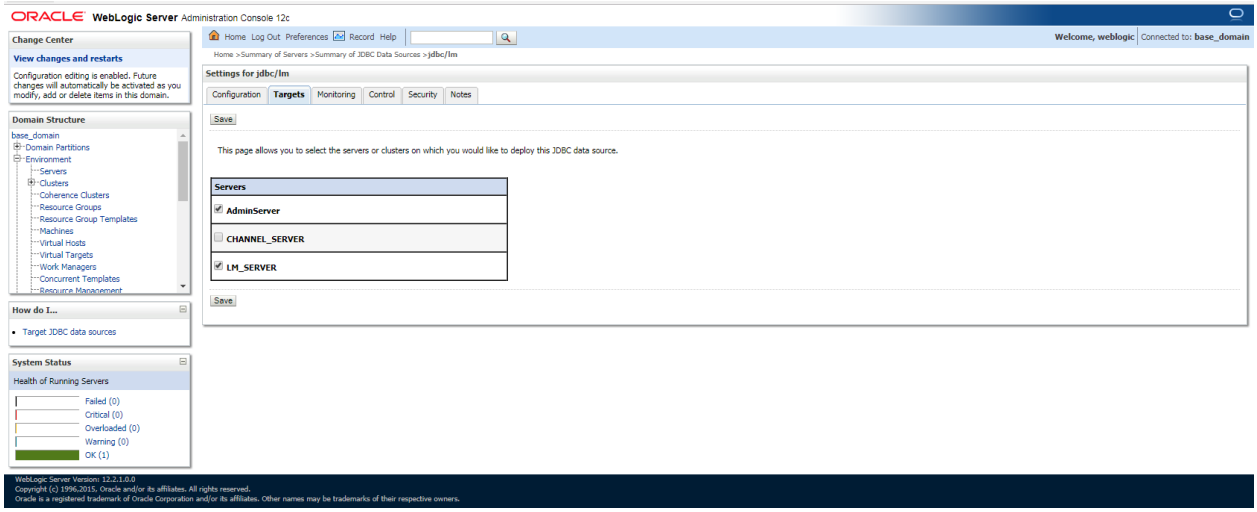
1. Click on the Data Sources under Services



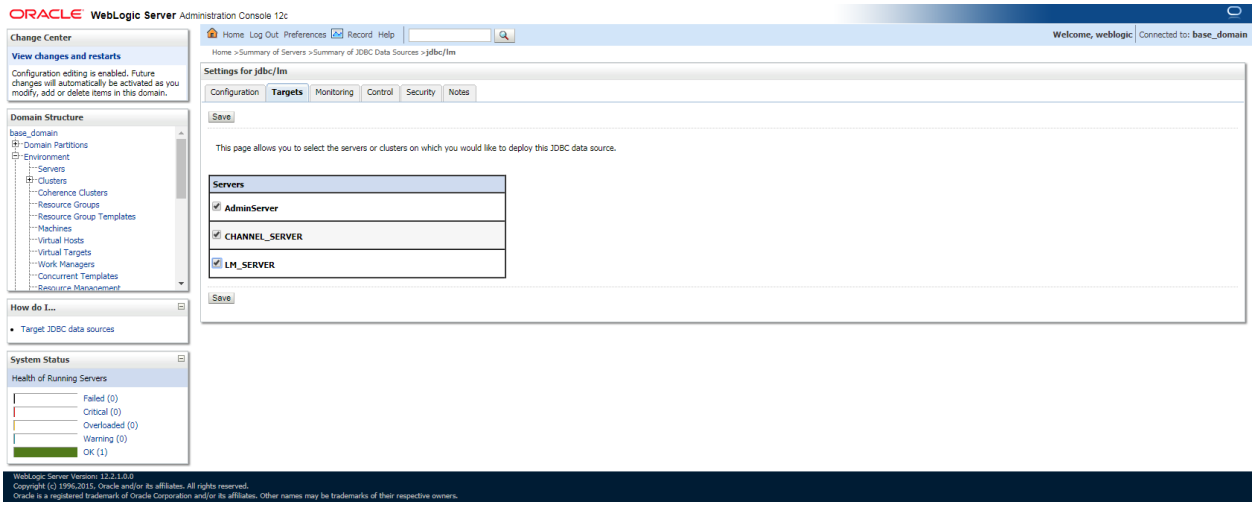
2. Click the jdbc/lm datasource link.



3. Click the Targets link.



4.Choose the **Target Server** as CHANNEL_SERVER and Click **Save** button.



1.2.4 Build Liquidity Managements Executable Files

1. Edit **HostConfig.properties** file

   Go to the below folder *(“…\HostWorkspace\host12.2.1\Common\com.ofss.glm.config\src\com\ofss\glm\config\properties”)* of the OSDC Package and Open **HostConfig.properties** and edit the below values:

   Protocol = http or https based on the protocol setting of the server

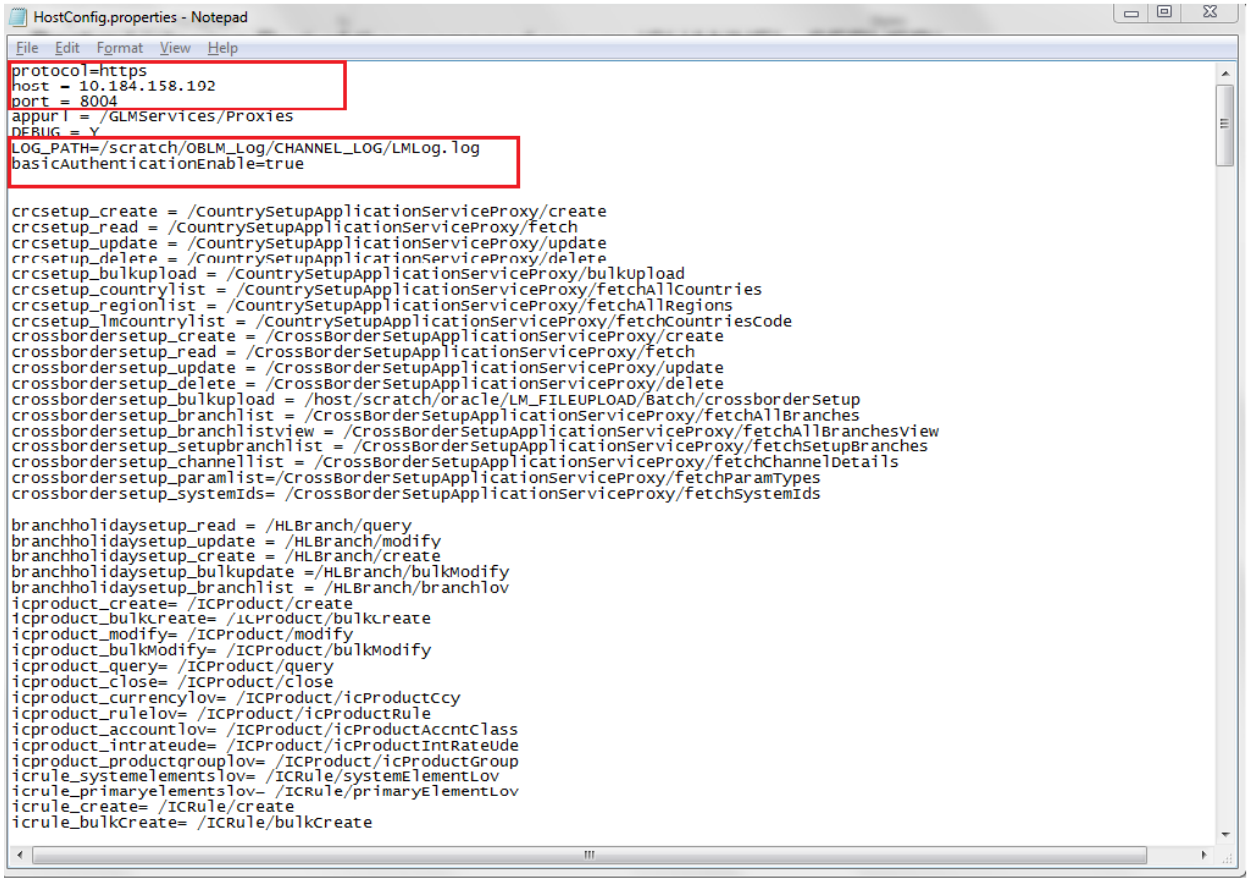
   Host = Host Name or IP of the Server that is Listening Address

   Port = Listening Port of the managed server (CHANNEL_SERVER)

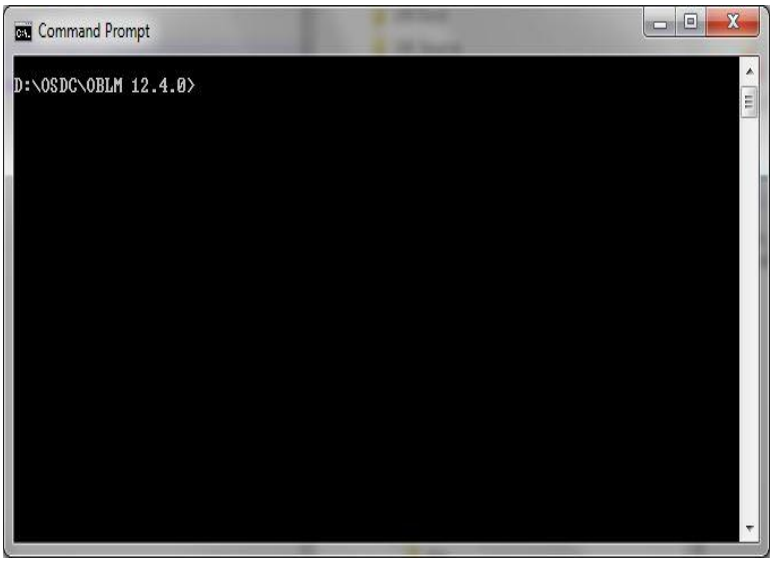
   basicAuthenticationEnable= Enable the basic Authentication for Rest Services.

   ****Note:** Create folder as mentioned in **LOG_PATH** variable

   ```
   Folder:
   D:\OSDC\OBLM 12.4\HostWorkspace\host12.2.1\Common\com.ofss.glm.config\src\com\ofss\glm\config\properties
   ```



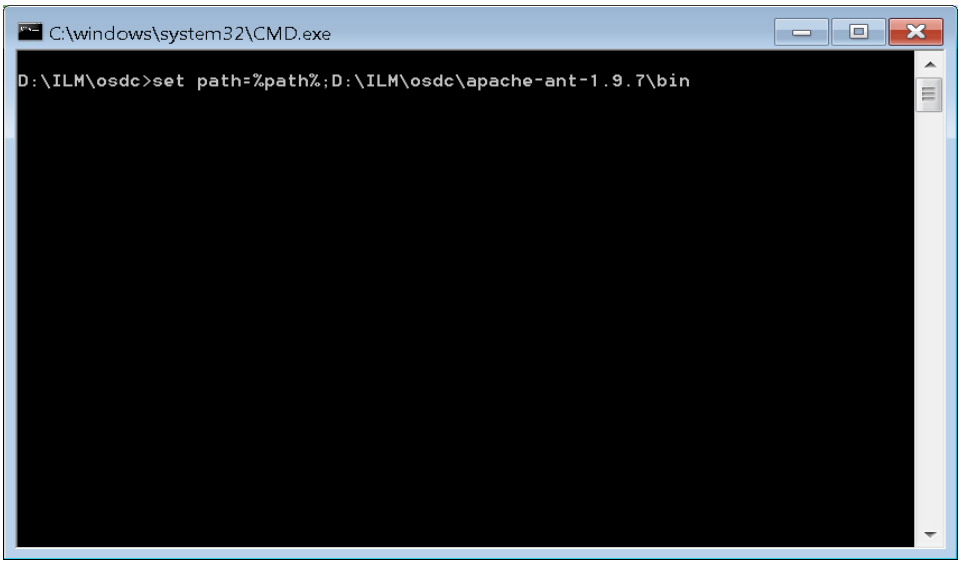
2. Open the Command prompt and Point it to the OSDC package location

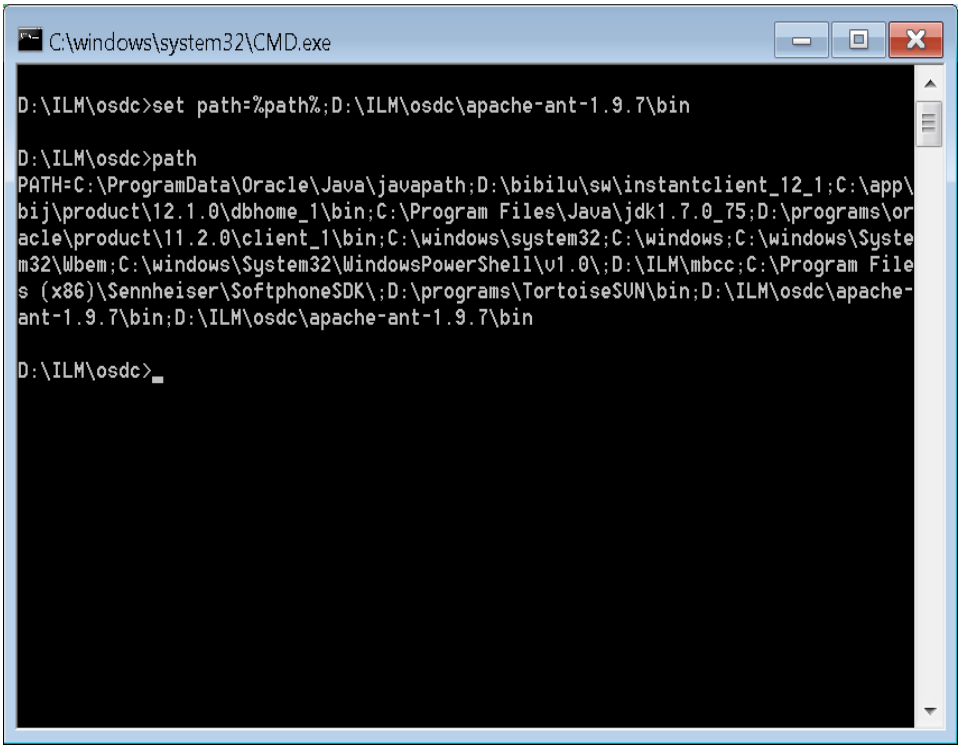


3. Add Path

Set the Ant path using the following Commands

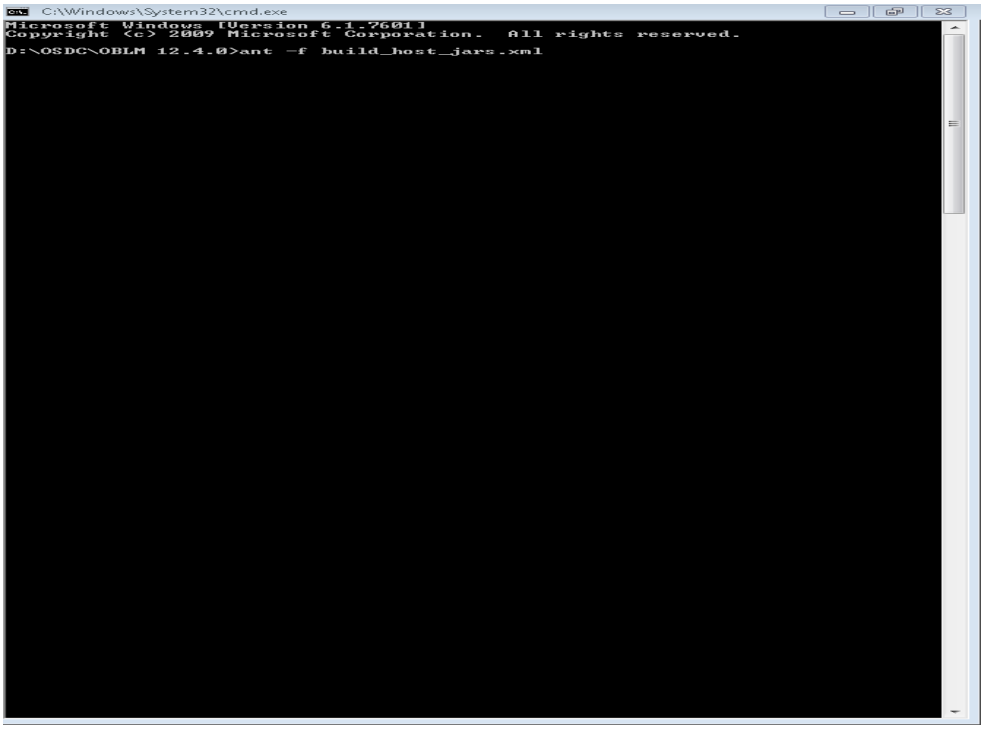
set path=%path%;D:\ILM\osdc\apache-ant-1.9.7\bin

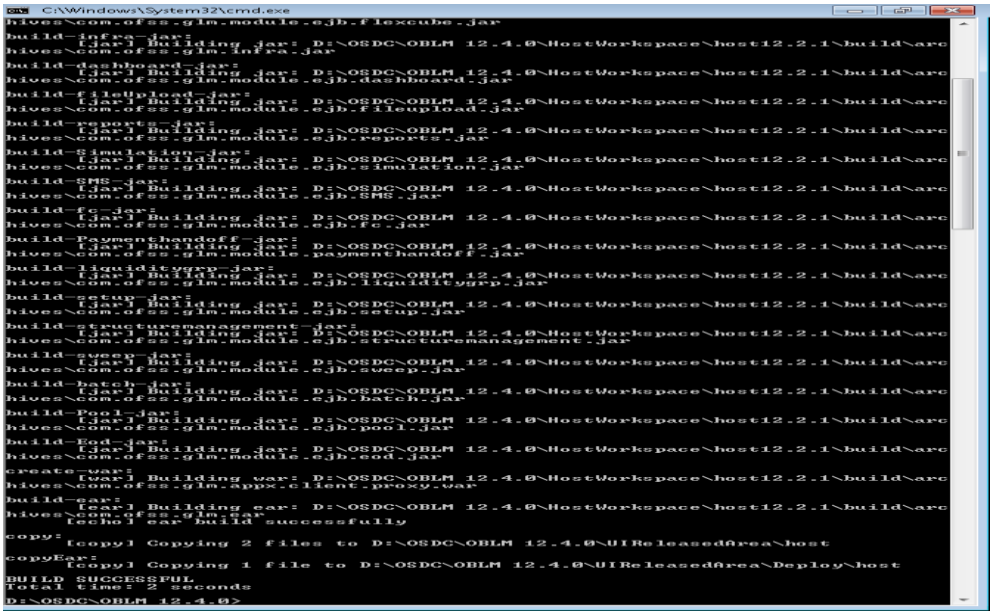




4. Enter the following command to build the Host side class files.

"**ant -f build_host_jars.xml"** and press **"Enter"**


C:\Windows\System32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
D:\OSDC\OBLM 12.4.0>ant -f build_host_jars.xml


C:\Windows\System32\cmd.exe
hives\com.ofss.glm.module.ejb.flexcube.jar
build-infra-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.infra.jar
build-dashboard-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.dashboard.jar
build-fileUpload-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.fileupload.jar
build-reports-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.reports.jar
build-simulation-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.simulation.jar
build-SMS-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.SMS.jar
build-fc-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.fc.jar
build-Paymenthandoff-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.paymenthandoff.jar
build-liquiditygrp-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.liquiditygrp.jar
build-setup-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.setup.jar
build-structuremanagement-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.structuremanagement.jar
build-sweep-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.sweep.jar
build-batch-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.batch.jar
build-Pool-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.pool.jar
build-Eod-jar:
[jar] Building jar: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.module.ejb.eod.jar
create-war:
[war] Building war: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.appx.client.proxy.war
build-ear:
[ear] Building ear: D:\OSDC\OBLM 12.4.0\HostWorkspace\host12.2.1\build\arc
hives\com.ofss.glm.ear
[echo] ear build successfully
copy:
[copy] Copying 2 files to D:\OSDC\OBLM 12.4.0\UIReleasedArea\host
copyEar:
[copy] Copying 1 file to D:\OSDC\OBLM 12.4.0\UIReleasedArea\Deploy\host
BUILD SUCCESSFUL
Total time: 2 seconds
D:\OSDC\OBLM 12.4.0>

1.2.5 Deploy Liquidity Management Executable Files

NOTE : If Oracle Fusion Middleware 12c Infrastructure (Example: Weblogic Server) is installed and any domain is available in local system, deployment can be done using the script see section 2.2.6.1 else Manual Deployment can be done see section 2.2.6.2.

1.2.5.1 Deployment using Scripts

1. Change the Following values in **Build.properties** file under the OSDC source

```
#Wed Apr 08 12:14:57 IST 2017

install.dir=C\:\\Oracle\\Middleware\\Oracle_Home
domain.path=\\scratch\\Middleware\\Oracle_Home\\user_projects\\domains\\oblm_domain
domain.name=OBLM_domain
host=10.184.157.221
port=8005

wls.ui.url=t3://10.184.157.221:8001
wls.ui.server.name=LM_SERVER
wls.ui.deploy.name=AAGLMShell-1
wls.ui.userName=weblogic
wls.ui.password=weblogic123
wls.ui.deploy.source=UIReleasedArea/Deploy/ui/buildScript/GLMShell.ear

wls.host.url=t3://10.184.157.221:8001
wls.host.server.name=LM_SERVER
wls.host.deploy.name=com.ofss.glm-1
wls.host.userName=weblogic
wls.host.password=weblogic123
wls.host.deploy.source=UIReleasedArea/Deploy/host/com.ofss.glm.ear


```

Use the following details:

i. **install.dir**= Point to it to the weblogic home folder in the local system. For Example: "*C:\Oracle\Middleware\Oracle_Home*". (Change it to the format as shown in the figure)

ii. **domain.path**= Point it to the weblogic domain folder created for the application (*i.e. channel_domain*). (Change it to the format as shown in the figure)

iii. **domain.name**= Enter the name of weblogic domain created in the local system. Leave it blank if no domain exists.

iv. **wls.ui.url**= Enter URL of the Weblogic Console in the following format **t3://<ip_address>:<admin_server_port_no>**

v. **wls.ui.username**= Enter the username of the Weblogic Console

vi. **wls.ui.password**= Enter the password of the Weblogic Console

vii. **wls.host.url**= Same as wls.ui.url

viii. **wls.host.username**= Same as wls.ui.username

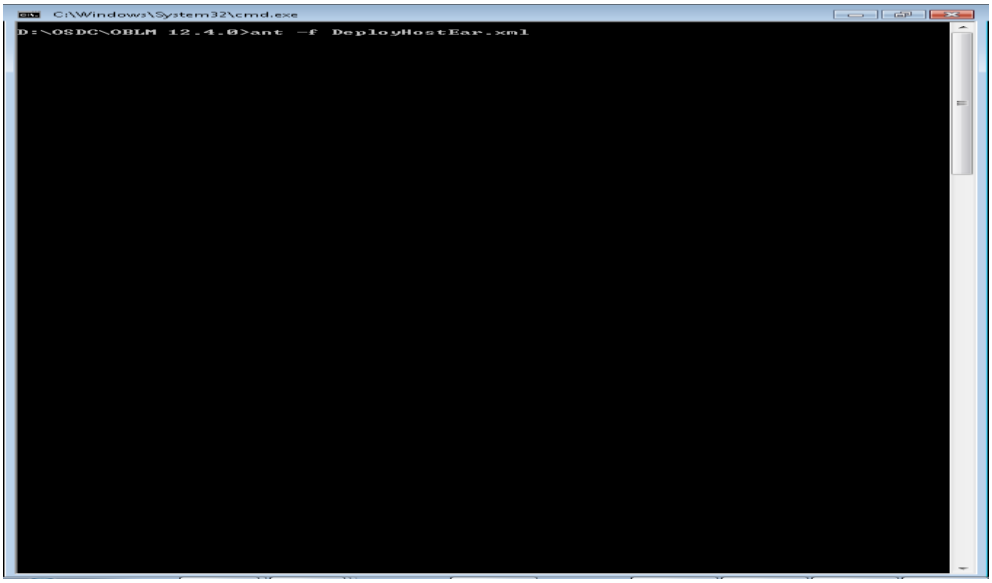
ix. **wls.host.password**= Same as wls.ui.password

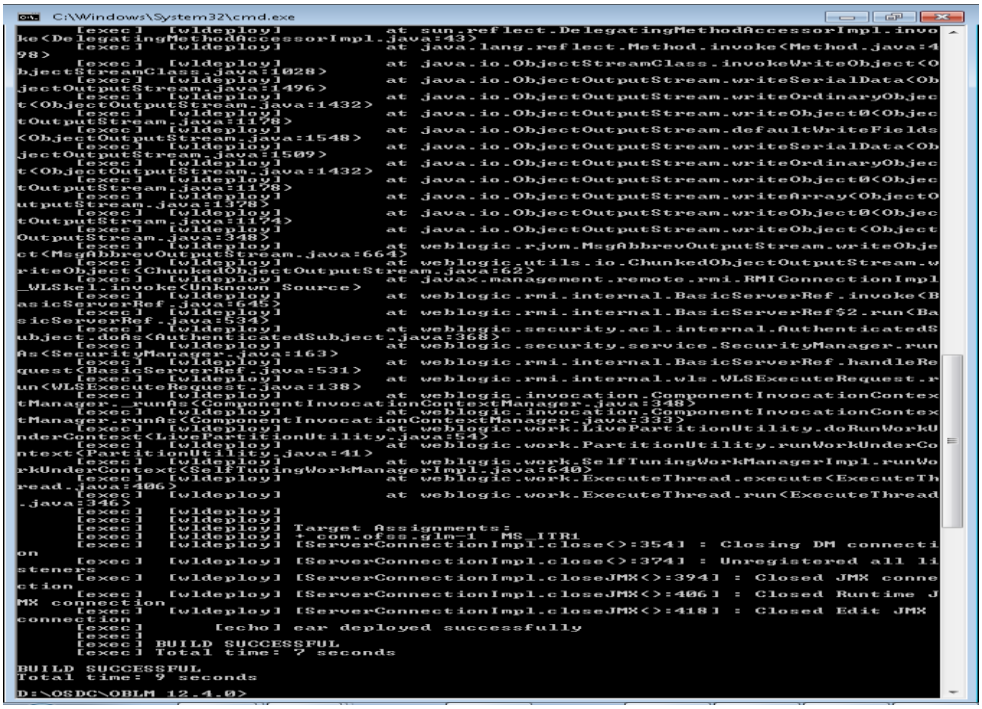
Define remaining properties as mentioned in above screen shot.

2. Open the Command prompt and Point it to the OSDC package location

3. Enter the following command to deploy the Host EAR file.

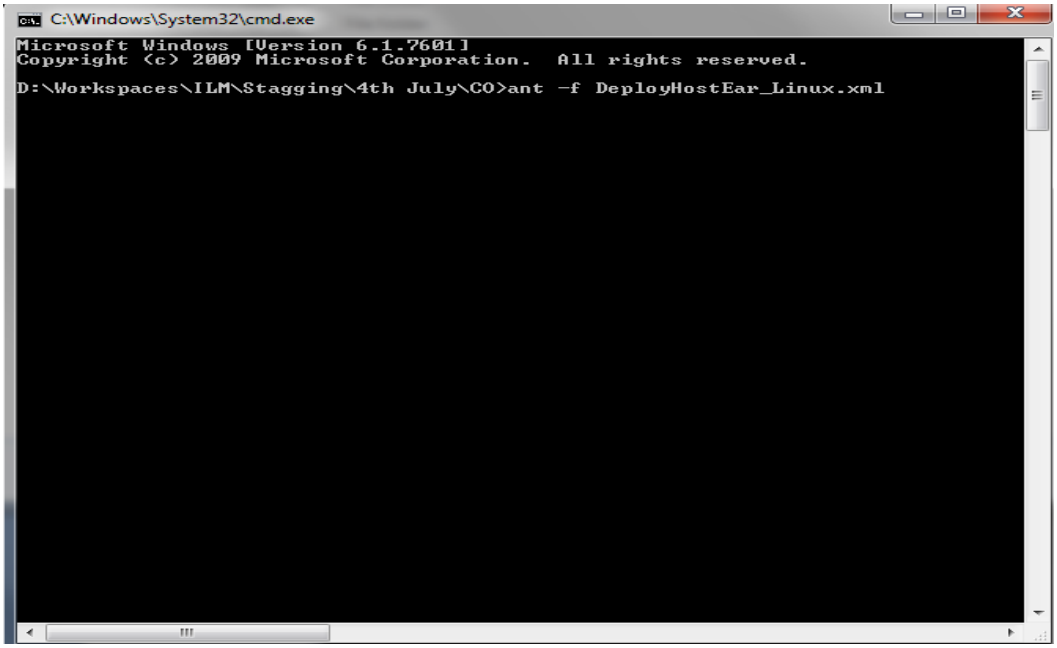
"**ant -f DeployhostEar.xml**" and press **"Enter" (Windows System)**





[Note: If user is having Linux system use the following command]

"**ant -f DeployHostEar_Linux.xml**" and press **"Enter" (Linux System)**

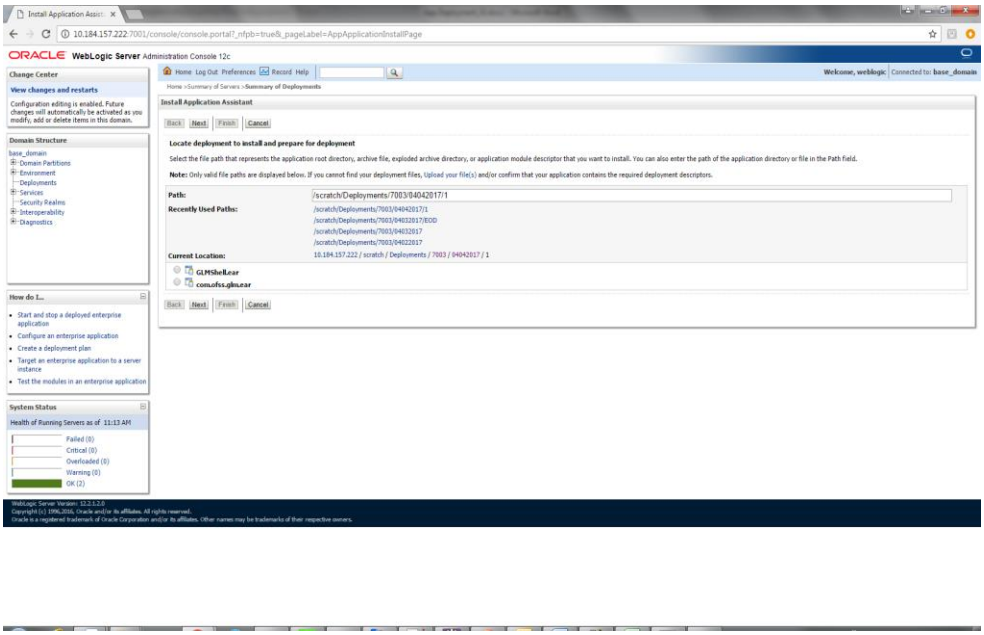


1.2.5.2 Manual Deployment:

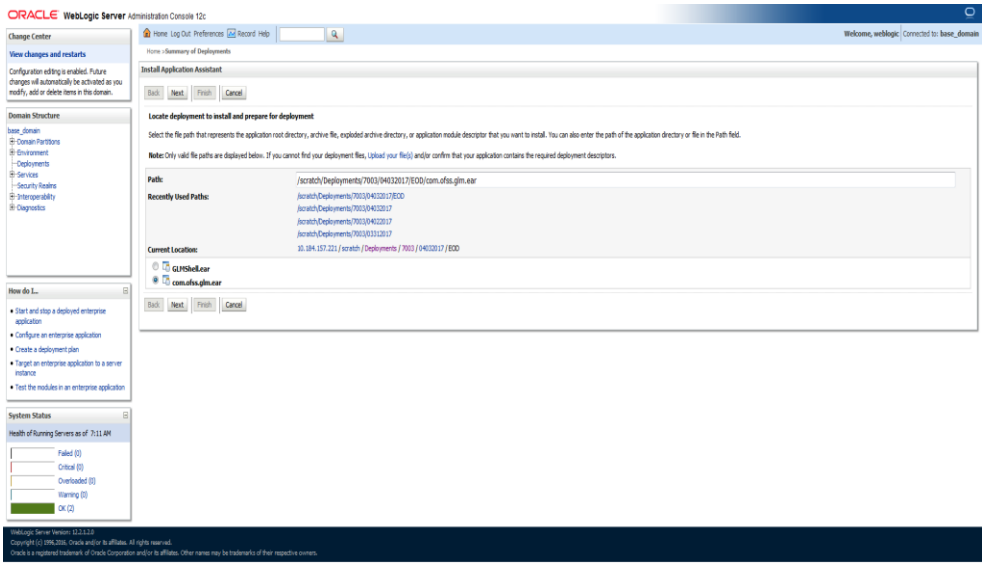
For Manual Deployment, Ear (Enterprise Application aRchive) file can be deployed either from Local Machine or from server where Weblogic Server is installed, In case if deployment needs to be done from server then use FTP/SFTP client for Windows in order to move the Ear file to the server and do the deployment as given below. Suggested Software for FTP/SFTP client for Windows: **Winscp**

1.2.5.2.1 CHANNEL EAR Deployment

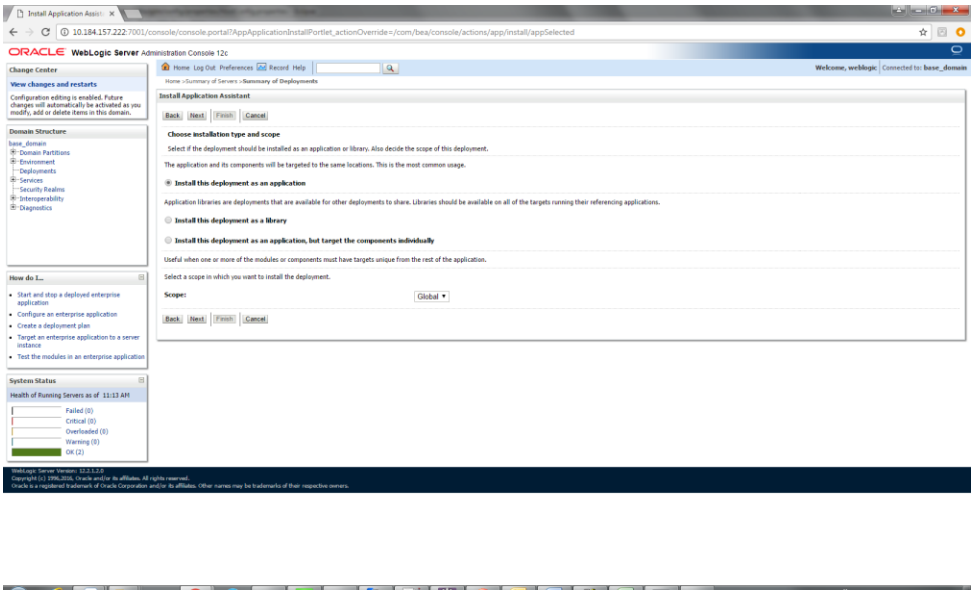
1. Click on **Install** and go o the Drive Location where the EAR files are kept.



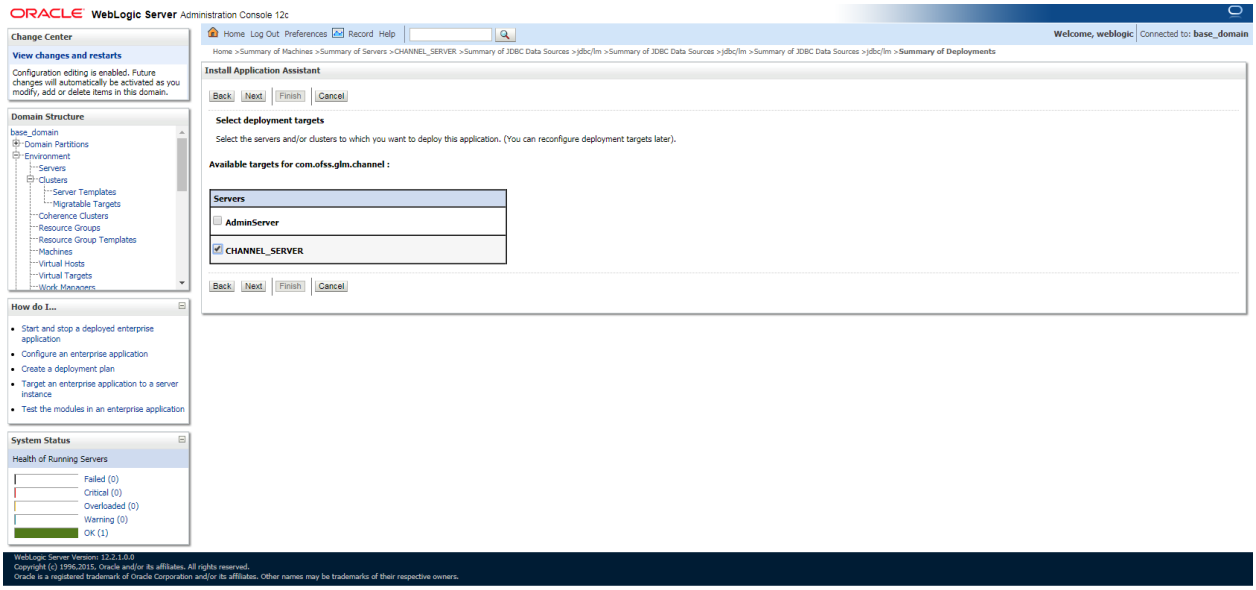
2. Select the Host EAR File **com.ofss.glm.channel.ear** and click on **Next**



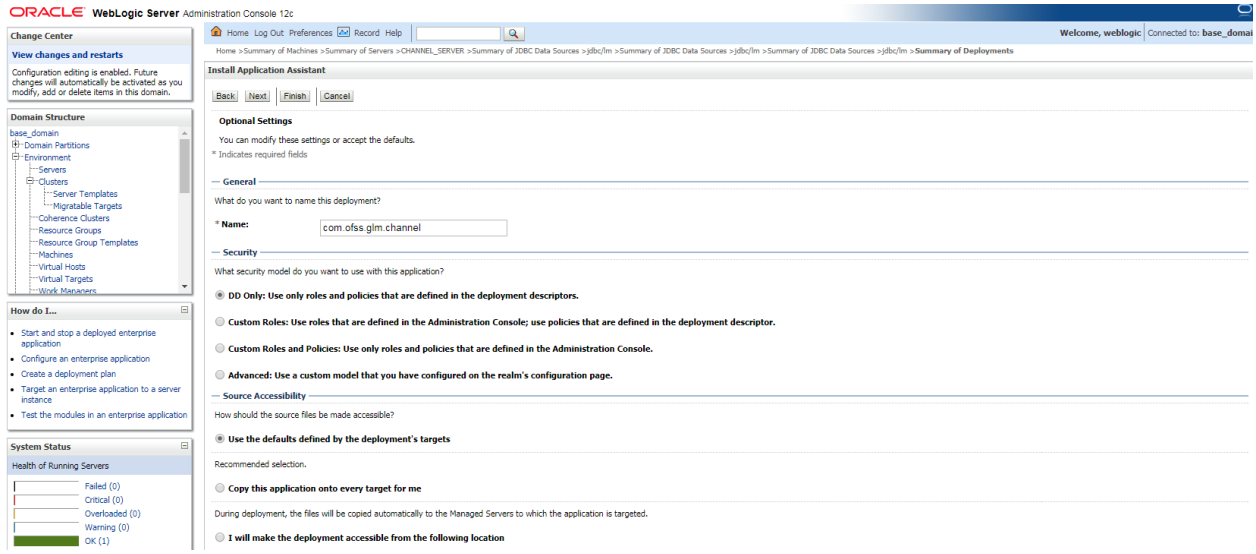
3. Click on **Next**



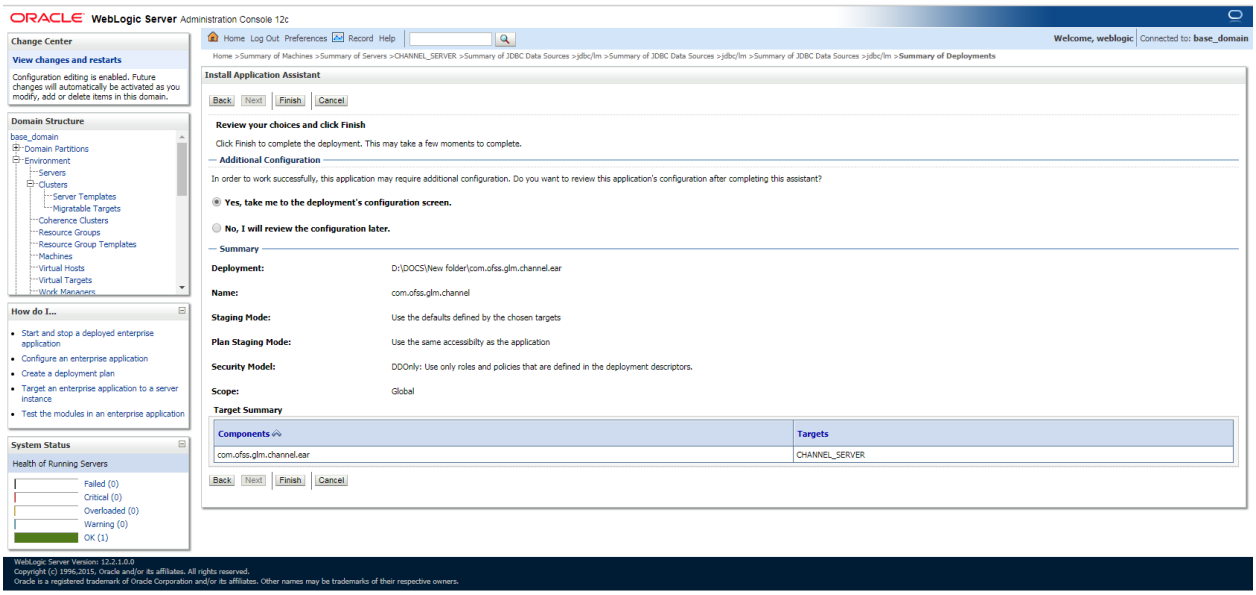
4. Select the target Server For example: **ITR2**



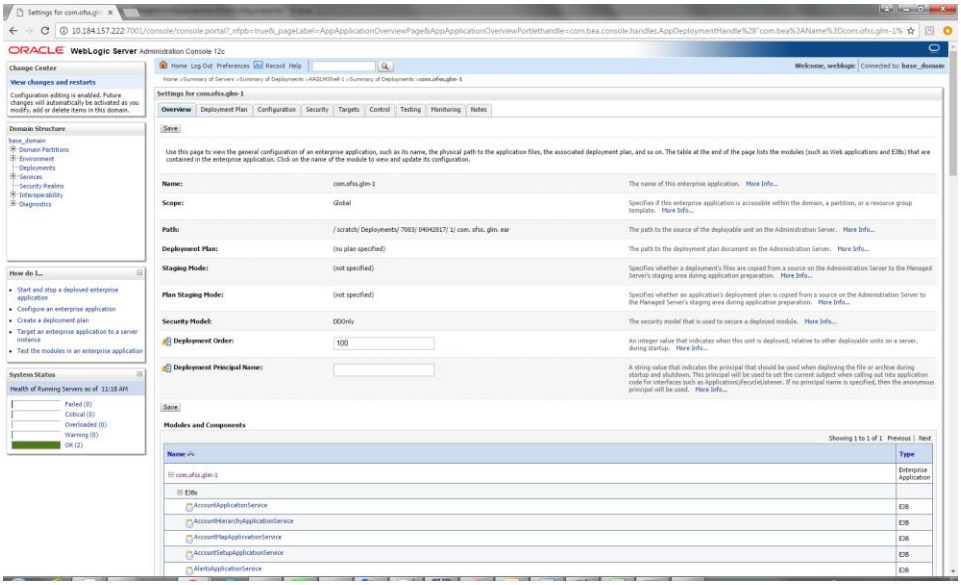
5. Select Name for the deployment file For Example: "**com.ofss.glm.channel**" and click on **Next**



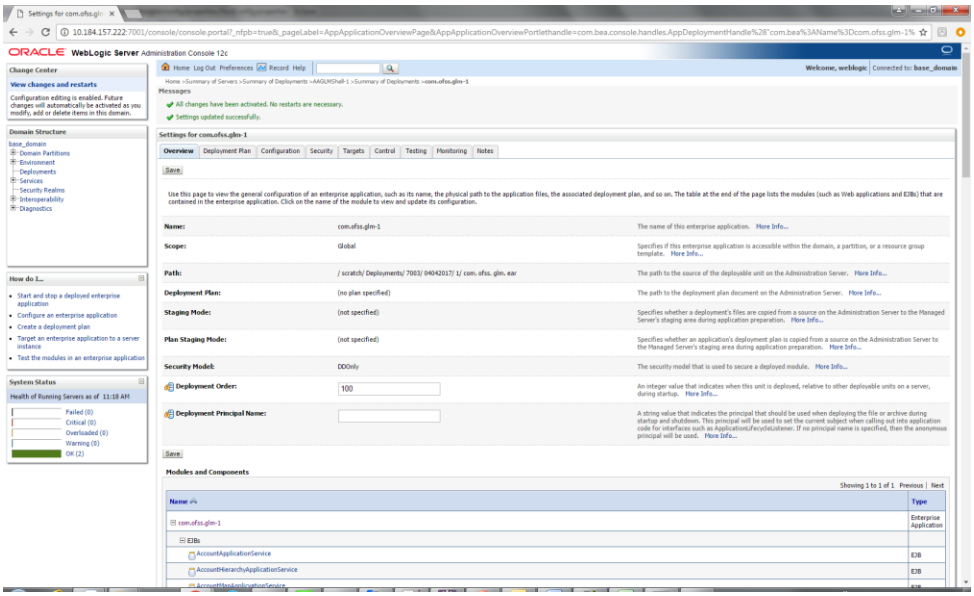
6. Click on **Finish**.



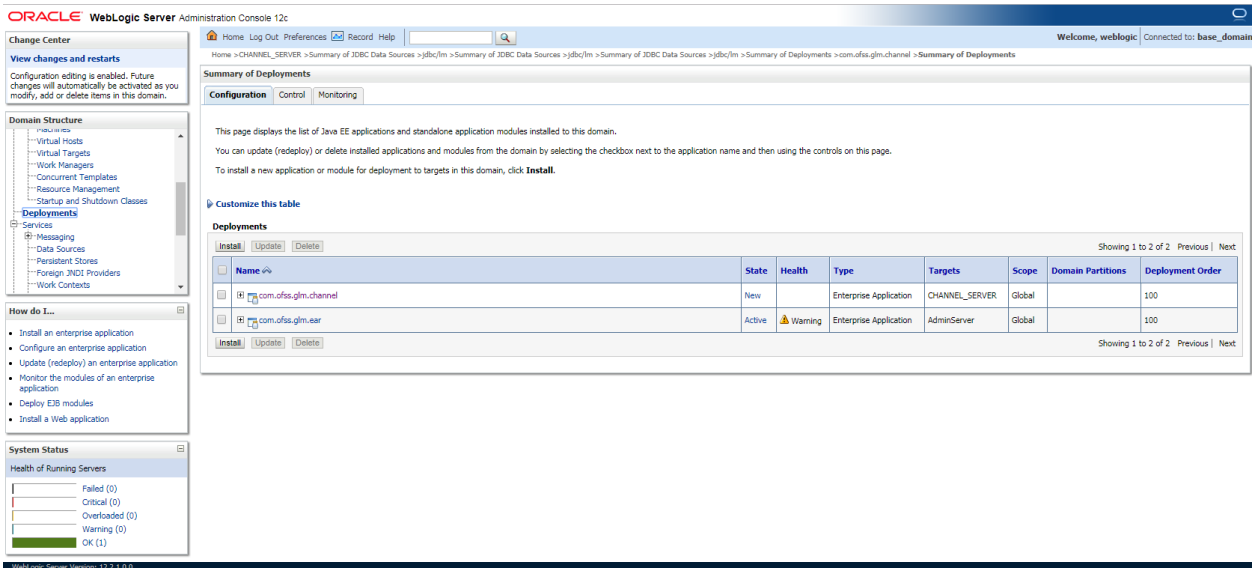
7. Click on **Save**



8. After Clicking Save the Follwing Screen should appear.



9. Click on Deployment and check the two newly installed EAR's are available and Health column should have the OK status for the EAR's



10. Config.xml change: Need to add the **<enforce-valid-basic-auth-credentials>** in config.xml file. Go to domain home and open the config.xml file. Add the below tags,

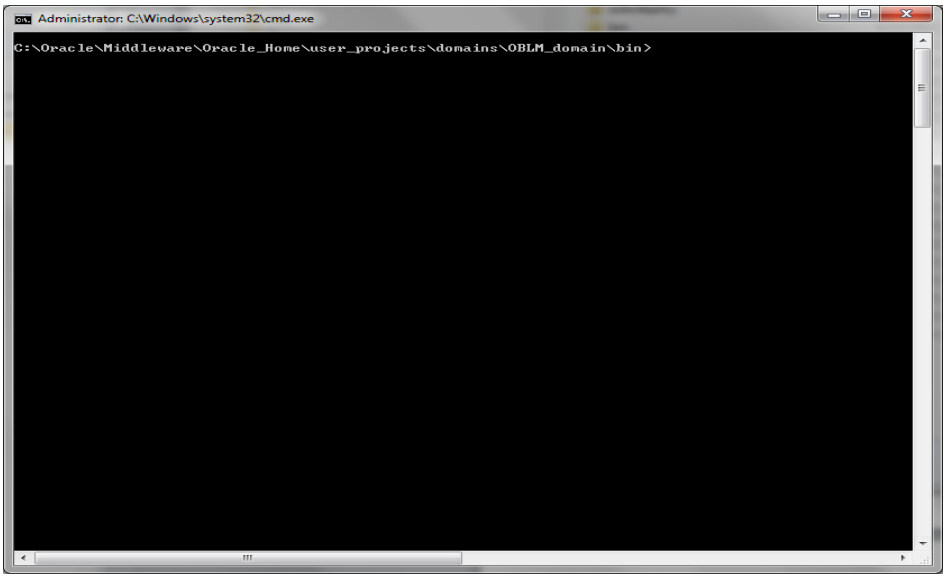
Weblogic domain config.xml file we have to create the below entry
(<WL_DOMAIN_HOME>/config/config.xml)

```
<security-configuration>
   <name>base_domain</name>
<enforce-valid-basic-auth-credentials>false</enforce-valid-basic-auth-credentials>
 </security-configuration>
```

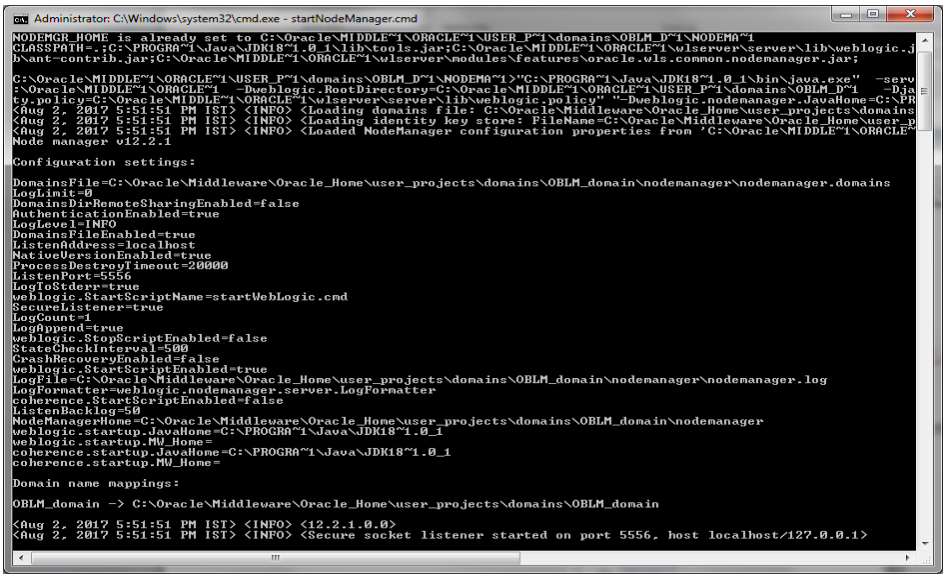
```
        <pas:min-numeric-or-special-characters>1</pas:min-numeric-or-special-characters>
      </sec:password-validator>
    </realm>
    <default-realm>myrealm</default-realm>
    <credential-encrypted>{AES}GBU3TOH0KbLHfh0pnvUwvI395Ss3Z0KYojybruFpZiOS/I5oP6712hvhmbrKTV5St/n6b1oQOGUTcQZKmAJq7bbky/u50Zml
    <node-manager-username>weblogic</node-manager-username>
    <node-manager-password-encrypted>{AES}DQiNZXZ5AywWquUEu+OoZfQ72ANjOfq1lBIwxiGpX7I=</node-manager-password-encrypted>
    <enforce-valid-basic-auth-credentials>false</enforce-valid-basic-auth-credentials>
    <use-kss-for-demo>true</use-kss-for-demo>
  </security-configuration>
```

1.2.6 Start The Server

1. Go to the domain path of oblm_domain, (e.g. …\Middleware\Oracle_Home\user_projects\domains\OBLM_domain\). Right click on **bin** folder and Select the "**CMD Prompt Here as Administrator**" to open the Command Prompt.

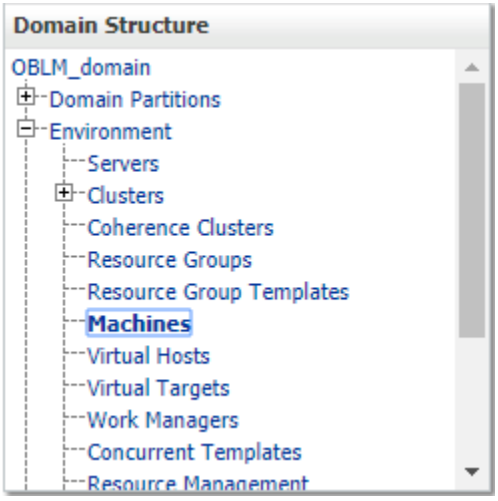


2. Run the **startNodeManager.cmd** file

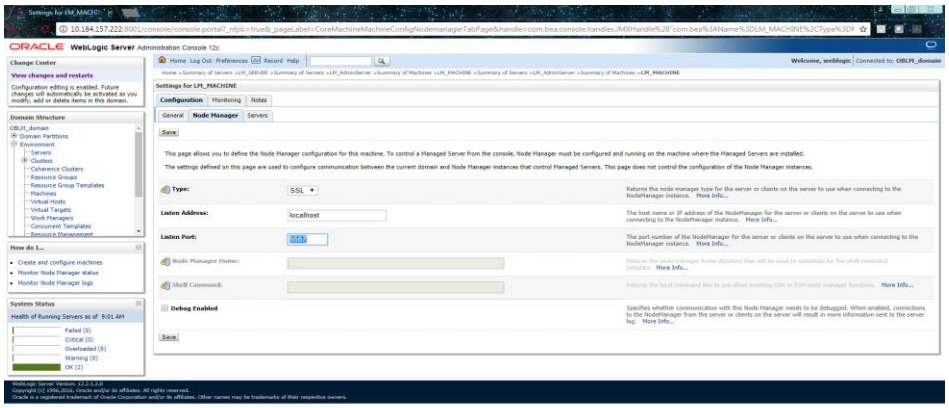


Note: If you get an error stating “5556 port is already in use” then follow the below steps before starting the node manager.

i. Go to Weblogic Console and click on **Machines** under the **Environment** tab in **Domain Structure** section



ii. Click on **LM_MACHINE** and then go to **Node Manager** tab



iii. Change the **Listen Port** to 5557 and click on **Save**

iv. Go to …/ Oracle/Middleware/Oracle_Home/user_projects/domains/oblm_domain/nodemanager path and edit **nodemanager.properties** file as follows,

ListenPort=5557

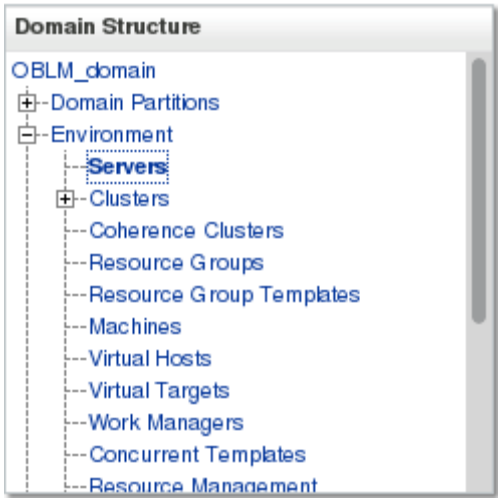
Leave the rest of the properties as it was.

```
#Tue Jul 18 05:12:27 EDT 2017
#Node manager properties
#Tue Jul 18 04:13:25 EDT 2017
DomainsFile=/scratch/oraofss/Oracle/Middleware/Oracle_Home/user_projects/domains/oblm_domain/nodemanager/nodemanager.domains
LogLimit=0
PropertiesVersion=12.2.1.2.0
AuthenticationEnabled=true
NodeManagerHome=/scratch/oraofss/Oracle/Middleware/Oracle_Home/user_projects/domains/oblm_domain/nodemanager
JavaHome=/scratch/jdk/jdk1.8.0_112
LogLevel=INFO
DomainsFileEnabled=true
ListenAddress=localhost
NativeVersionEnabled=true
ListenPort=5556
LogToStderr=true
weblogic.StartScriptName=startWebLogic.sh
SecureListener=true
LogCount=1
QuitEnabled=false
LogAppend=true
weblogic.StopScriptEnabled=false
StateCheckInterval=500
CrashRecoveryEnabled=false
weblogic.StartScriptEnabled=true
LogFile=/scratch/oraofss/Oracle/Middleware/Oracle_Home/user_projects/domains/oblm_domain/nodemanager/nodemanager.log
LogFormatter=weblogic.nodemanager.server.LogFormatter
ListenBacklog=50
```

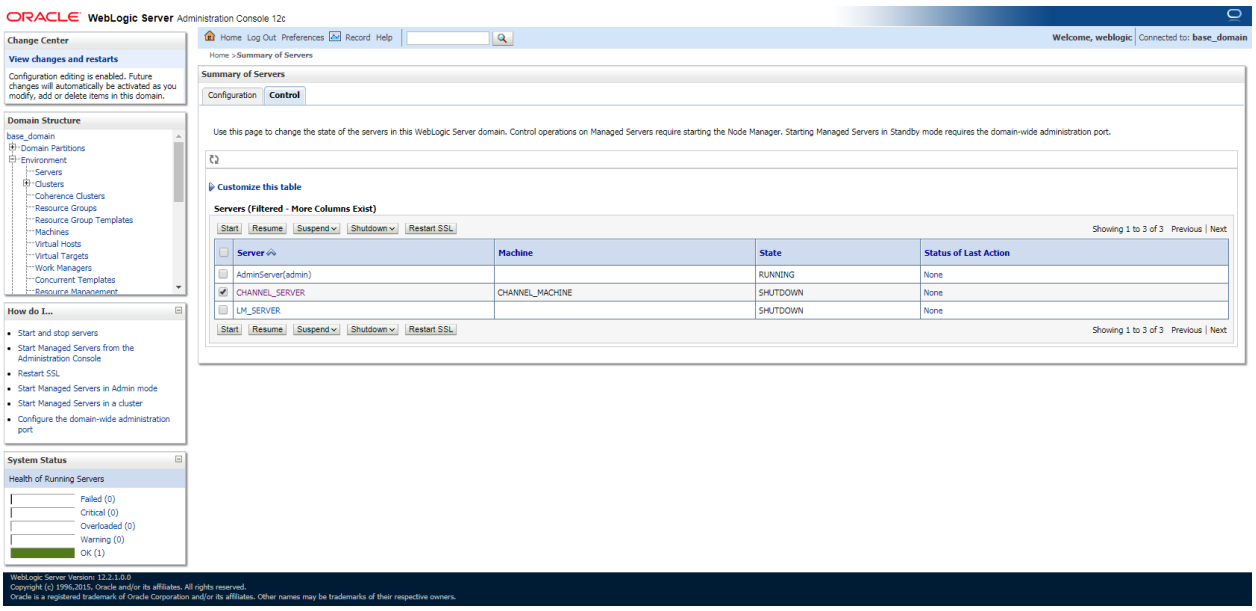
v. Save the file

vi. Now, repeat the steps of Section 2.2.7

3. Go to Weblogic console and click on **Server** under the **Environment** tab in **Domain Structure** section



4. You should see the **Summery of Servers** page. Click on **Control** tab



4. Select **CHANNEL_SERVER** and click **Start** button

5. Wait till the Server State change to **RUNNING**

1.2.7 Configure SSL

To Configure SSL, Please refer to the SSL Configuration Manual (**Oracle_Banking_Liquidity_Management_12 4 0 0 0_SSL_Configuration.pdf**)

1.2.8 Test Channel Setup

Channel Support Service Details: Currently Channel have five services. Below have the steps for testing the services.

Service 1 : List of Structures

URL :
http://10.184.159.200:8003/GLMServices/Proxies/StructureMaintenanceApplicationServiceProxy/getMaxVersionStructuredetails

Request:

{"structureKey":

{

"structureId":"ST3916"

},

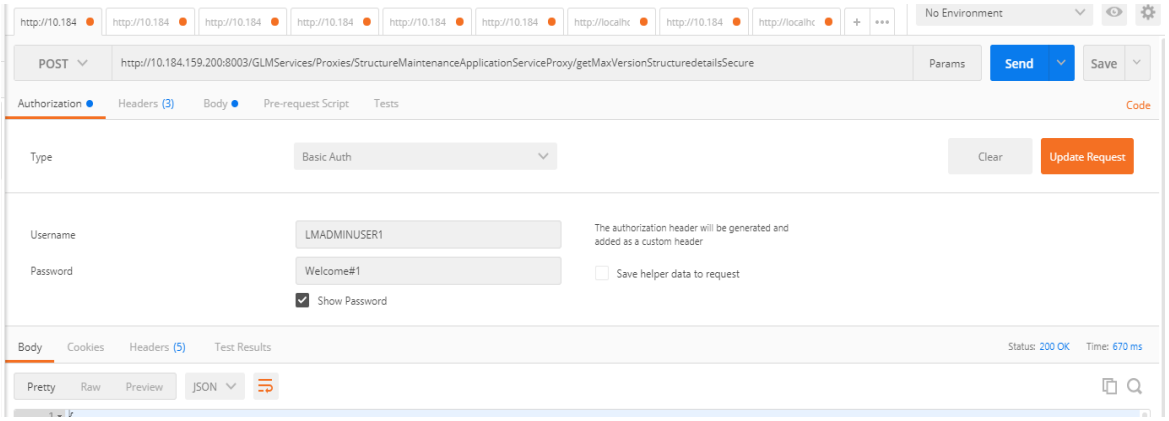
"customerId":"Google",

"accountlst":[],

"eodexecution":false

}

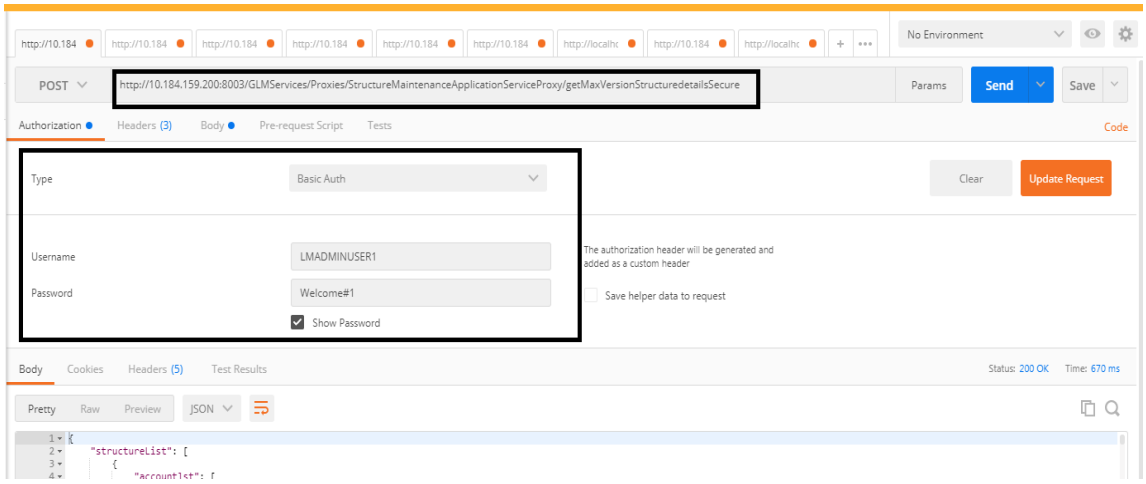
1, Open any Rest Client app EX: (POSTMAN) and select service whether GET or POST and provide the need request in body section.



2, Enter the URL and user credentials in Authorization section.

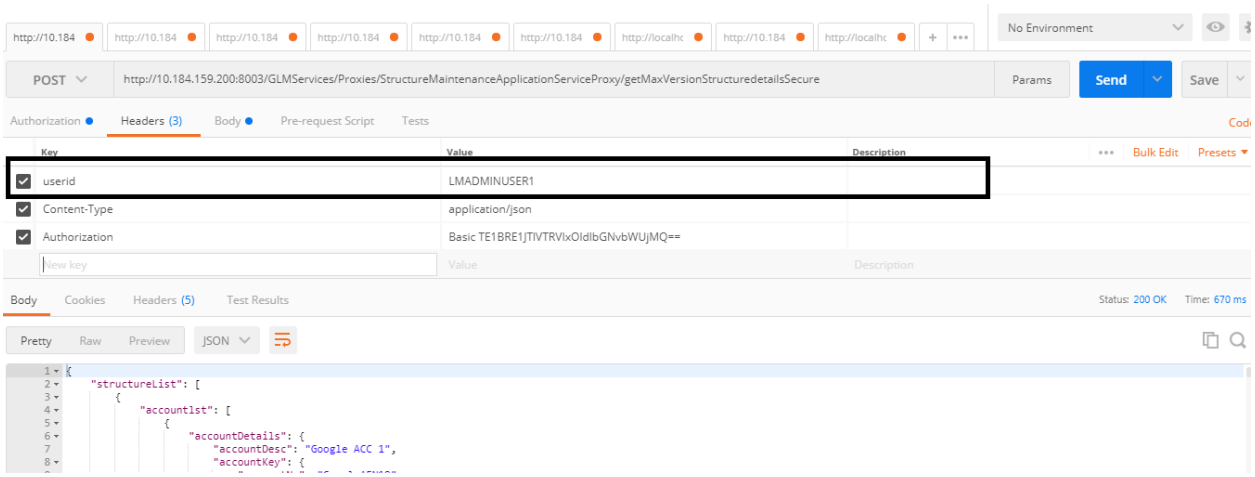
Username : LMADMINUSER1

Password : Welcome#1



3. Enter the userid in this section as shown below,

userid : LMADMINUSER1



4. Pass below input in body section,

{"structureKey":

{

"structureId":"ST3916"

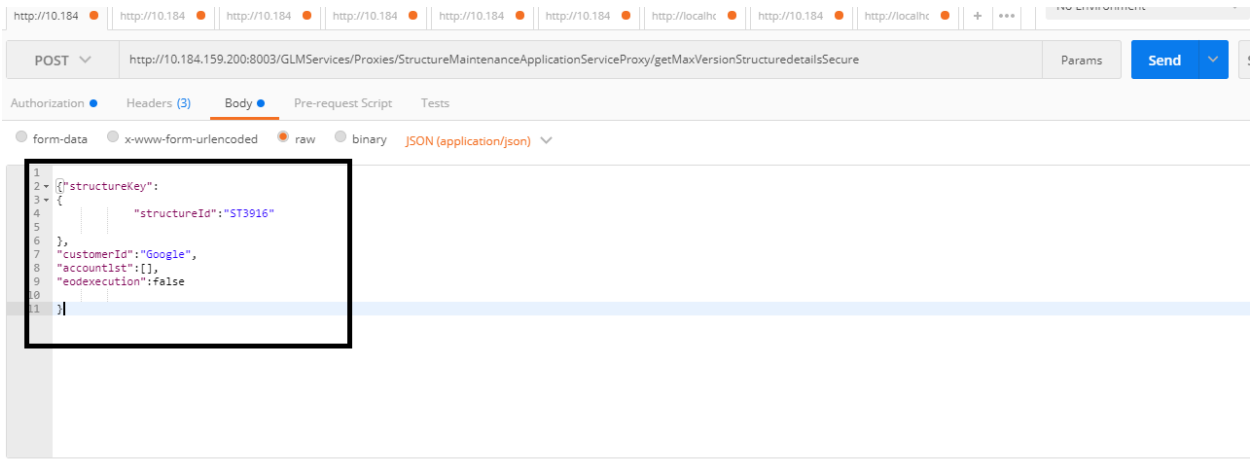
},

"customerId":"Google",

"accountlst":[],

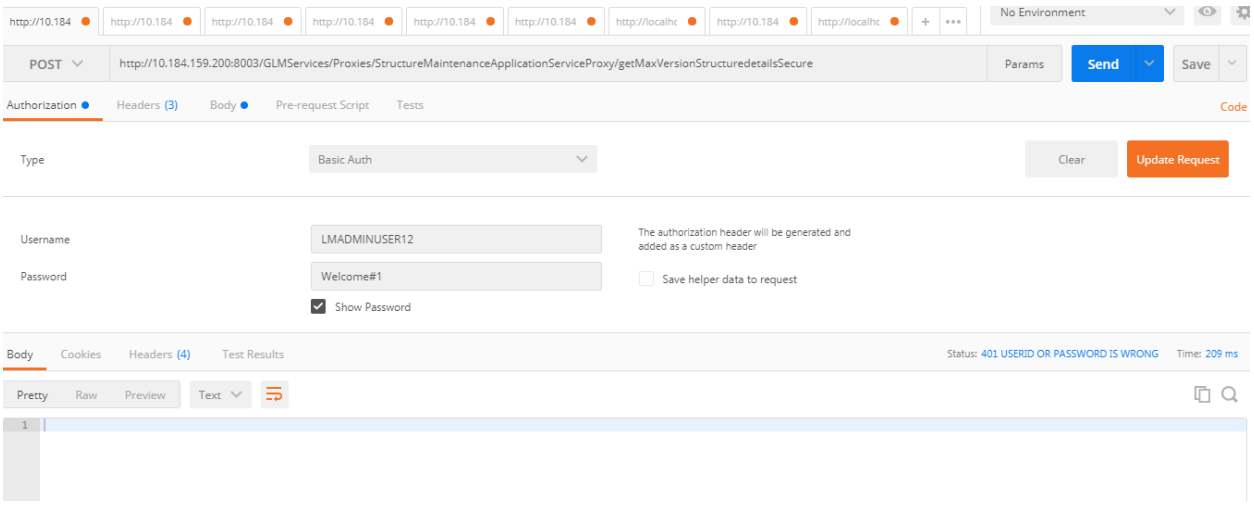
"eodexecution":false

}

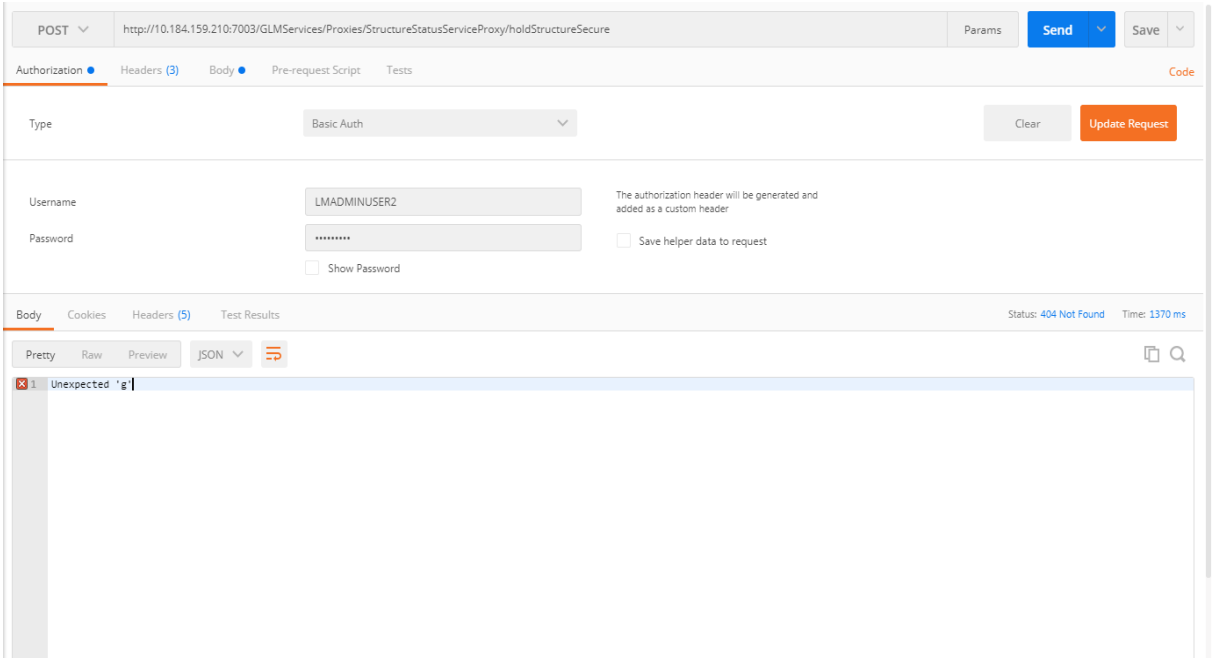


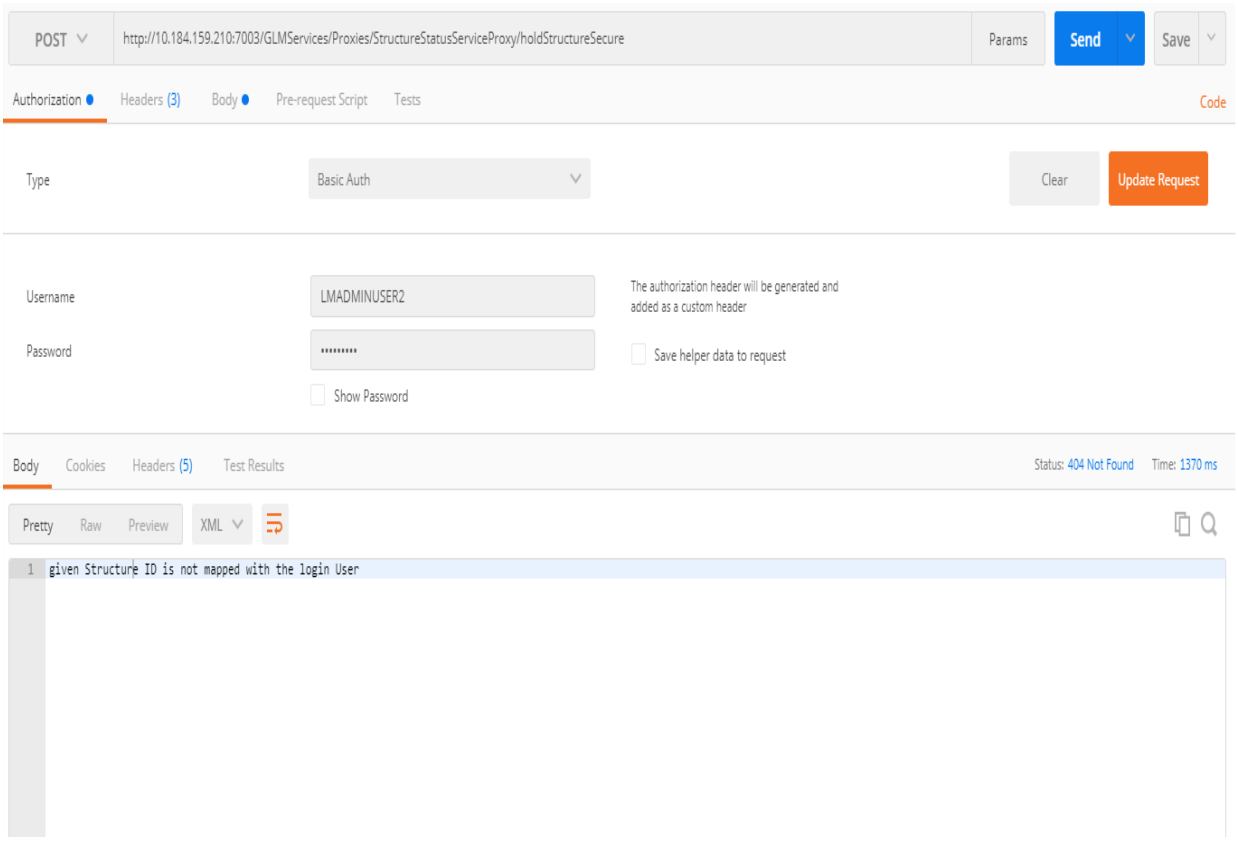
4, The credentials are correct then Response will be 200 OK and result will be shown in body section.

5, The credentials are wrong then Response will be 401 Unauthorized.



6. If we get the message like ‘Unexpected ‘g’ ’. Then postman have default settings as JSON. So We have to change the format to XML instead of JSON like below image.


POST
http://10.184.159.210:7003/GLMServices/Proxies/StructureStatusServiceProxy/holdStructureSecure
Params
Send
Save
Authorization
Headers (3)
Body
Pre-request Script
Tests
Code
Type
Basic Auth
Clear
Update Request
Username
LMADMINUSER2
Password
Show Password
The authorization header will be generated and added as a custom header
Save helper data to request
Body
Cookies
Headers (5)
Test Results
Status: 404 Not Found
Time: 1370 ms
Pretty
Raw
Preview
JSON
1 Unexpected 'g'


POST
http://10.184.159.210:7003/GLMServices/Proxies/StructureStatusServiceProxy/holdStructureSecure
Params
Send
Save
Authorization
Headers (3)
Body
Pre-request Script
Tests
Code
Type
Basic Auth
Clear
Update Request
Username
LMADMINUSER2
Password
Show Password
The authorization header will be generated and added as a custom header
Save helper data to request
Body
Cookies
Headers (5)
Test Results
Status: 404 Not Found
Time: 1370 ms
Pretty
Raw
Preview
XML
1 given Structure ID is not mapped with the login User

Service 2 : Initiate Manual Sweeps (Batch--->Sweep Batch)

URL :
http://10.184.159.200:8003/GLMServices/Proxies/SweepApplicationServiceProxy/executeStructures

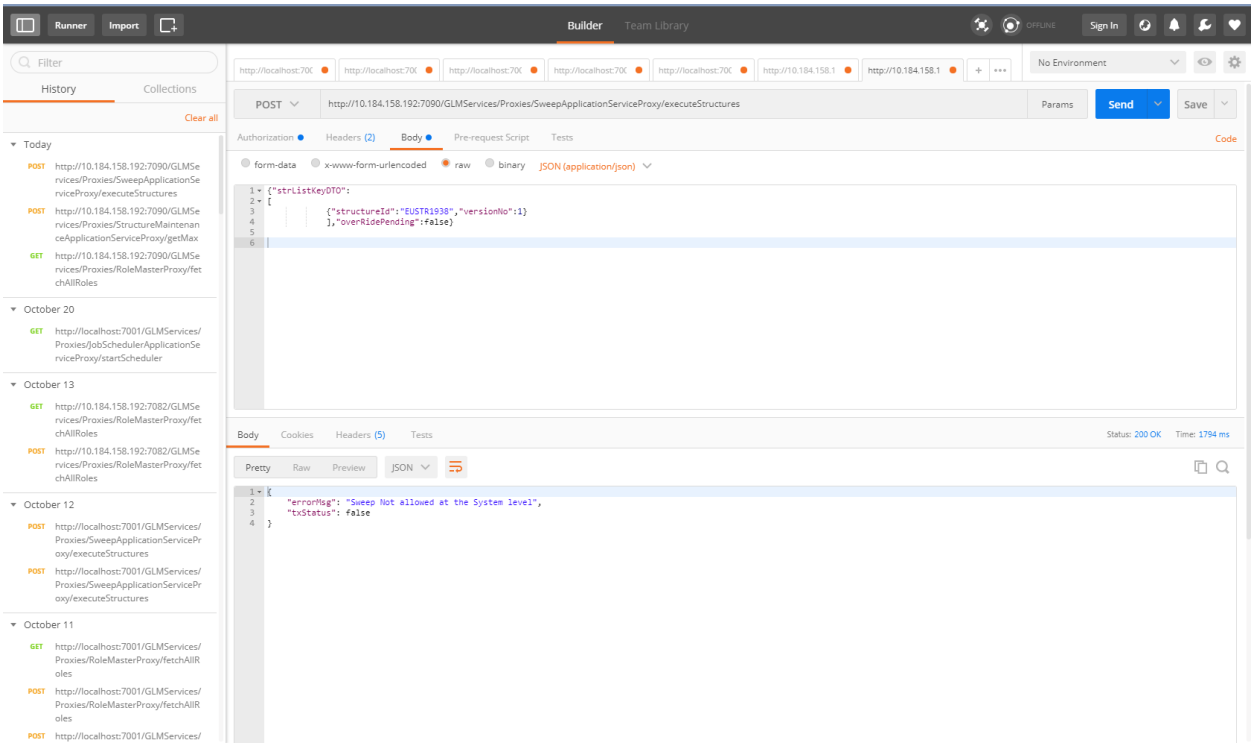
Request:

{"strListKeyDTO":

[

{"structureId":"EUSTR1938","versionNo":1}

],"overRidePending":false}

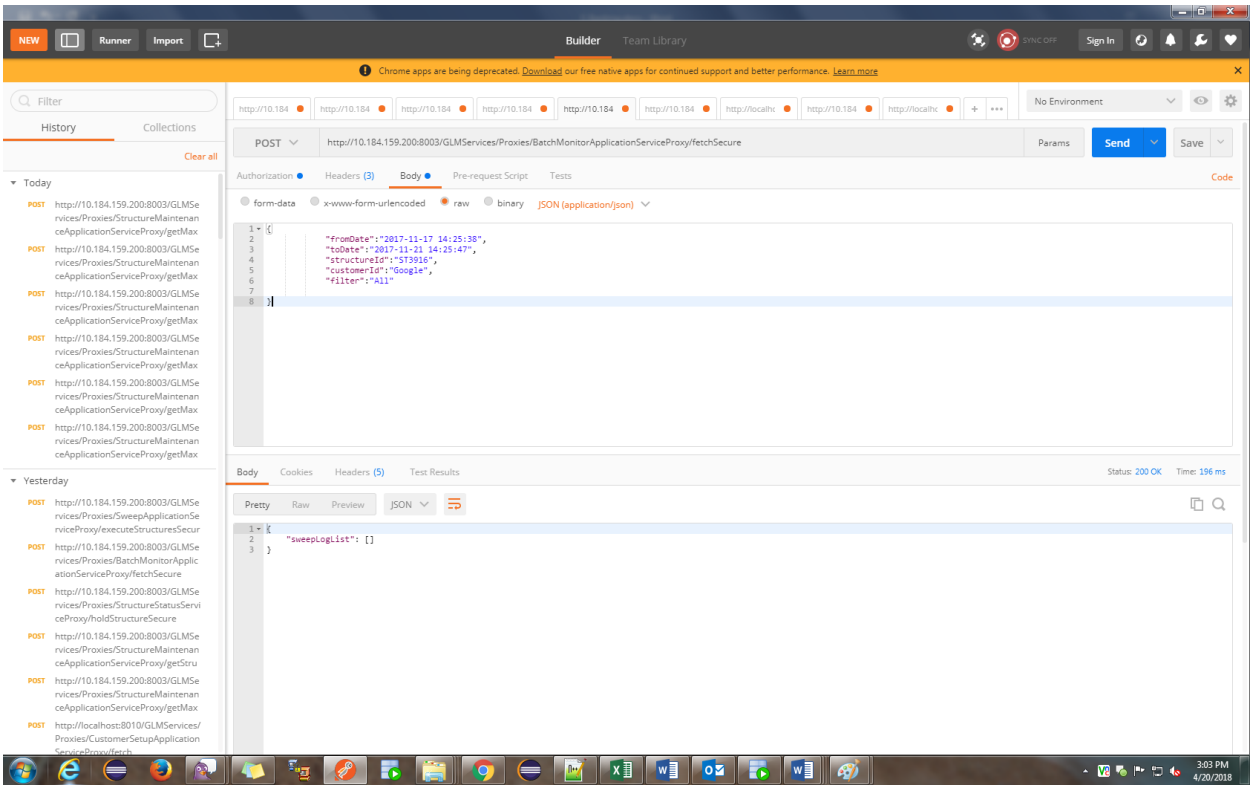


Service 3 : View Sweep Log from Sweep Monitor (Batch--->Sweep Monitor)

URL : http://10.184.159.200:8003/GLMServices/Proxies/BatchMonitorApplicationServiceProxy/fetch

Request:


```
{
        "fromDate":"2017-11-17 14:25:38",
        "toDate":"2017-11-21 14:25:47",
        "structureId":"ST3916",
        "customerId":"Google",
        "filter":"All"
  }
```

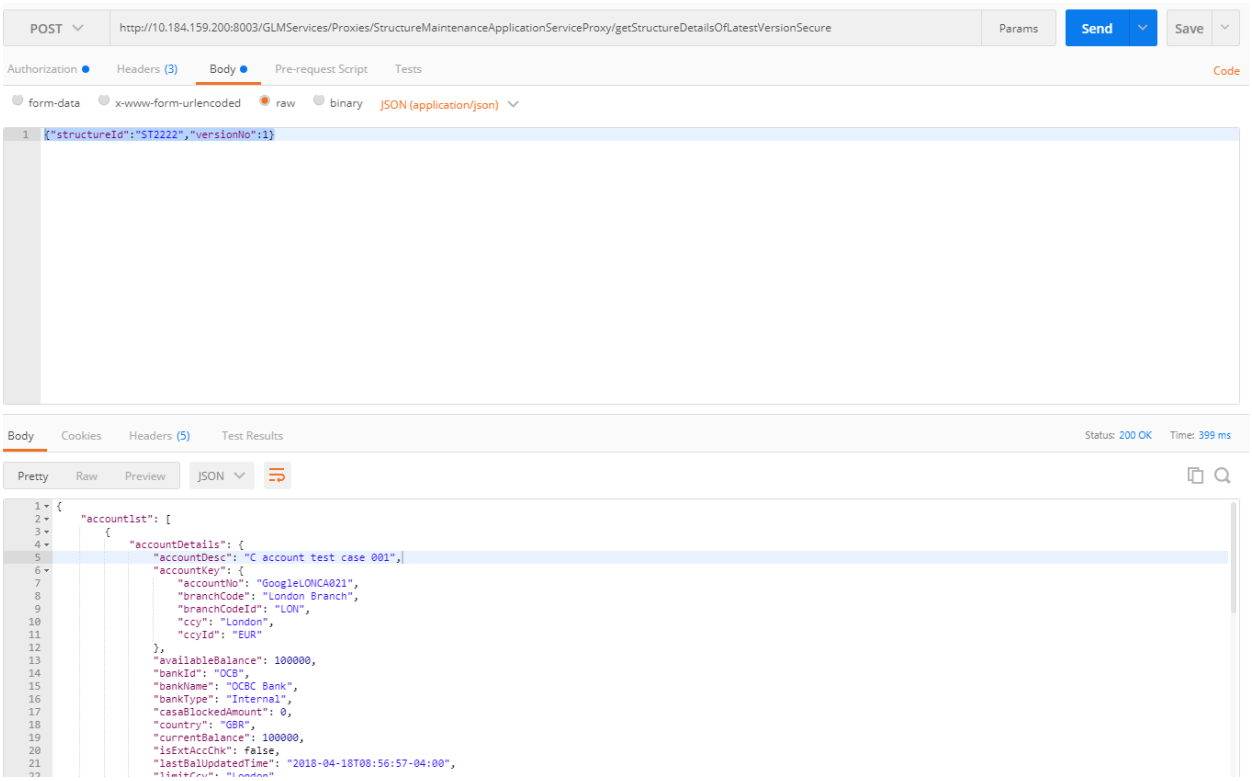



Service 4 : View of Liquidity Structures Sweep,Pool,Hybrid, Enhancement

URL :
http://10.184.159.200:8003/GLMServices/Proxies/StructureMaintenanceApplicationServiceProxy/getStructureDetailsOfLatestVersion

Request:

{"structureId":"ST2222","versionNo":1}

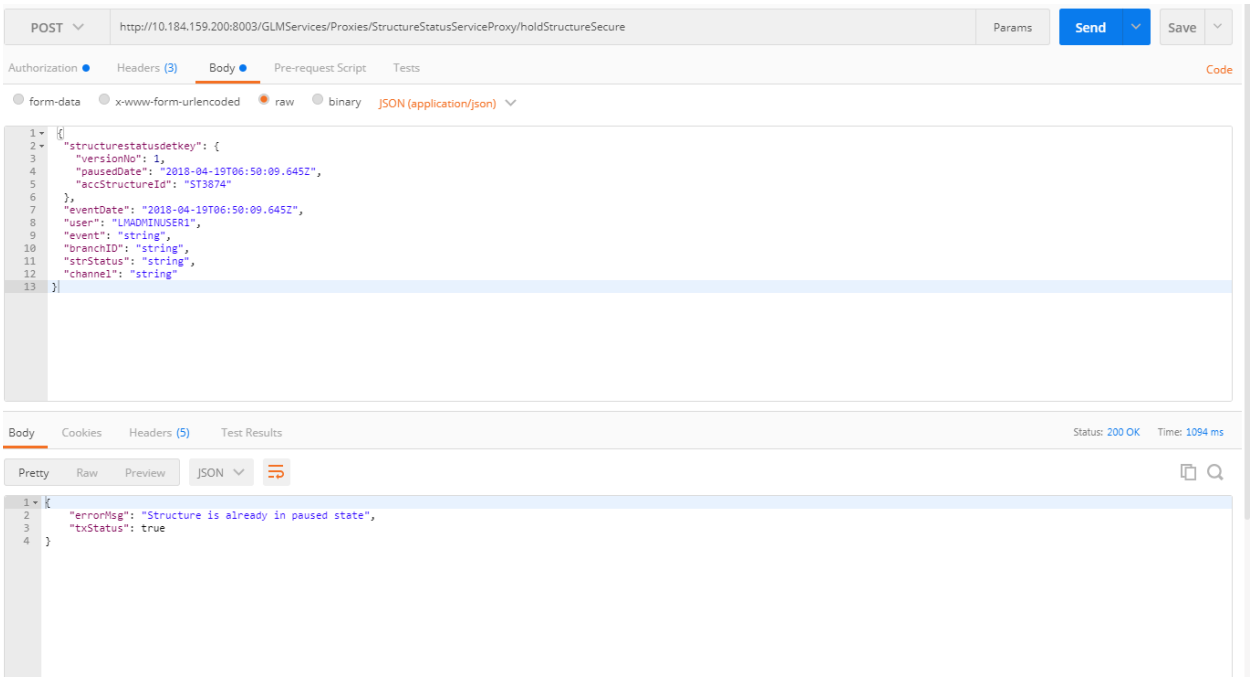


Service 5 : Marking of a structure to Hold status

URL : http://10.184.159.200:8003/GLMServices/Proxies/StructureStatusServiceProxy/holdStructure

Request:

```
{
  "structurestatusdetkey": {
    "versionNo": 1,
    "pausedDate": "2018-04-19T06:50:09.645Z",
    "accStructureId": "ST3874"
  },
  "eventDate": "2018-04-19T06:50:09.645Z",
  "user": "LMADMINUSER1",
  "event": "string",
  "branchID": "string",
  "strStatus": "string",
  "channel": "string"
}
```



1.2.9 Billing services

The following services are used by the Billing engine for charge computations.

Service 1 : Structure Detail for charges

URL :
http://10.184.159.210:7003/GLMServices/Proxies/ChargesReportsApplicationServiceProxy/getStructureDetails

Description:

This service will give information to the user about all the structure created, modified along with the existing structure in a certain period of time specified by the user.

Request:

{

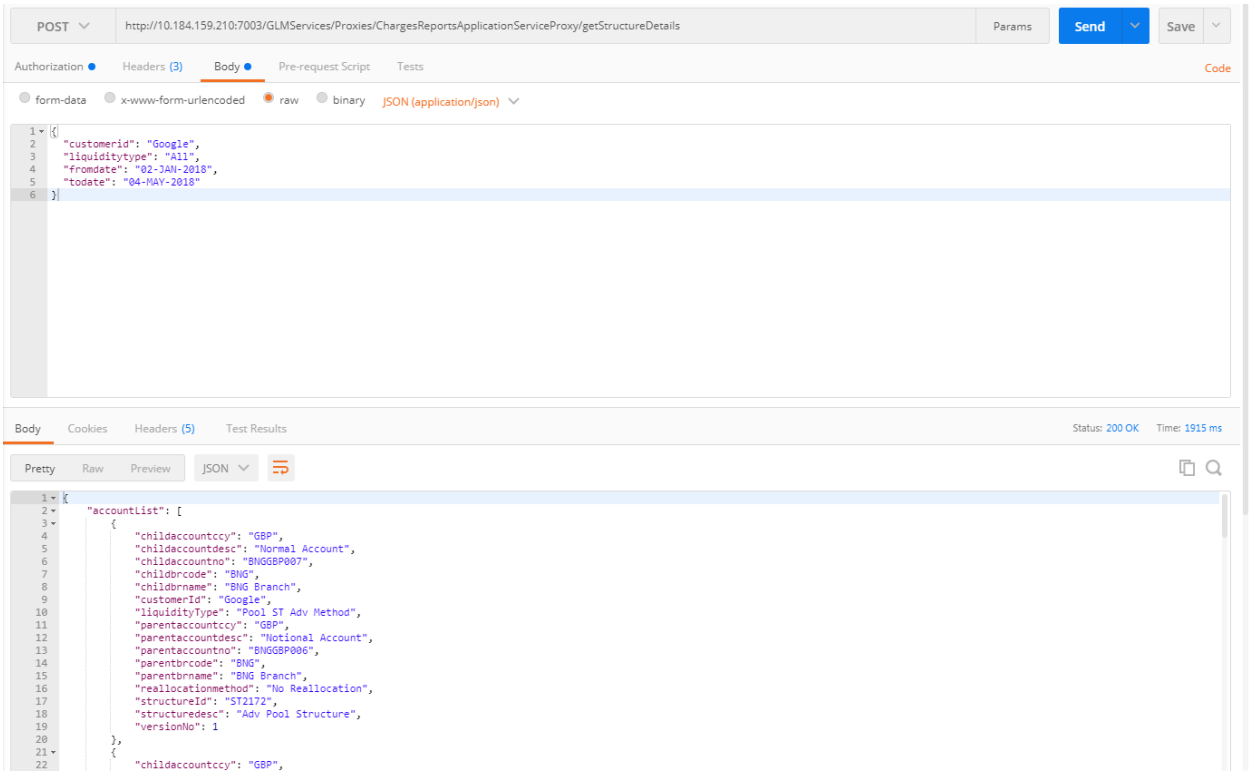
"customerid": "Google",

"liquiditytype": "All",

"fromdate": "02-JAN-2018",

"todate": "04-MAY-2018"

}



Service 2 : Structure Create Details for charges

URL :
http://10.184.159.210:7003/GLMServices/Proxies/ChargesReportsApplicationServiceProxy/getStructureCreate

Description :

This service will give information to the user about all the structure created along with the existing structure in a certain period of time specified by the user.

Request:

{

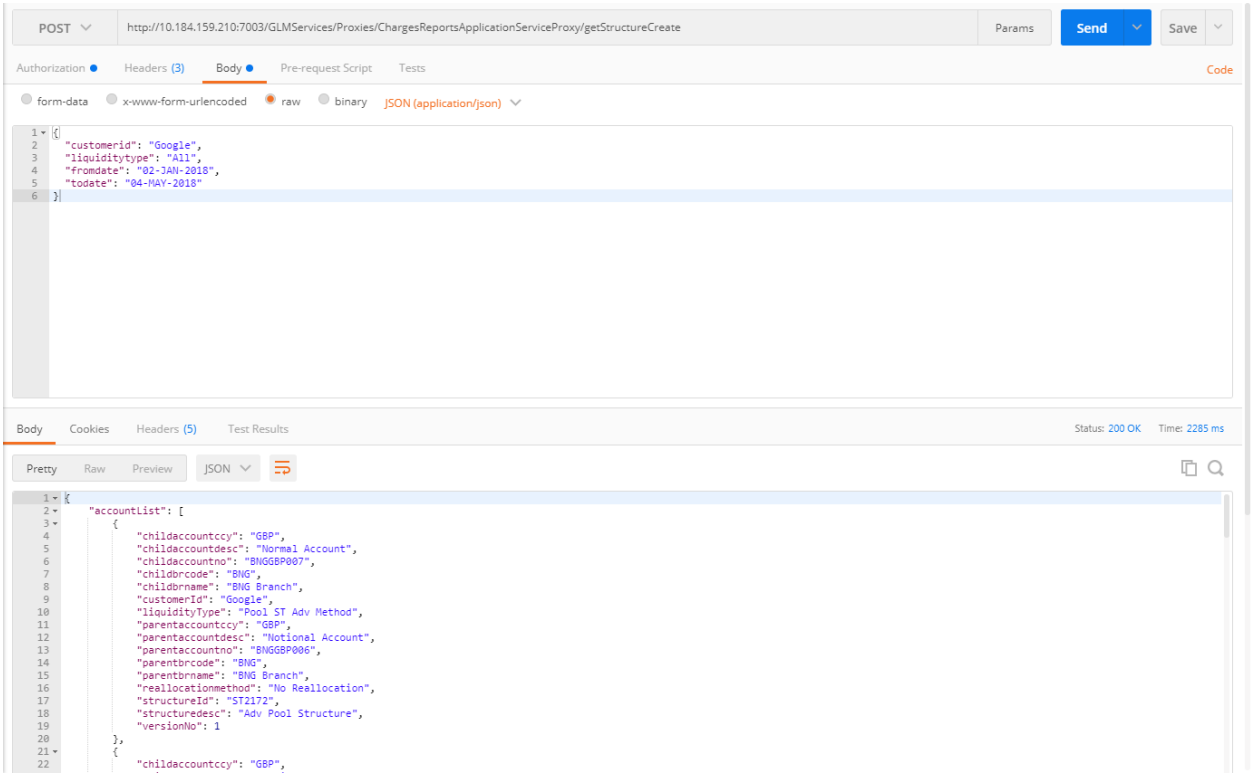
"customerid": "Google",

"liquiditytype": "All",

"fromdate": "02-JAN-2018",

"todate": "04-MAY-2018"

}



Service 3 : Structure Modify Details for charges

URL :
http://10.184.159.210:7003/GLMServices/Proxies/ChargesReportsApplicationServiceProxy/getStructureModify

Description :

This service will give information to the user about all the structure modified in a certain period of time specified by the user.

Request:

{

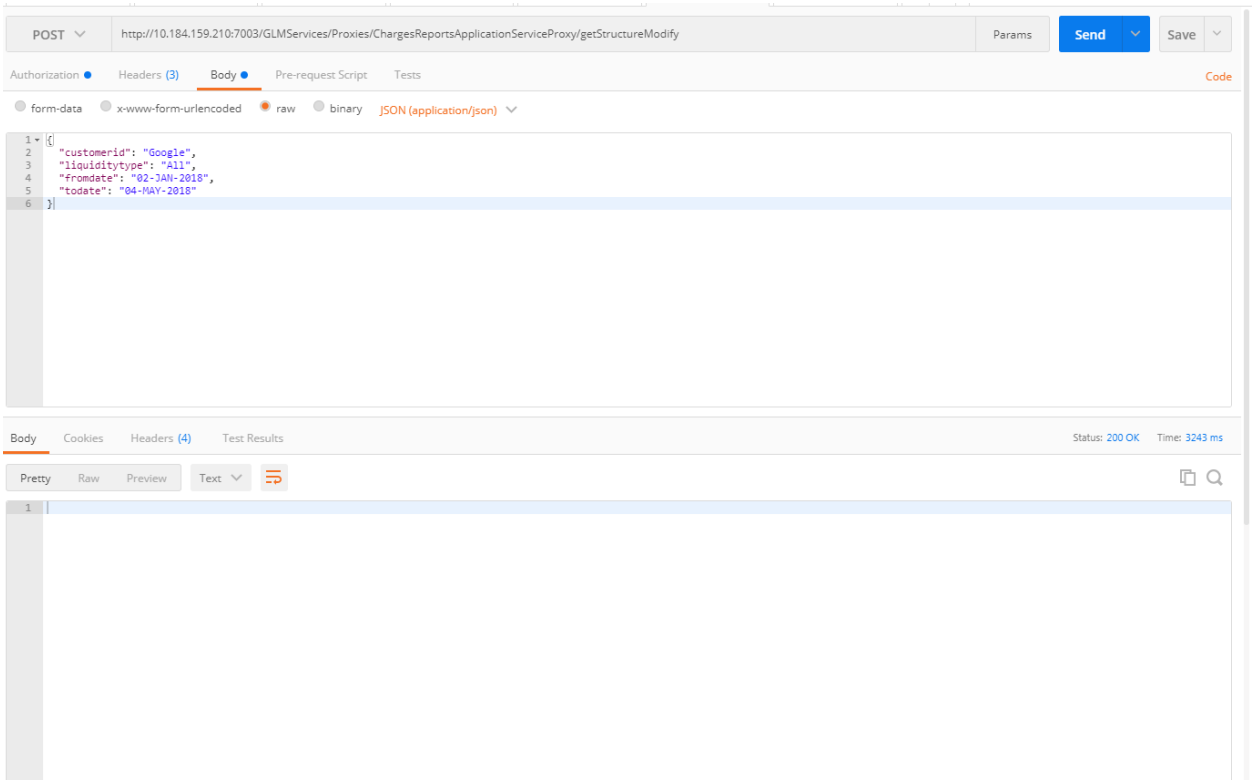
"customerid": "Google",

"liquiditytype": "All",

"fromdate": "02-JAN-2018",

"todate": "04-MAY-2018"

}



Service 4 : Structure Contribution Details for charges

URL :
http://10.184.159.210:7003/GLMServices/Proxies/ChargesReportsApplicationServiceProxy/getSweepPoolLog

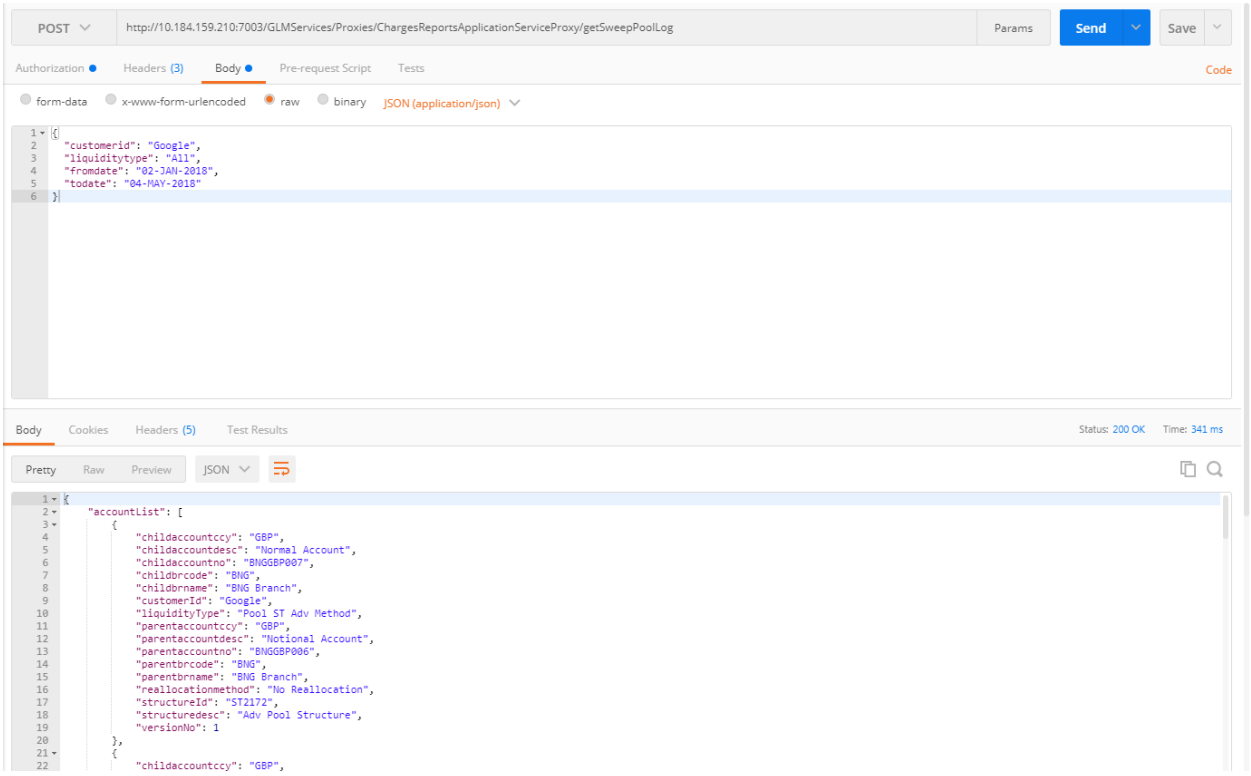
Description:

This service will give all the information to the user about the sweep and pool executed successfully in the given period of time specified by the user.

Request:

{

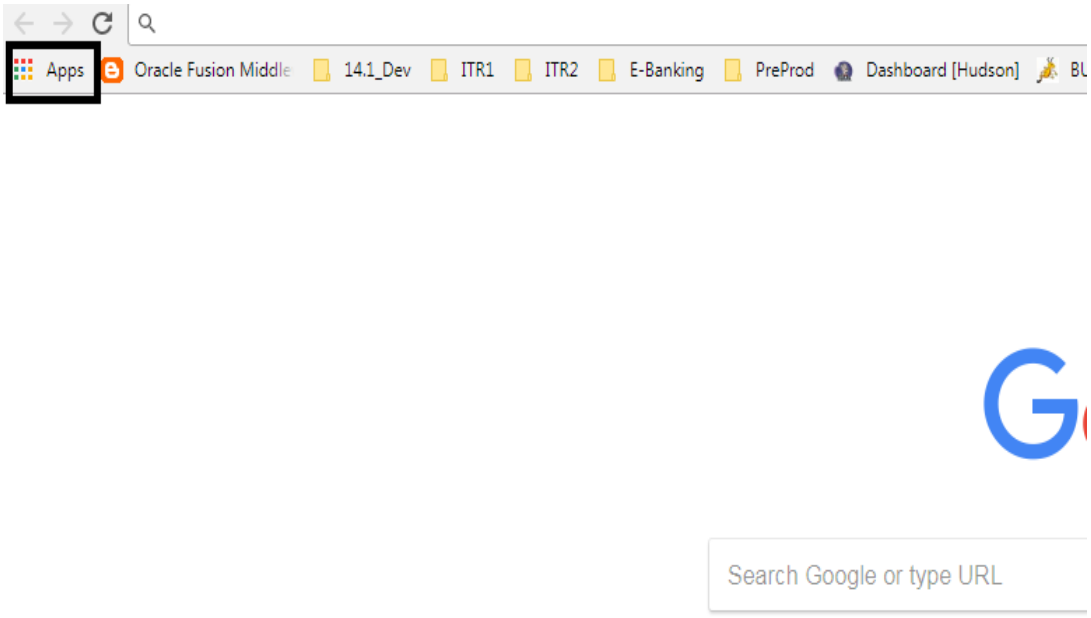
```
"customerid": "Google",
"liquiditytype": "All",
"fromdate": "02-JAN-2018",
"todate": "04-MAY-2018"
}
```

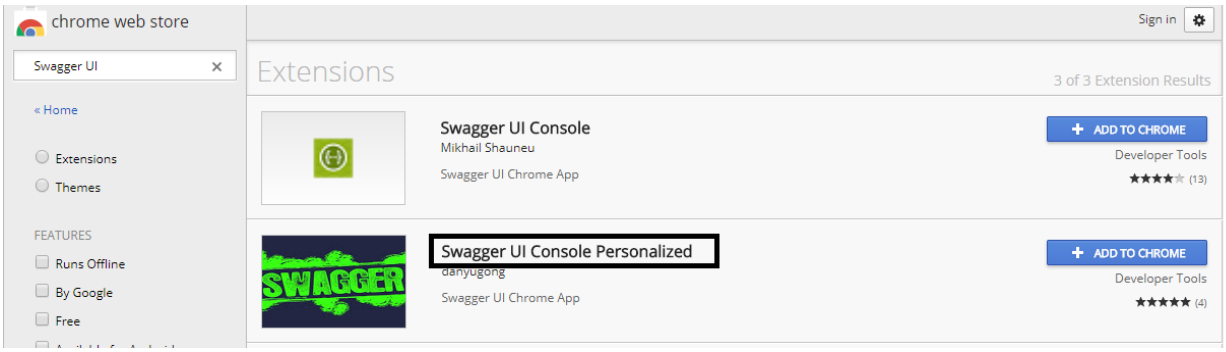
1.2.10 **Swagger** Setup

1.2.10.1 **Steps to Install Swagger UI Console**:

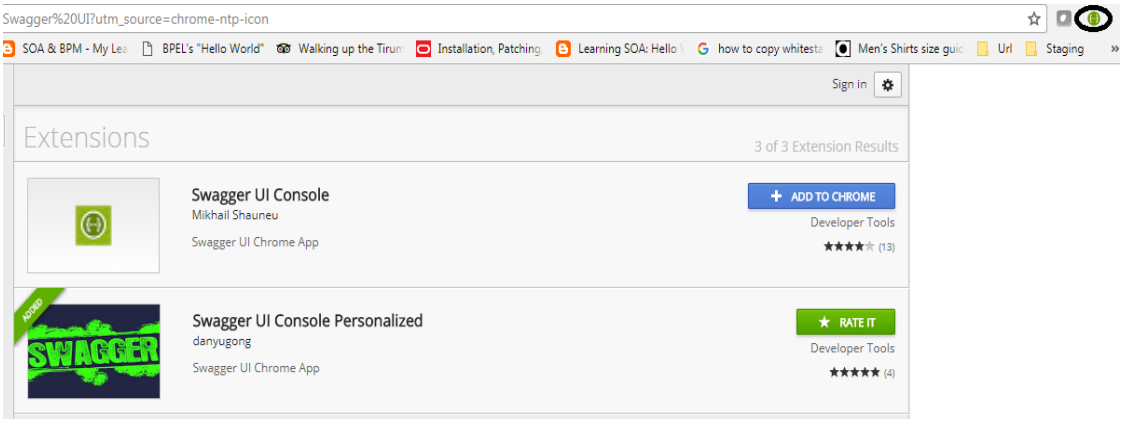
1. Open Chrome Browser
2. Click on apps icon as shown below screenshot



3. Click on Web store
4. Search for Swagger UI



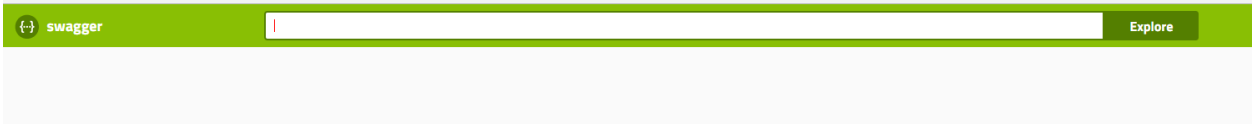
5. Click on ADD TO CHROME option from Highlighted Swagger UI Console Personalized.
6. After adding the swagger extension , click Swagger UI icon on right top end corner as shown below.



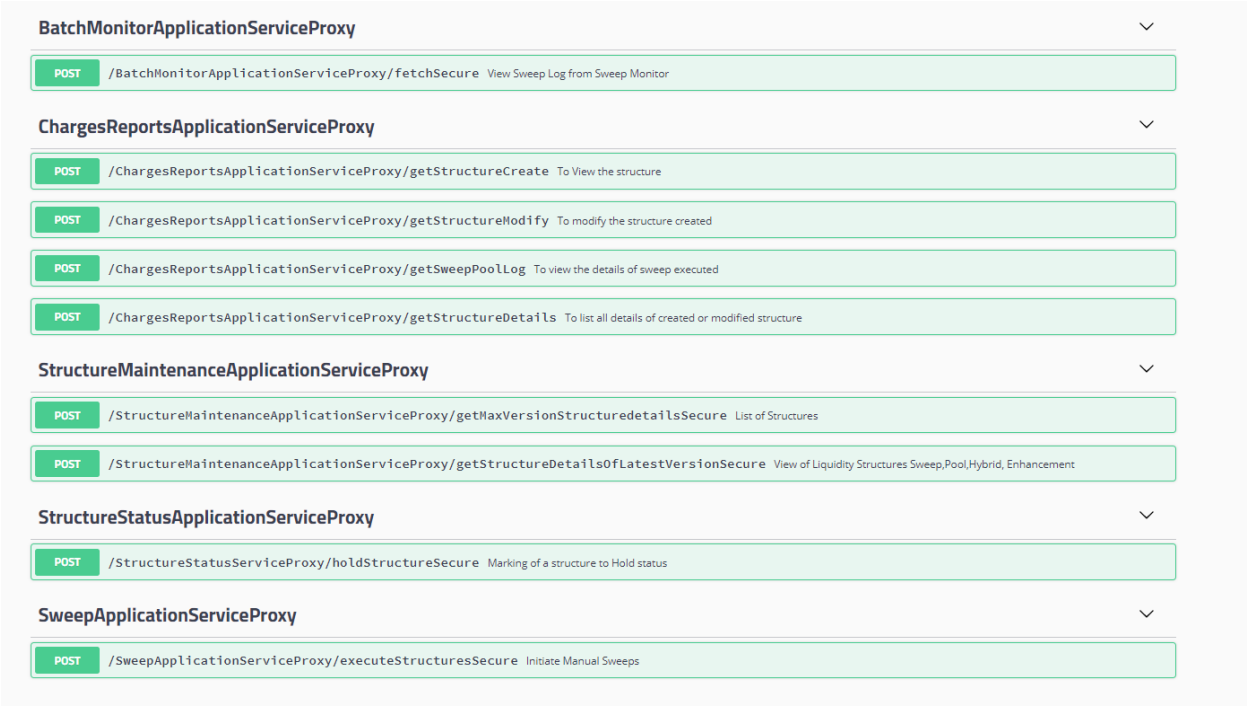
7.After clicking on swagger icon , Enter this url in below textbox and click on explore to launch the Swagger Implementation.

http://HostName:Port/GLMServices/Proxies/swagger.json?userid=<userid>

In above URL , Mention the “HostName” ,”Port” and “userid” values.



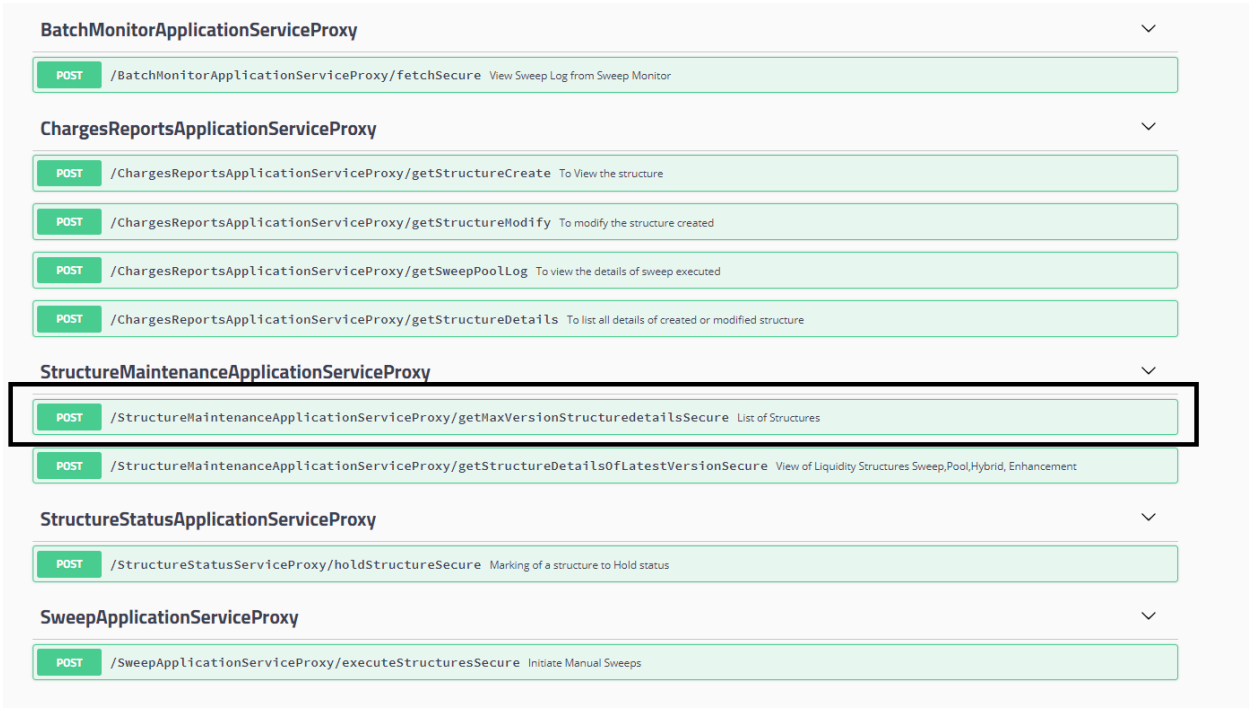
1.2.10.2 Swagger Implementation in OBLM:



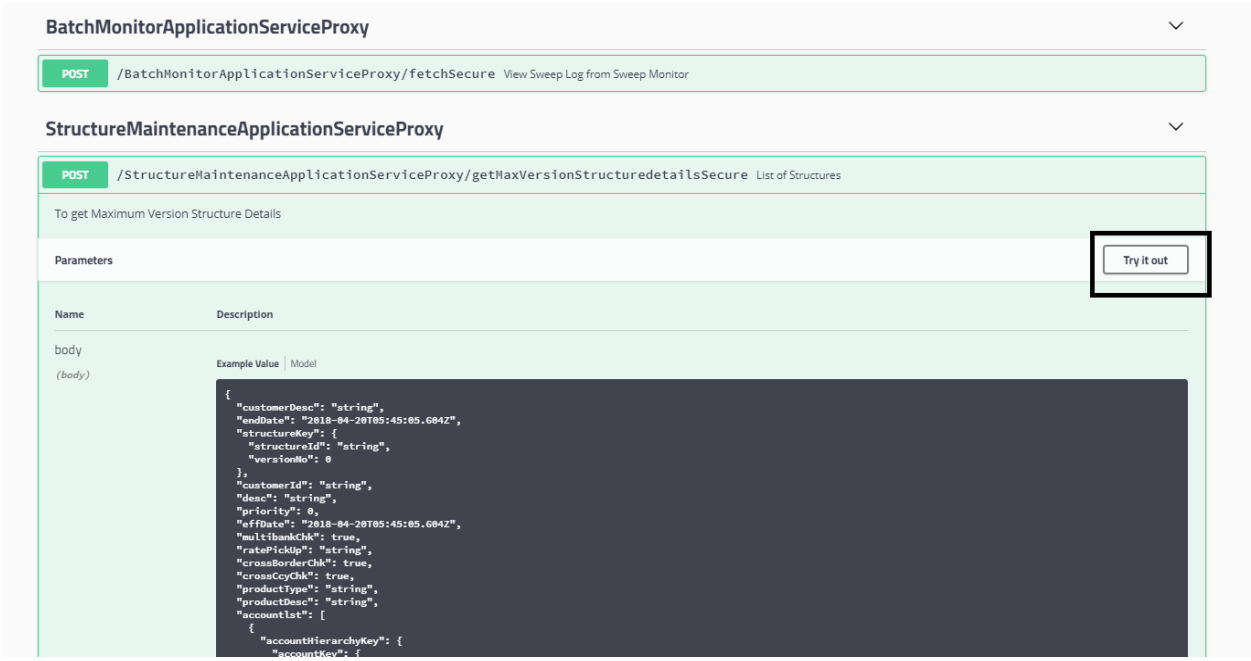
1.2.10.3 **Swagger Setup for all services**:

Service 1 .List of Structures.

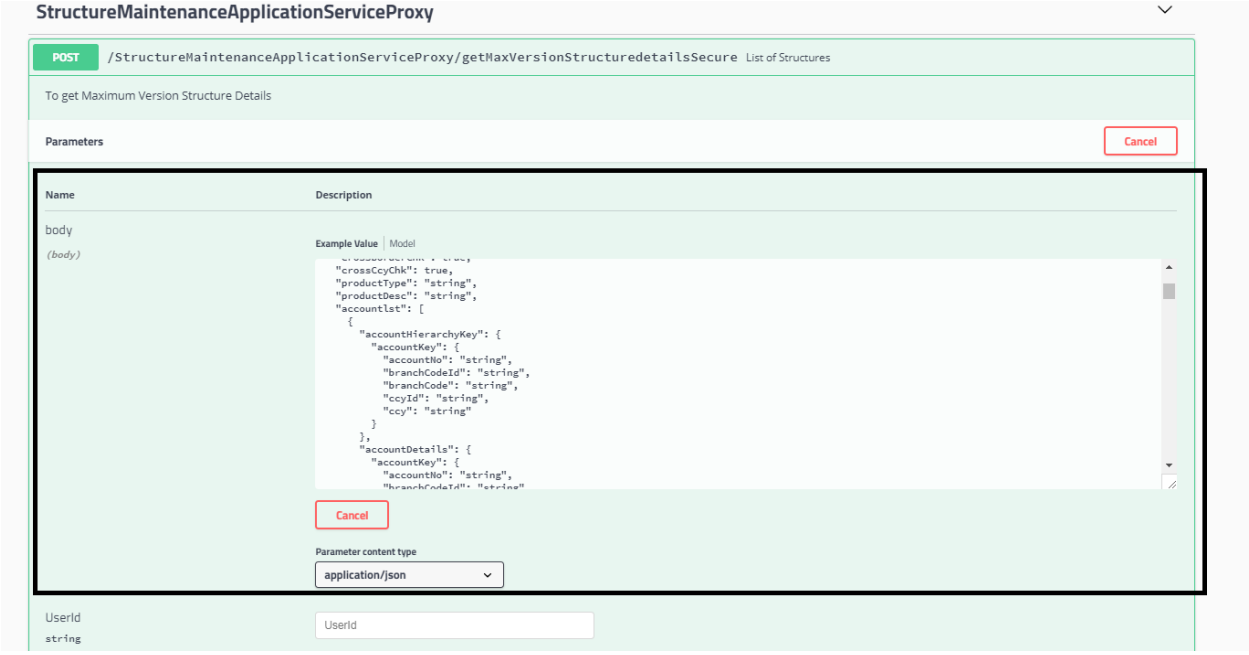
1. Click on List of Structures service which is highlighted below.



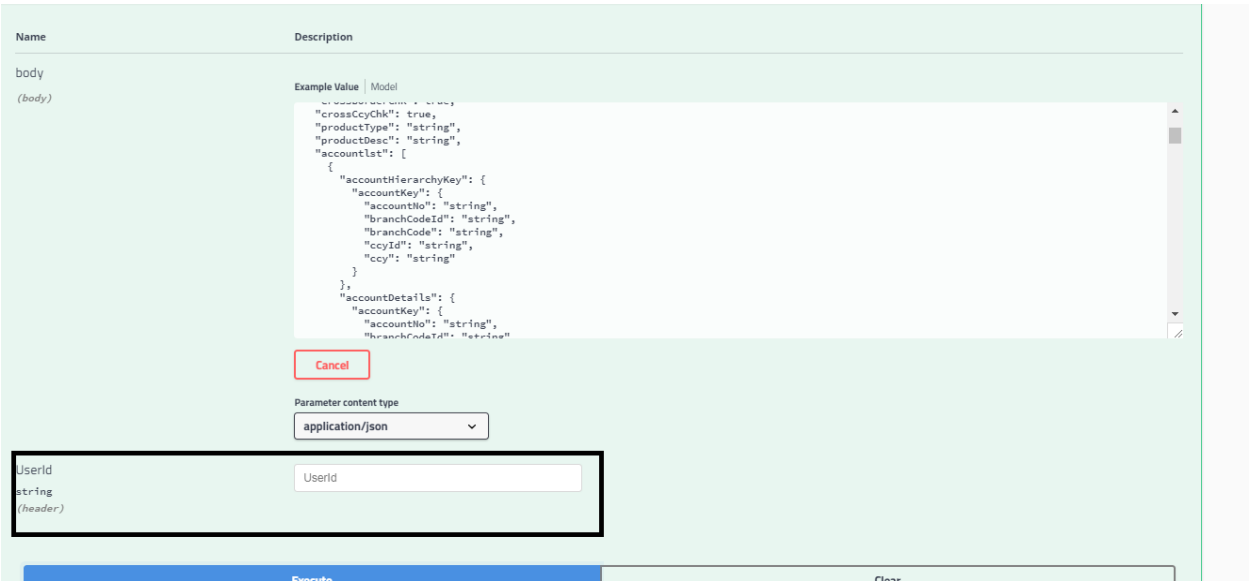
2. Click on Try it out as shown below.



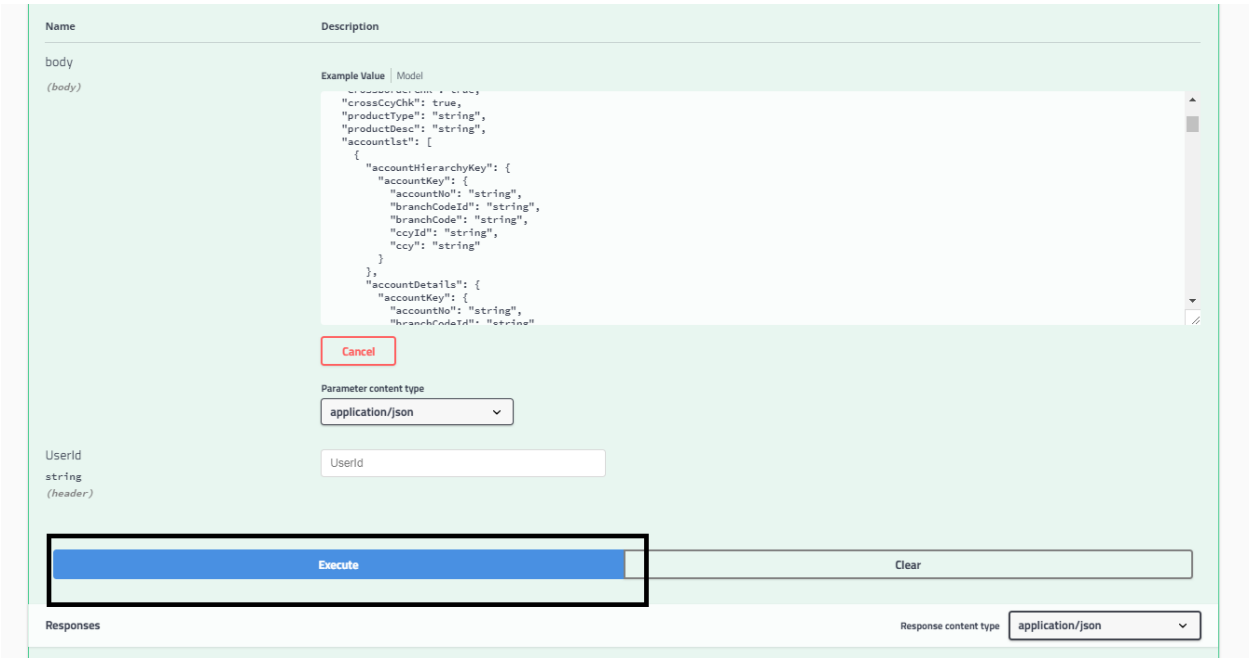
3. Give the corresponding input in body section,



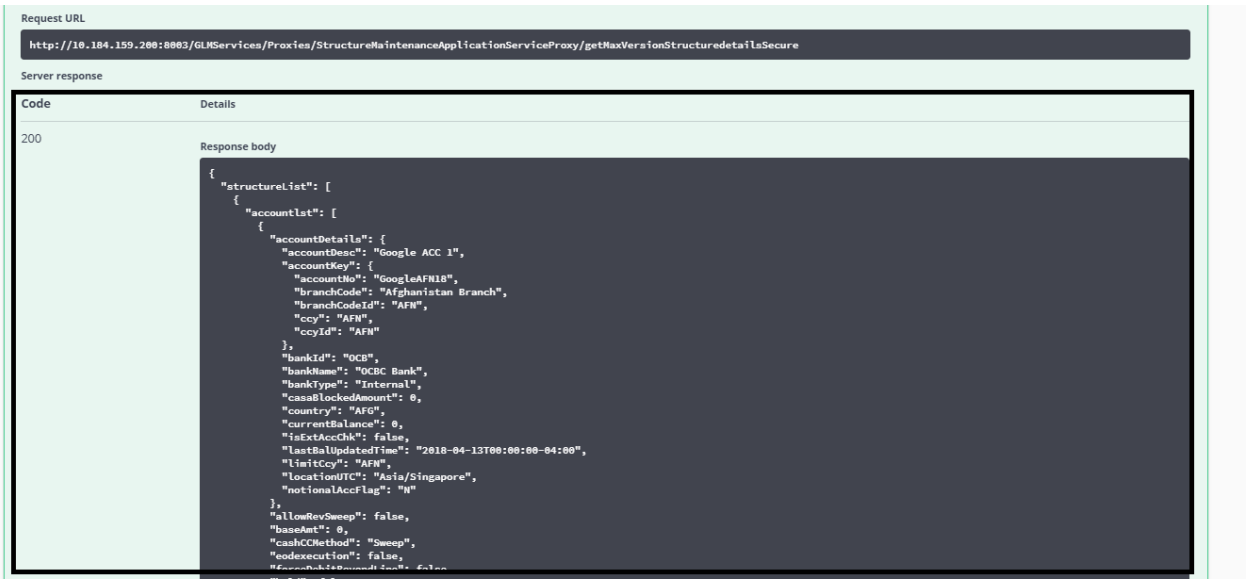
4. Give UserId for the service EX :(LMADMINUSER1).



5. Click on Execute.

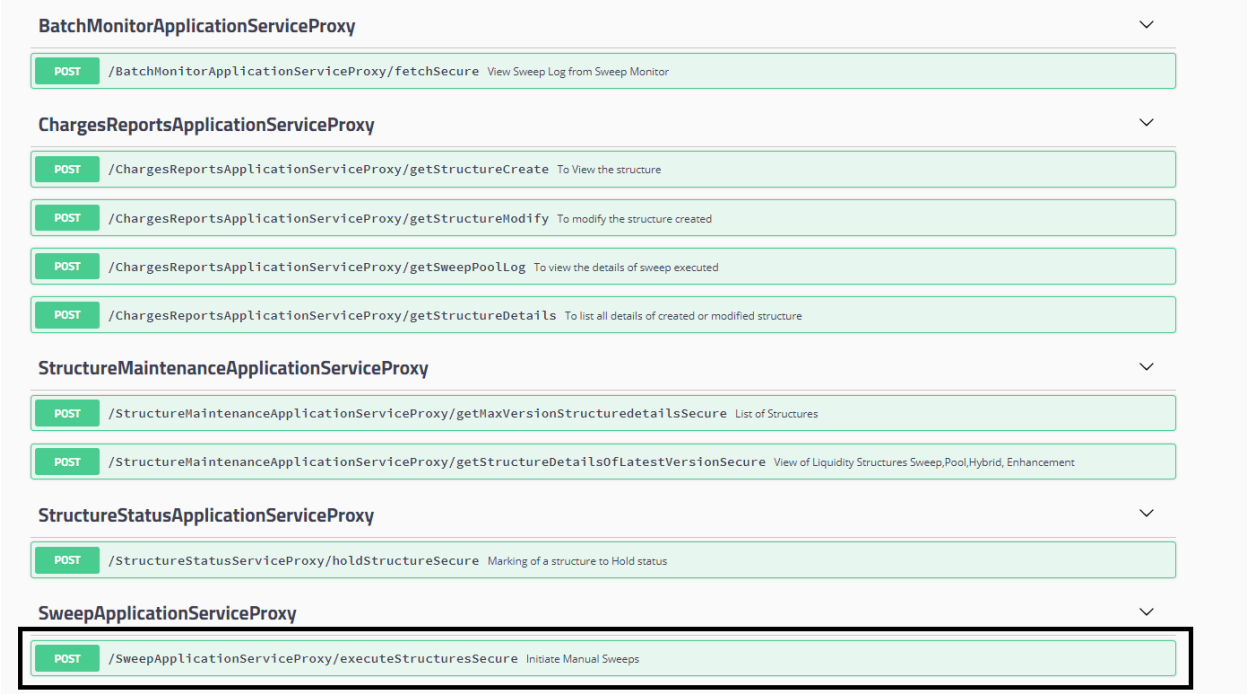


6. Response is populated after executing the service,

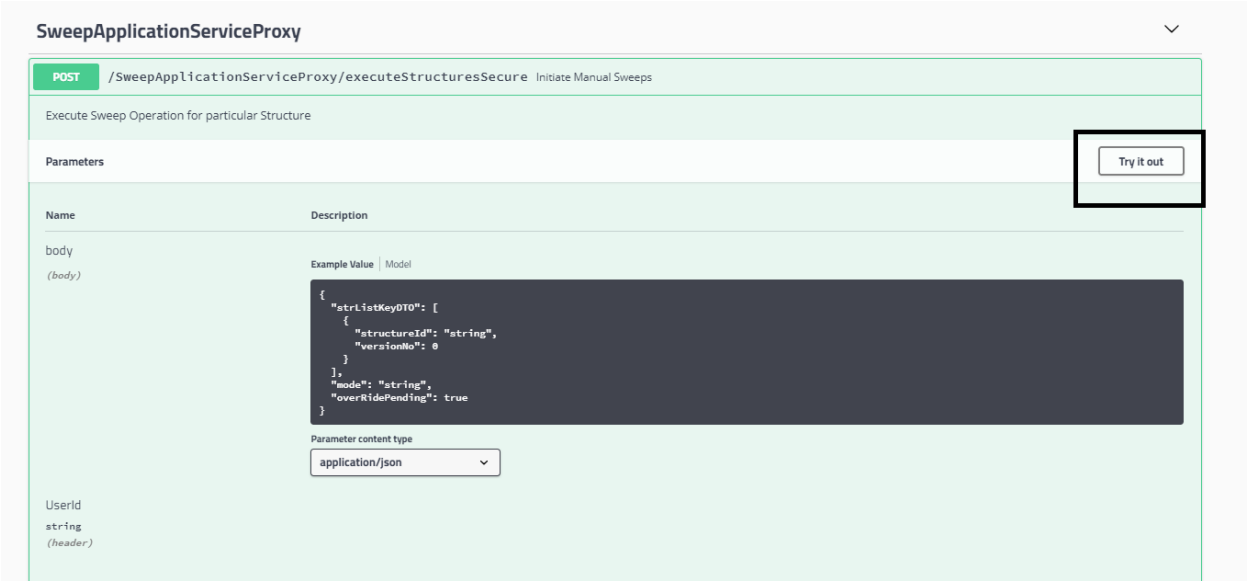


Service 2 : Initiate Manual Sweeps (Batch--->Sweep Batch)

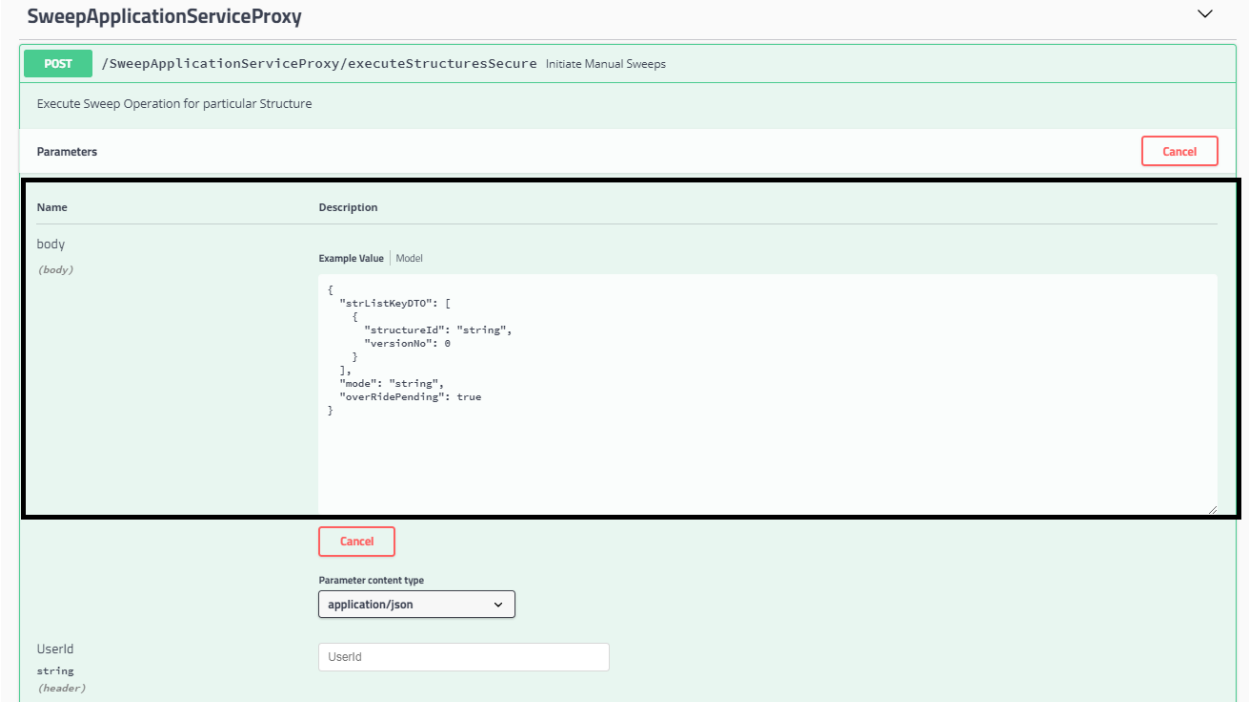
1. Click on Initiate Manual Sweeps service which is highlighted below.



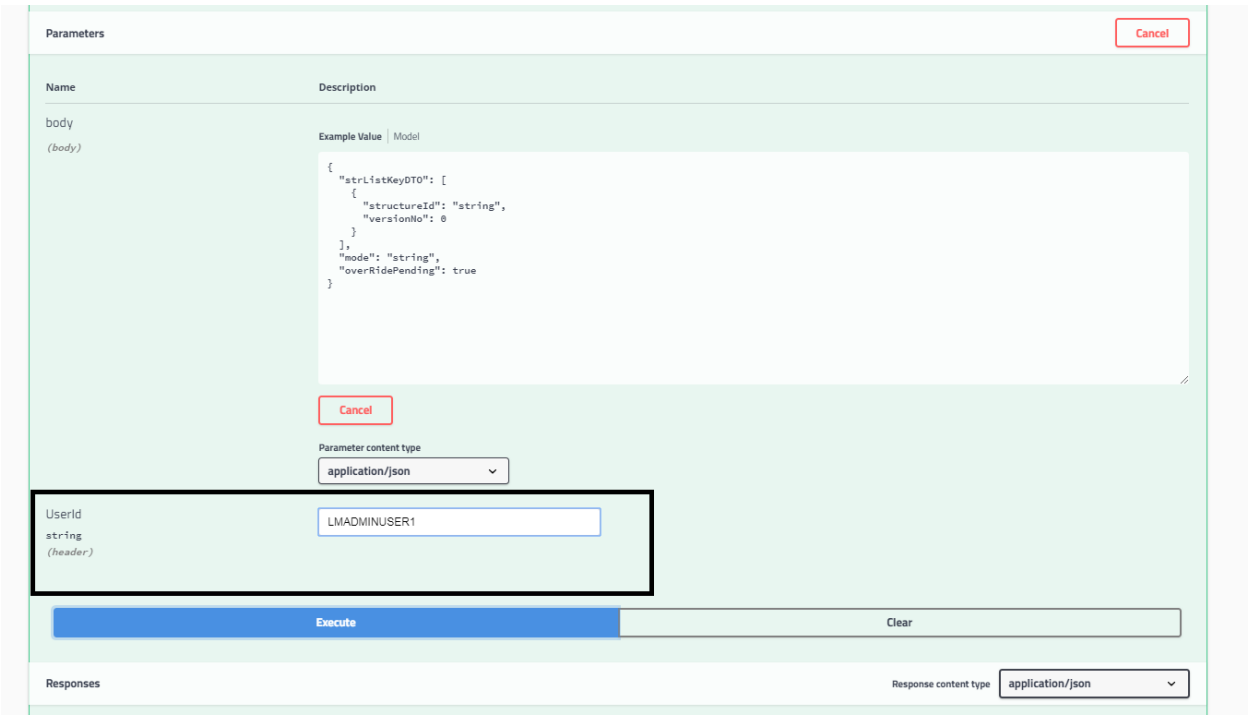
2. Click on Try it out as shown below.



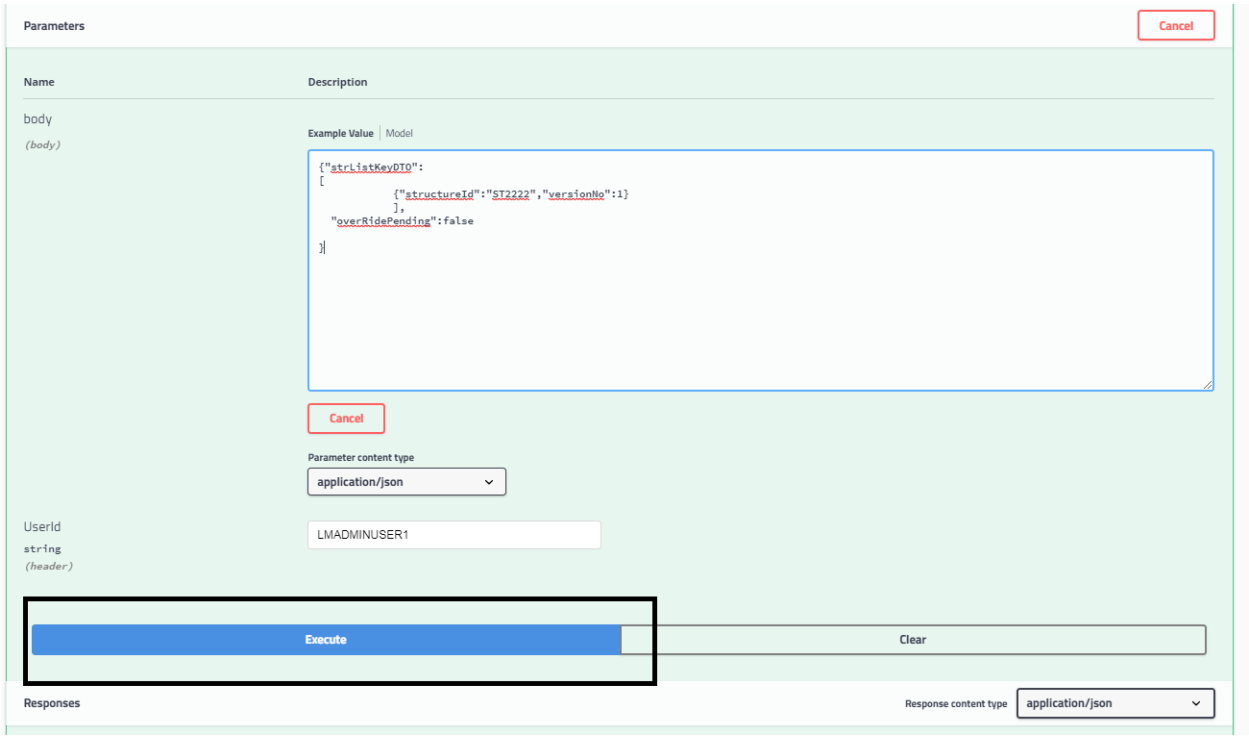
3. Give the corresponding input in body section,



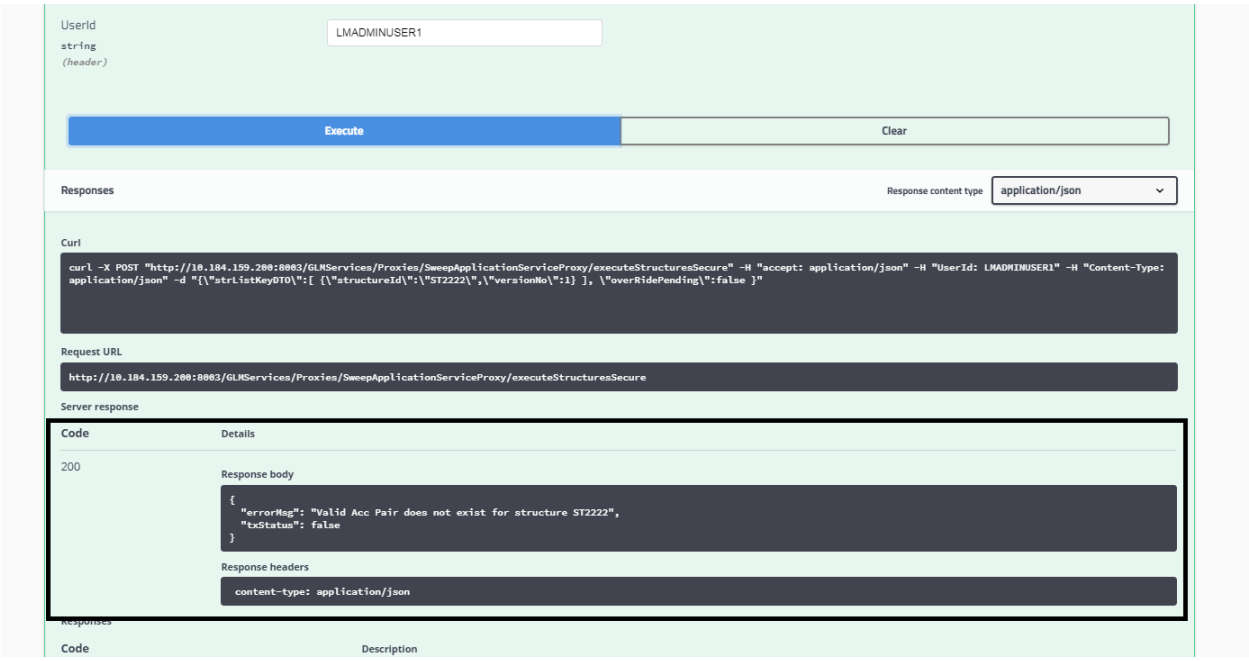
4. Give UserId for the service EX :(LMADMINUSER1).



5. Click on Execute.

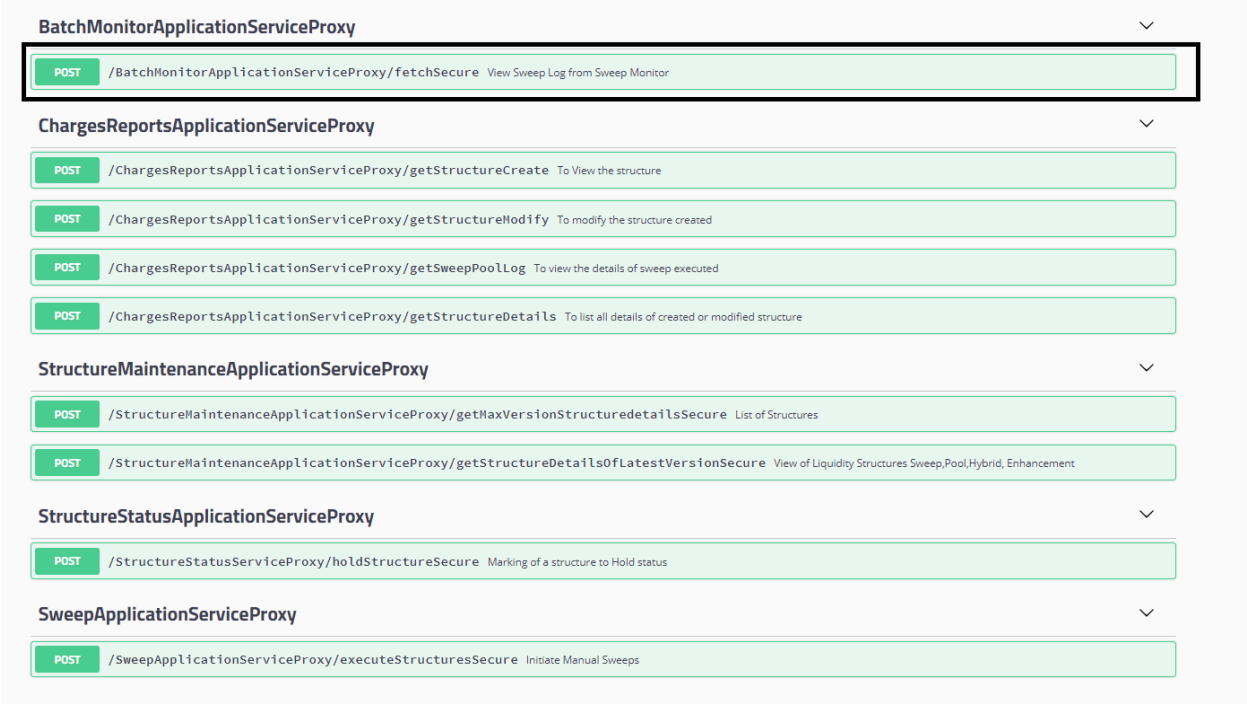


6. Response is populated after executing the service,

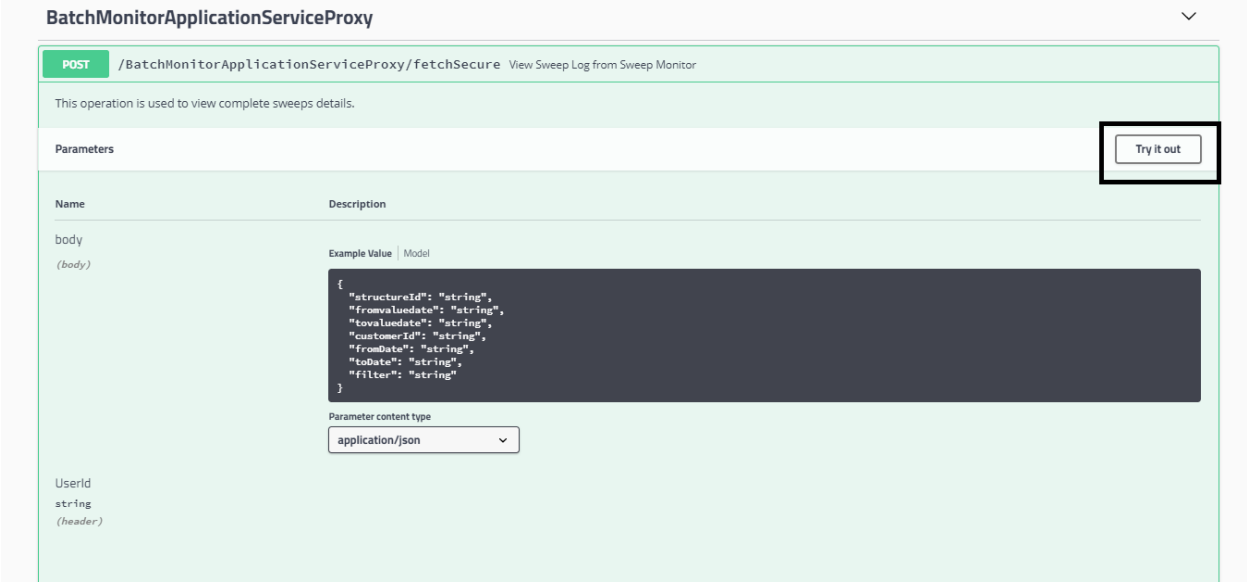


Service 3 : View Sweep Log from Sweep Monitor (Batch--->Sweep Monitor)

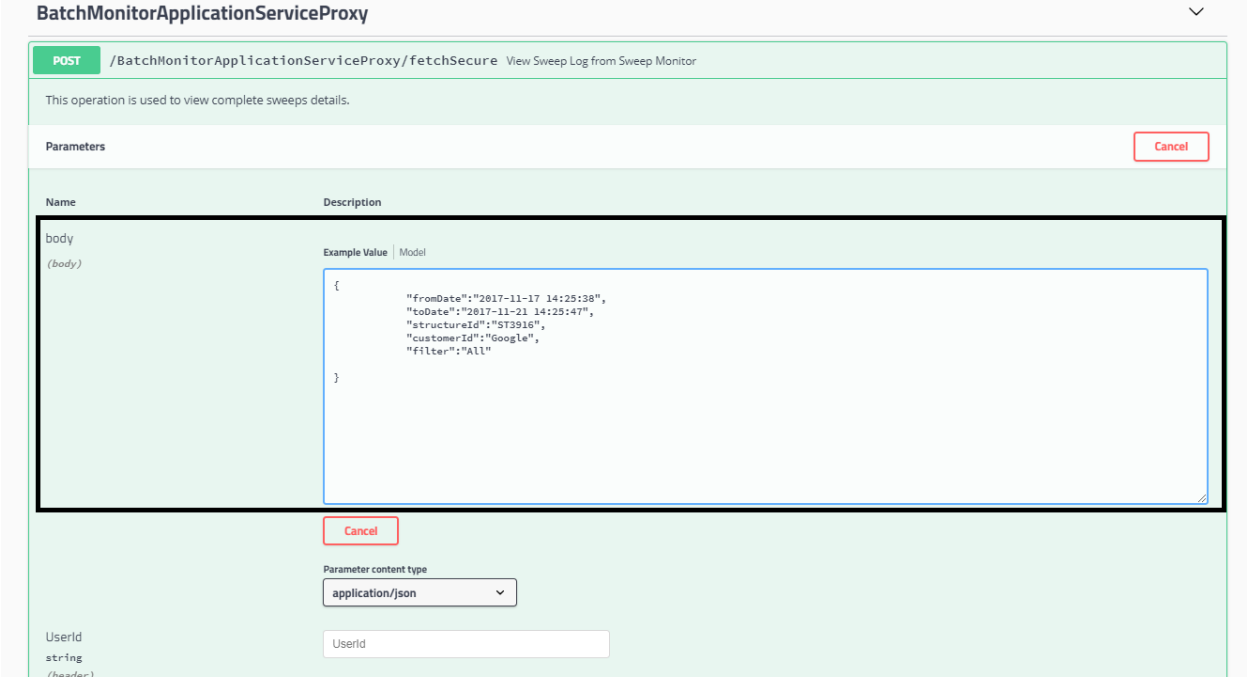
1. Click on View Sweep Log from Sweep Monitor service which is highlighted below,



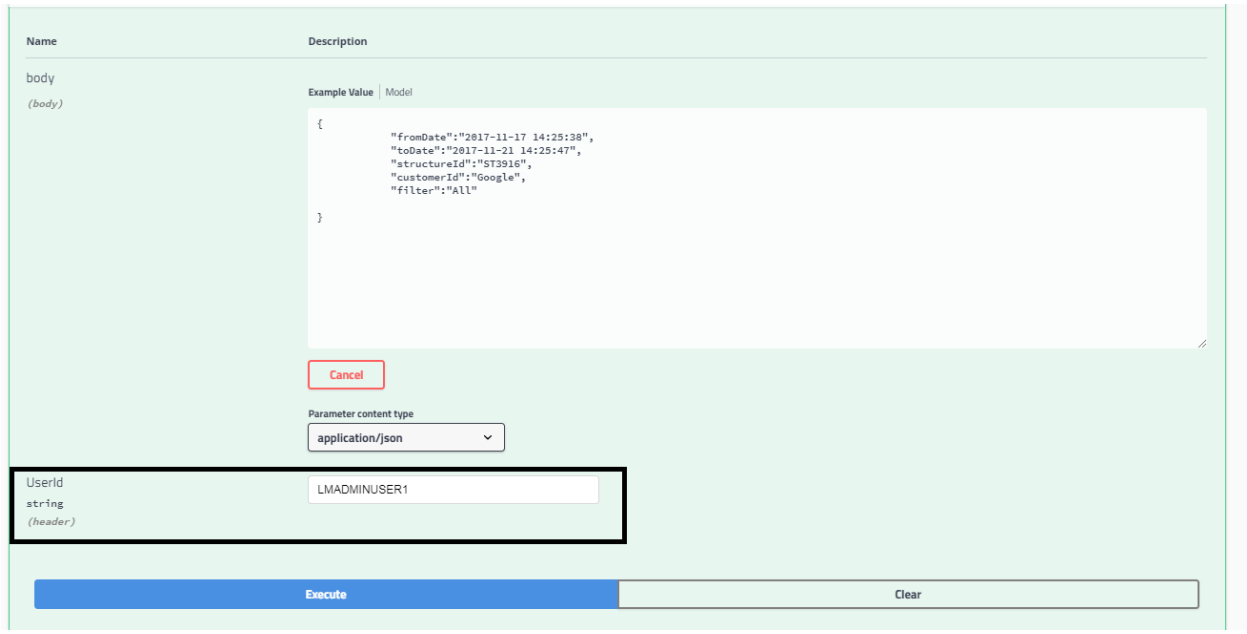
2. Click on Try it out as shown below.



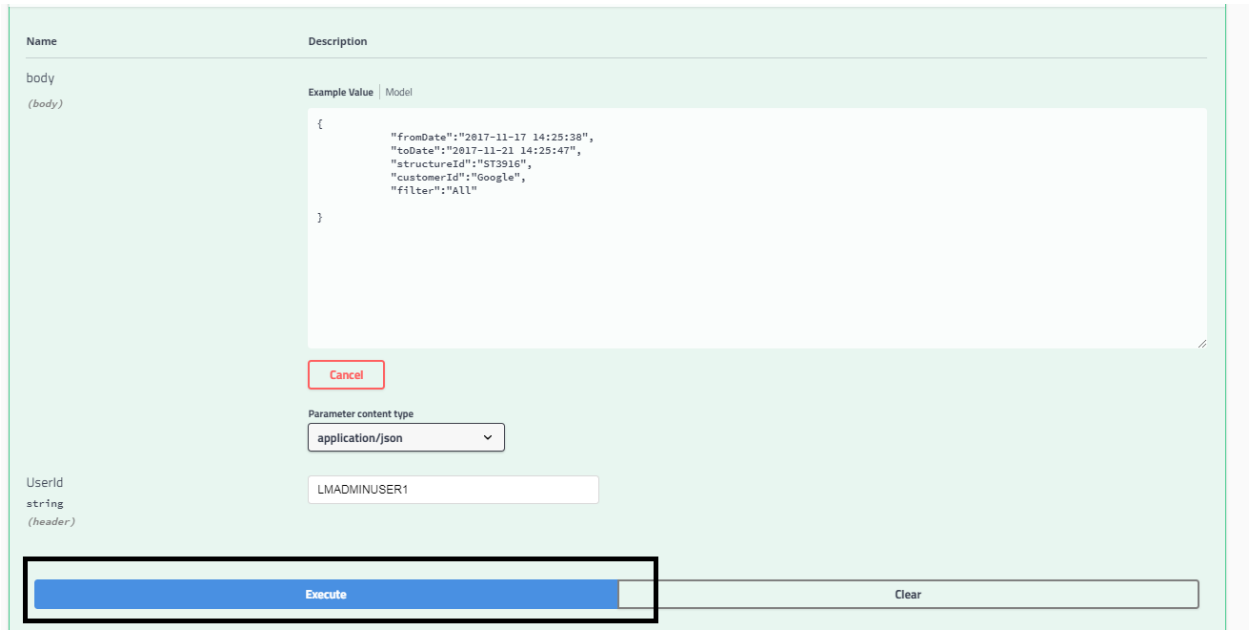
3. Give the corresponding input in body section,



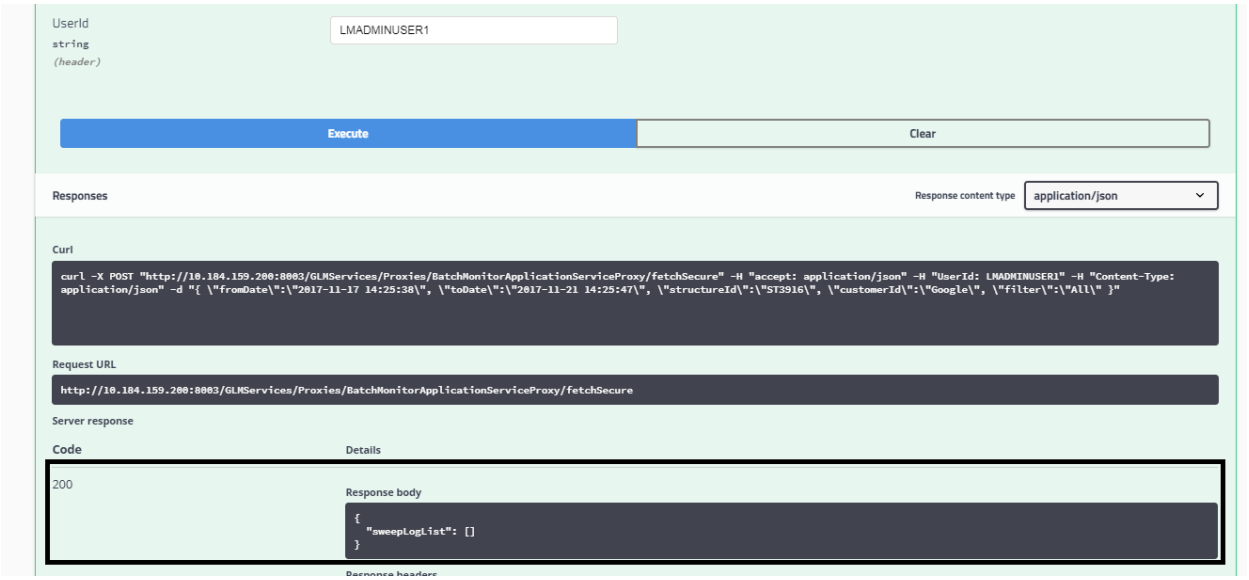
4. Give UserId for the service EX(LMADMINUSER1).



5. Click on Execute.

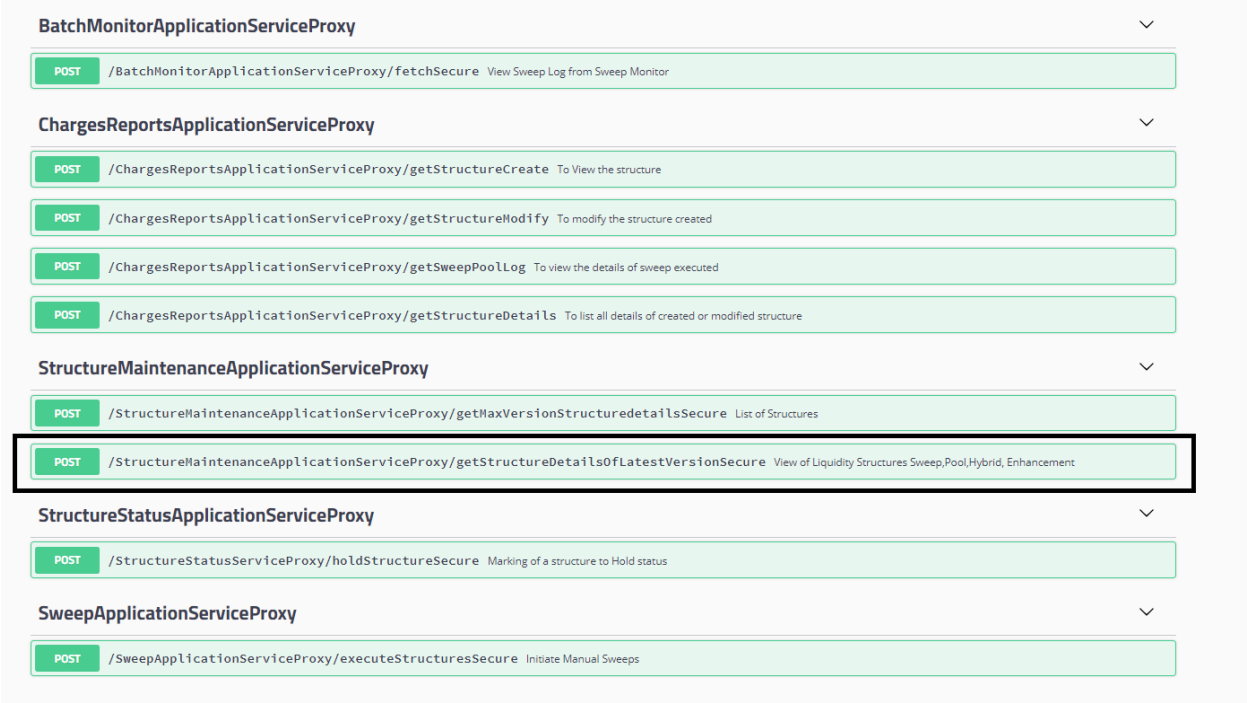


6. Response is populated after executing the service,

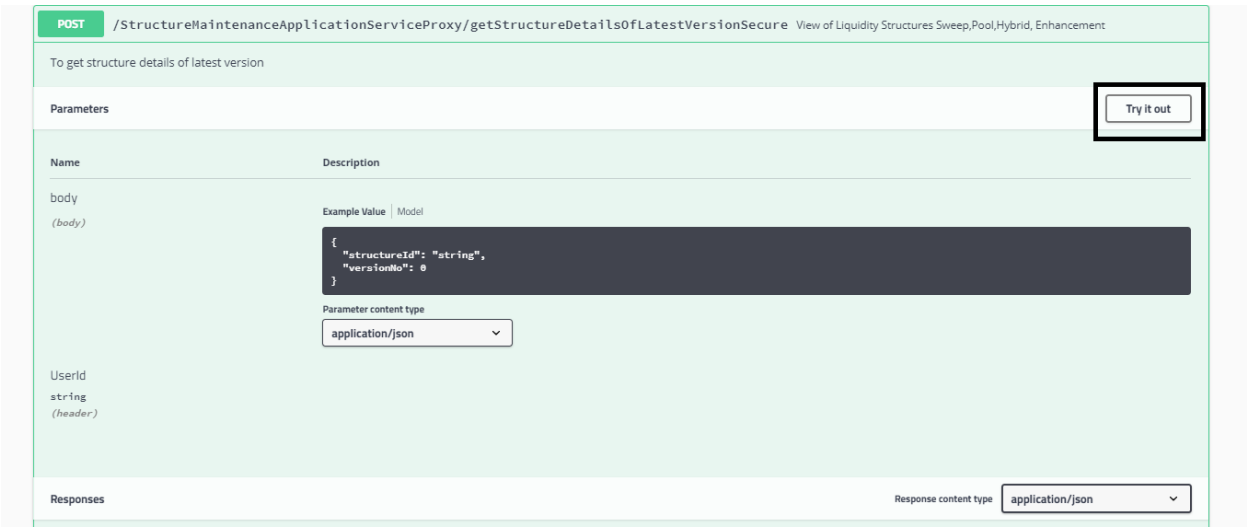


Service 4 : View of Liquidity Structures Sweep, Pool, Hybrid, Enhancement

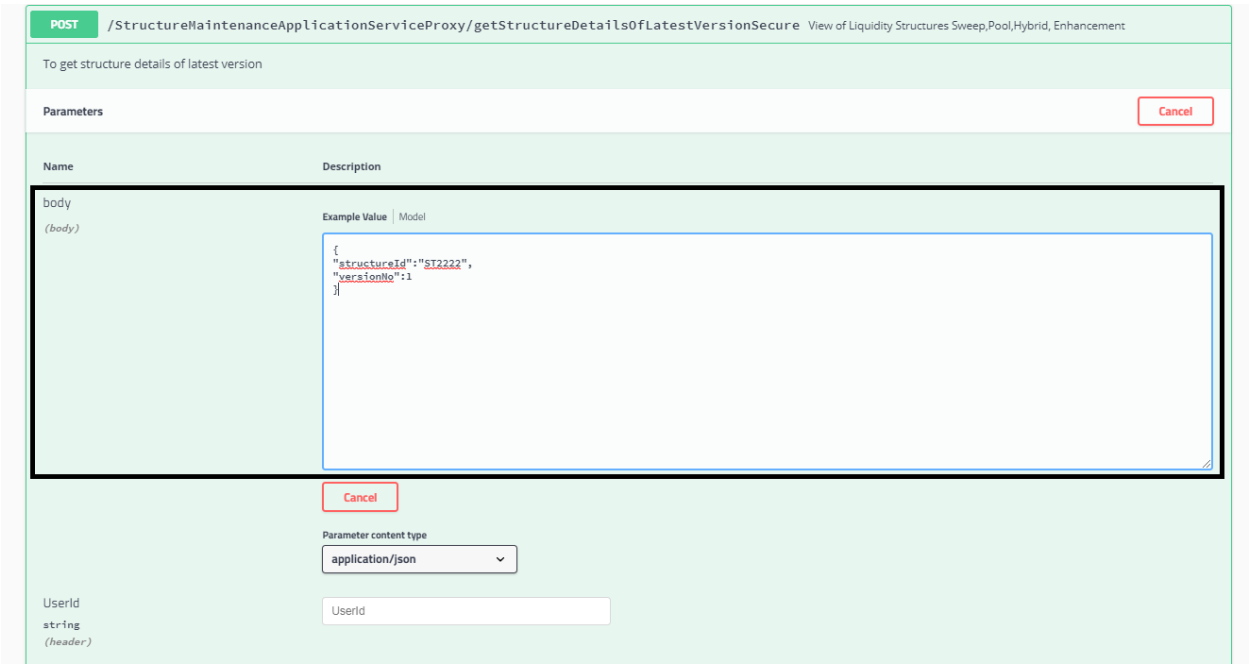
1. Click on View of Liquidity Structures Sweep, Pool, Hybrid, Enhancement service which is highlighted below.



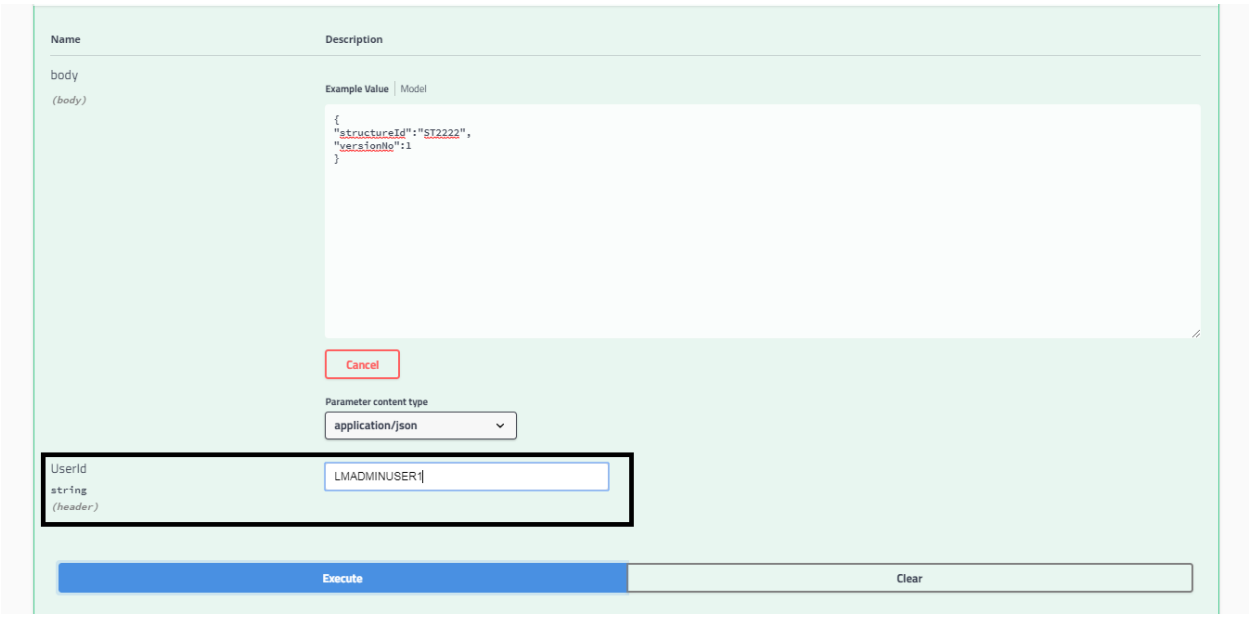
2. Click on Try it out as shown below.



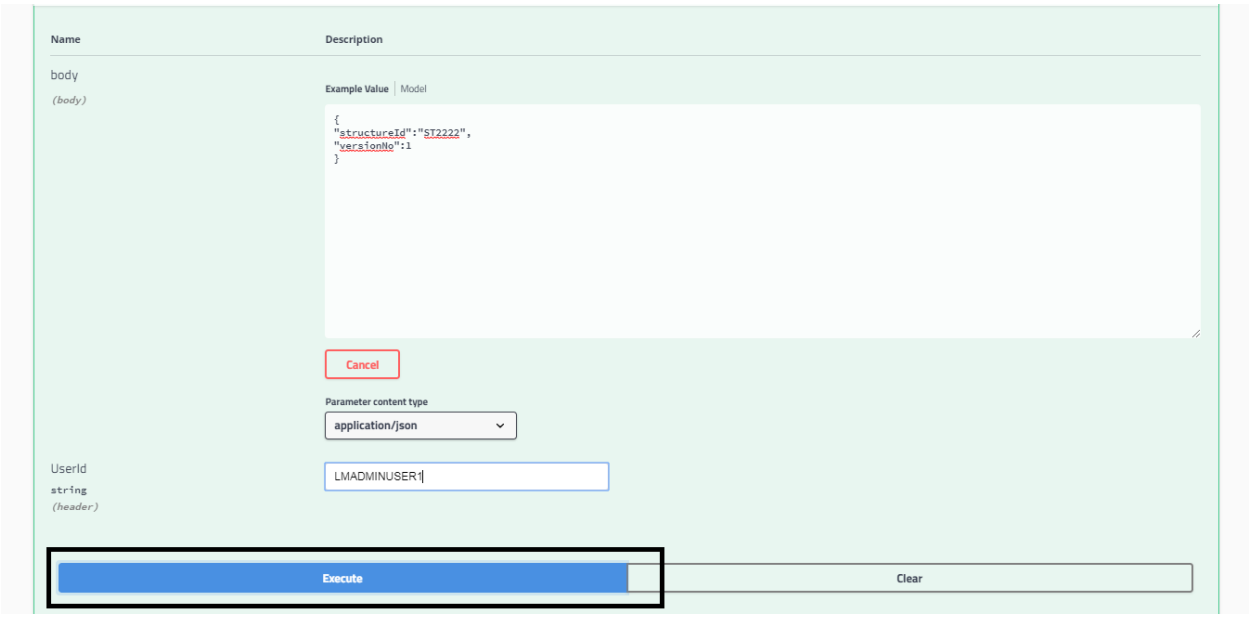
3. Give the corresponding input in body section,



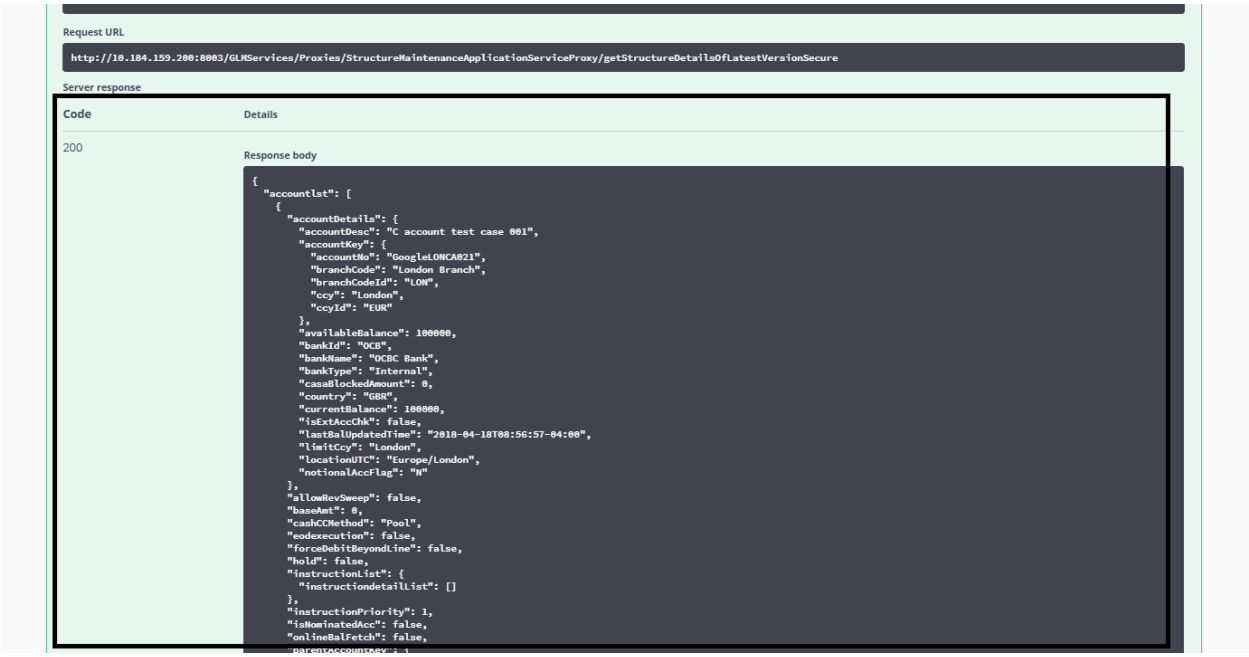
4. Give UserId for the service EX :(LMADMINUSER1).



5. Click on Execute.

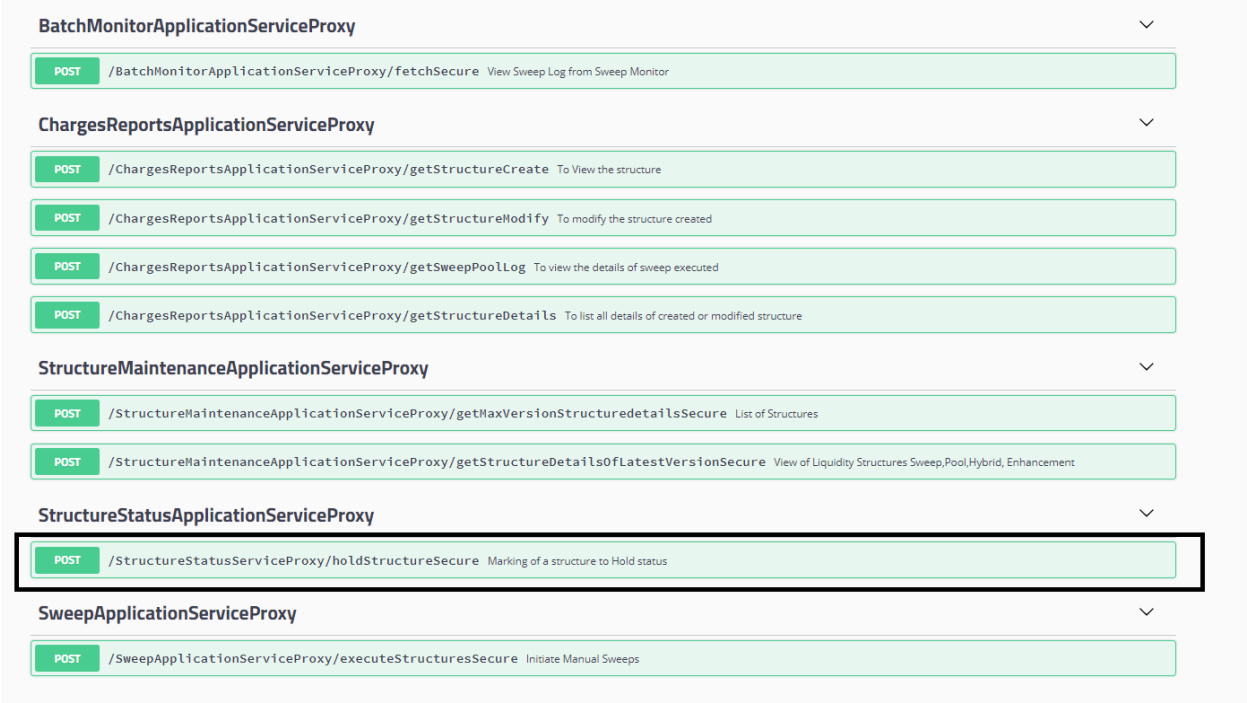


6. Response is populated after executing the service as shown below,

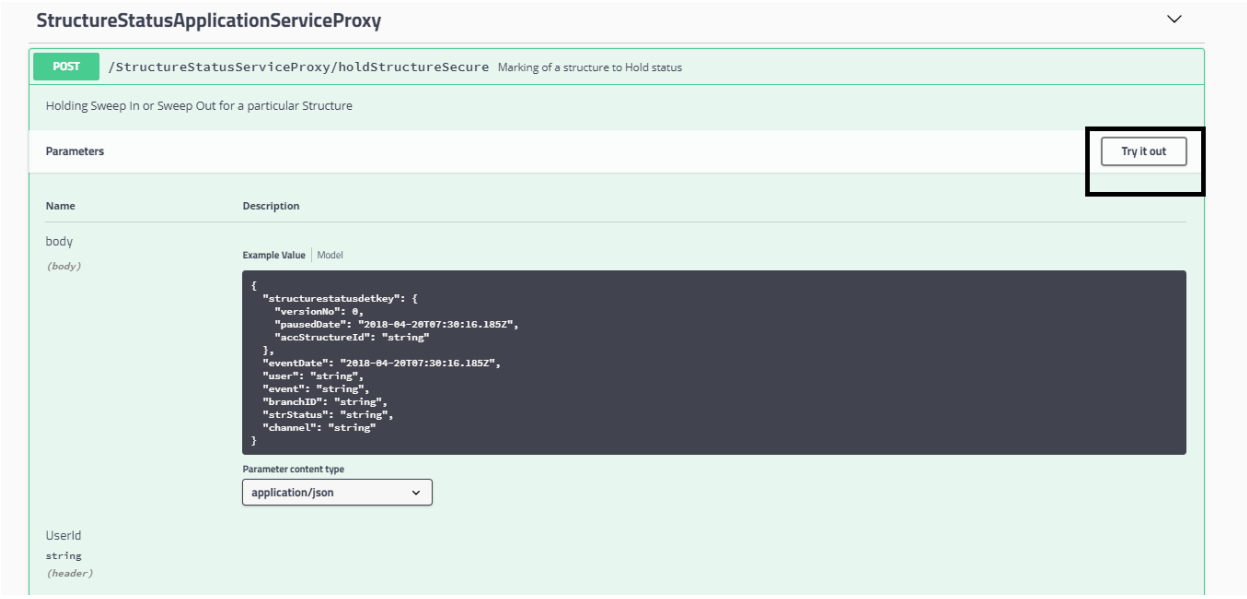


Service 5 : Marking of a structure to Hold status

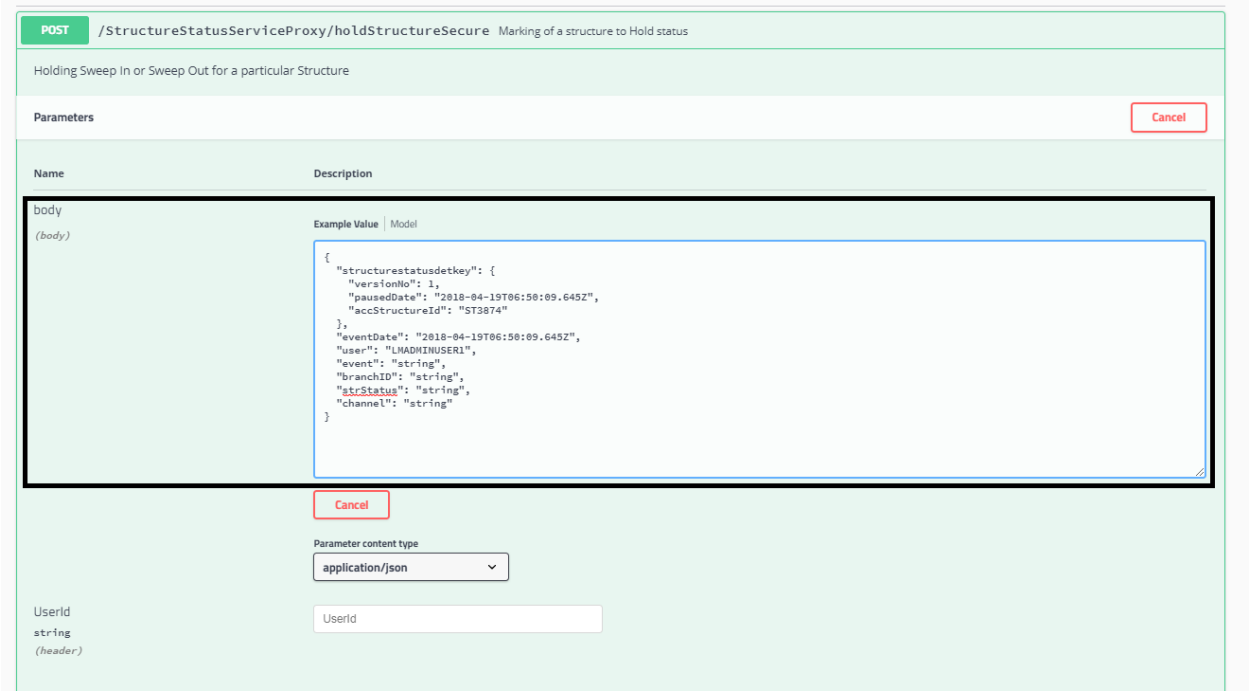
1. Click on Marking of a structure to Hold status service which is highlighted below,



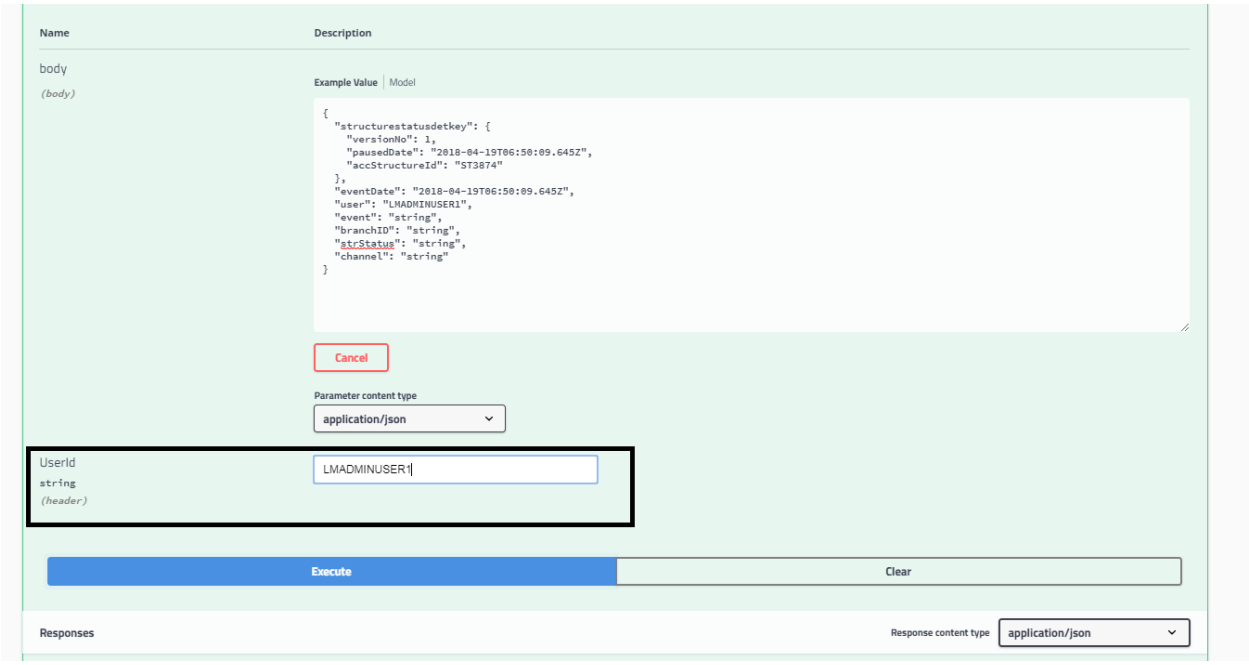
2. Click on Try it out as shown below.



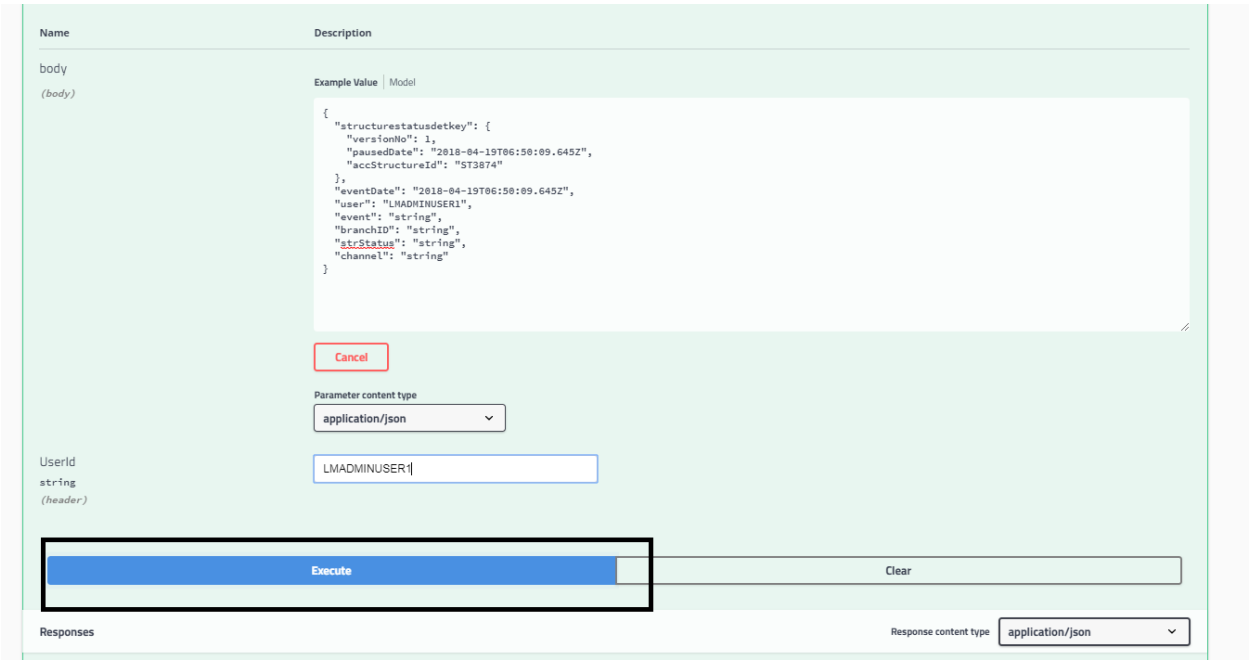
3. Give the corresponding input in body section,



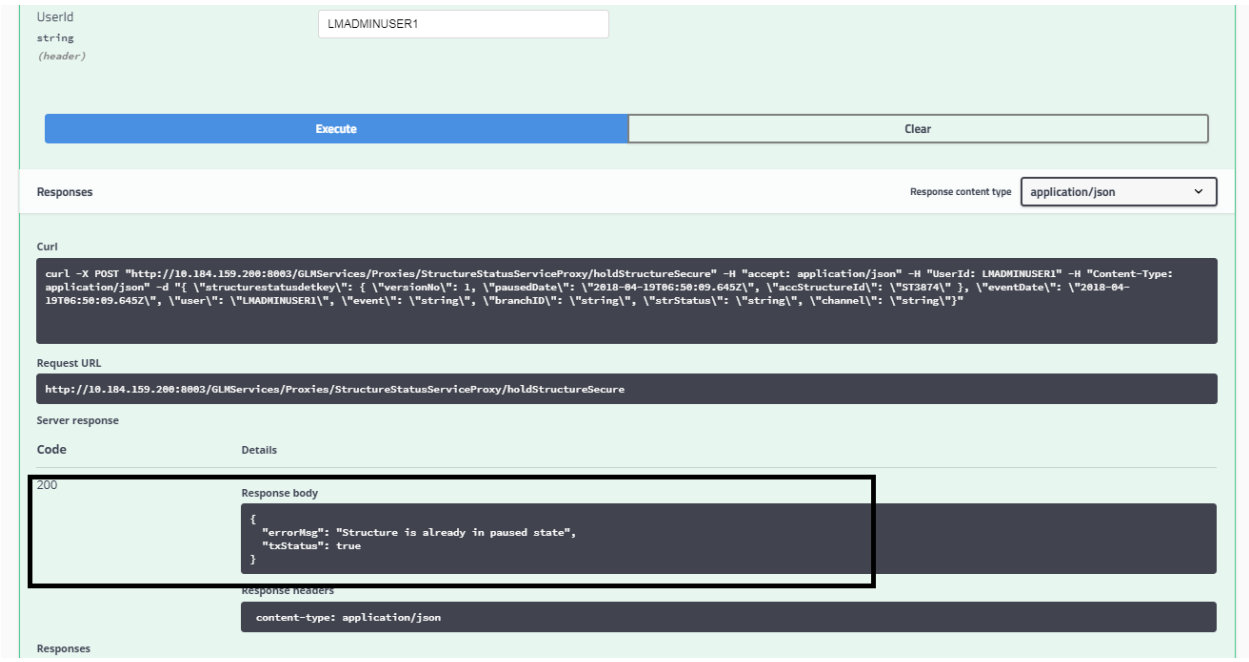
4. Give UserId for the service EX :(LMADMINUSER1).



5. Click on Execute.



6. Response is populated after executing the service as shown below,

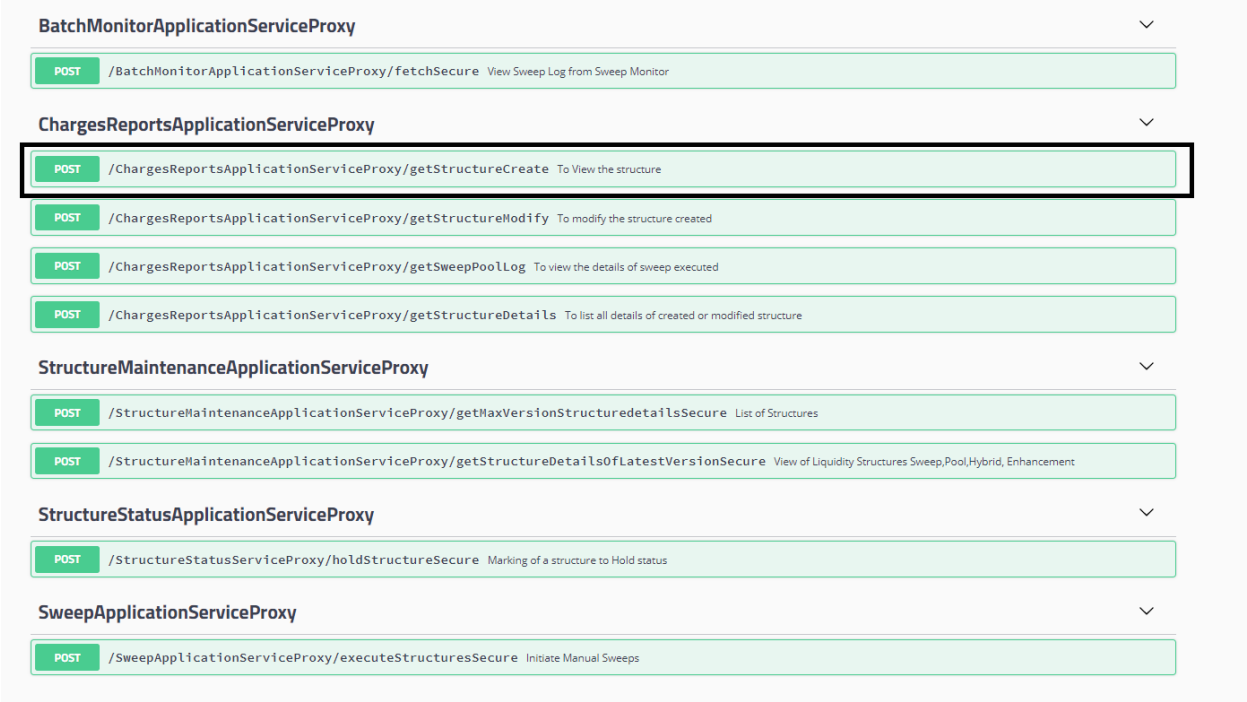


Service 6 : Structure Create Details for charges

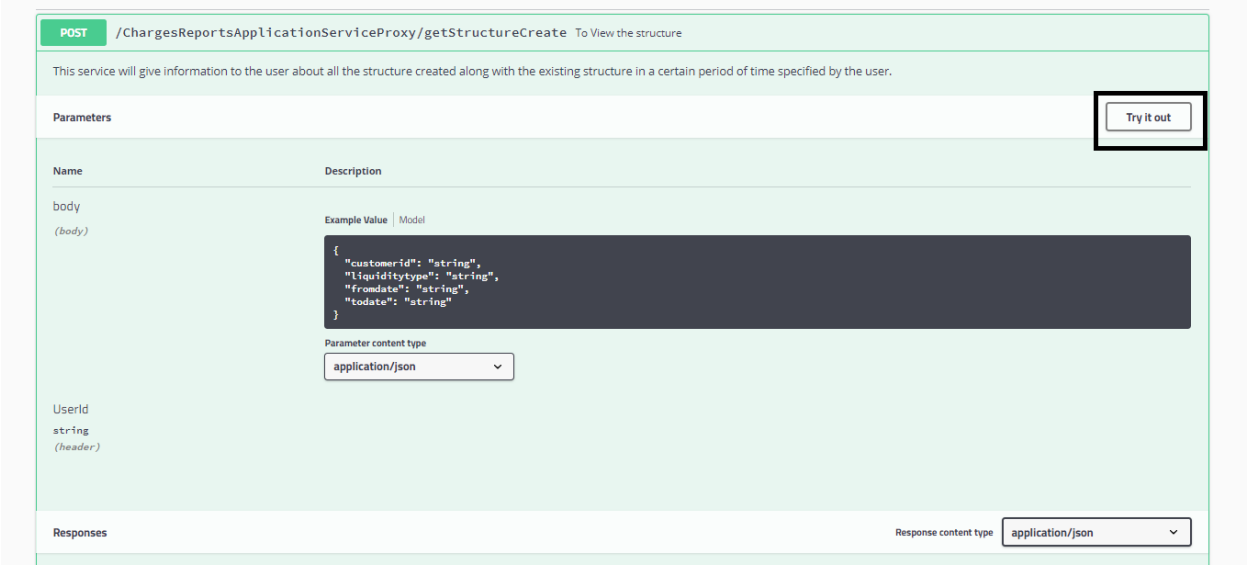
Description:

This service will give information to the user about all the structure created along with the existing structure in a certain period of time specified by the user.

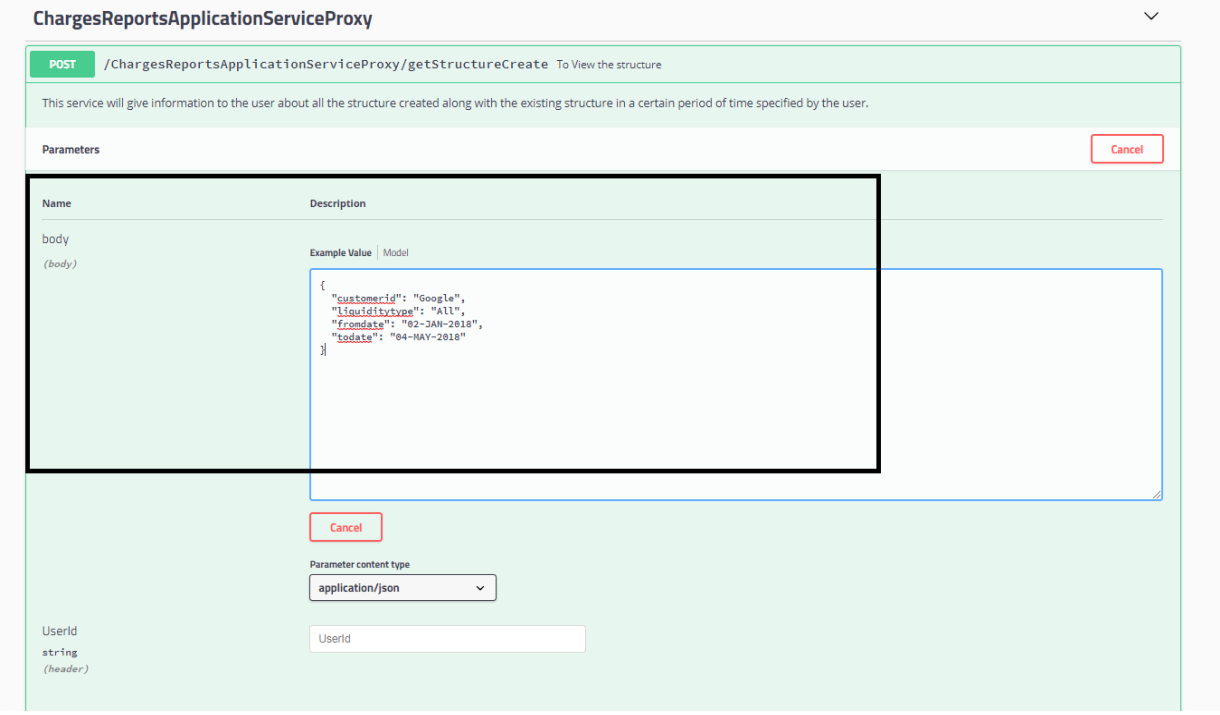
1. Click on to create the structure service which is highlighted below,



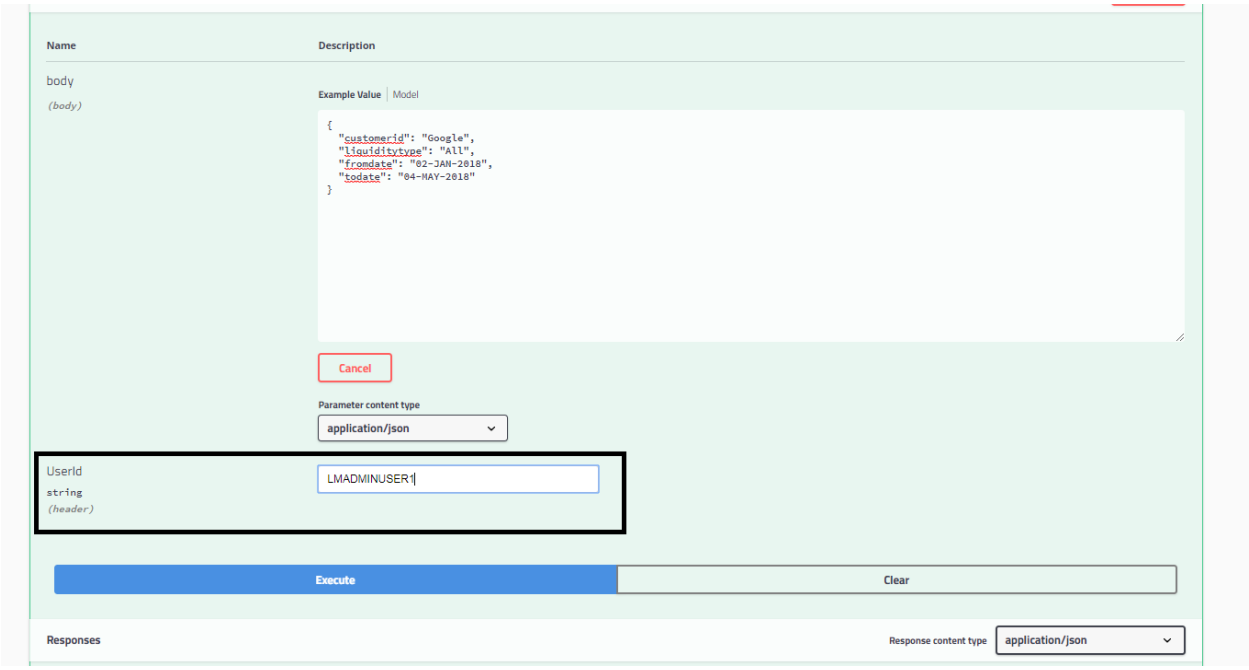
2. Click on Try it out as shown below.



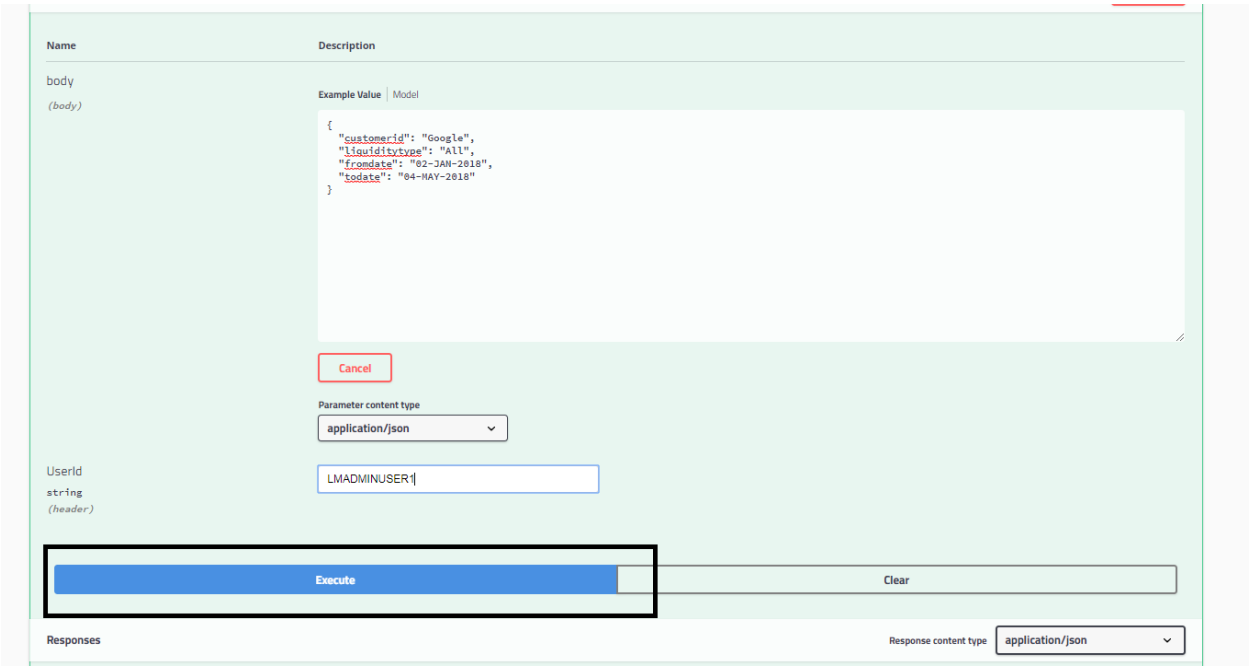
3. Give the corresponding input in body section,



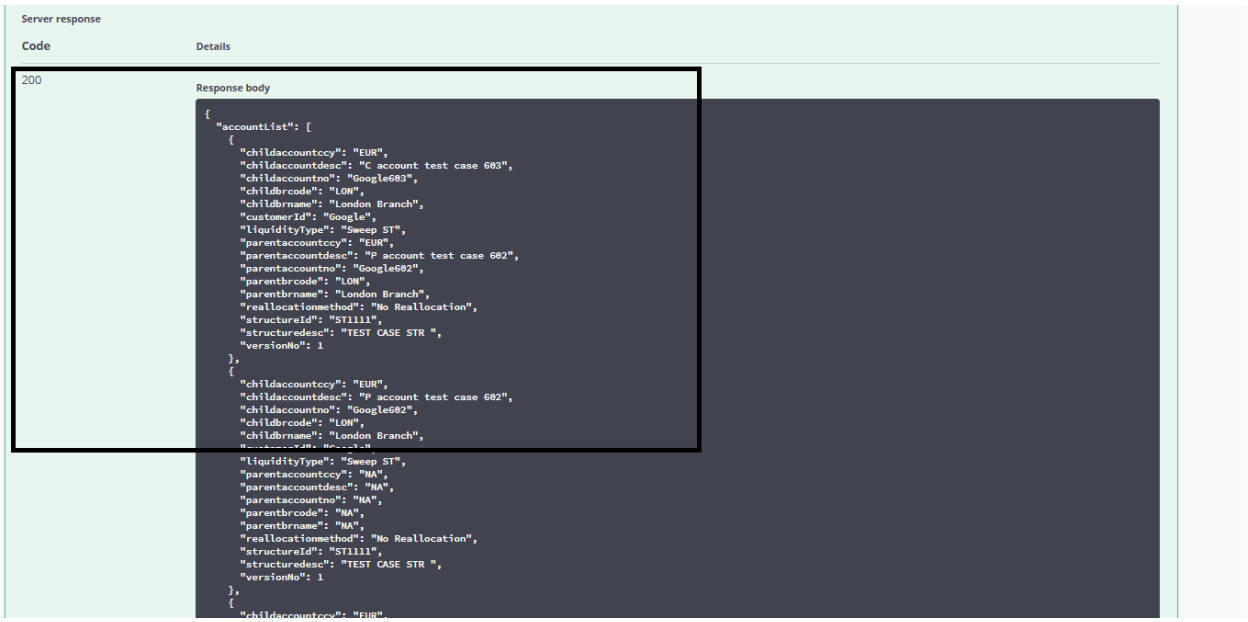
4. Give UserId for the service EX :(LMADMINUSER1).



5. Click on Execute.



6. Response is populated after executing the service as shown below,

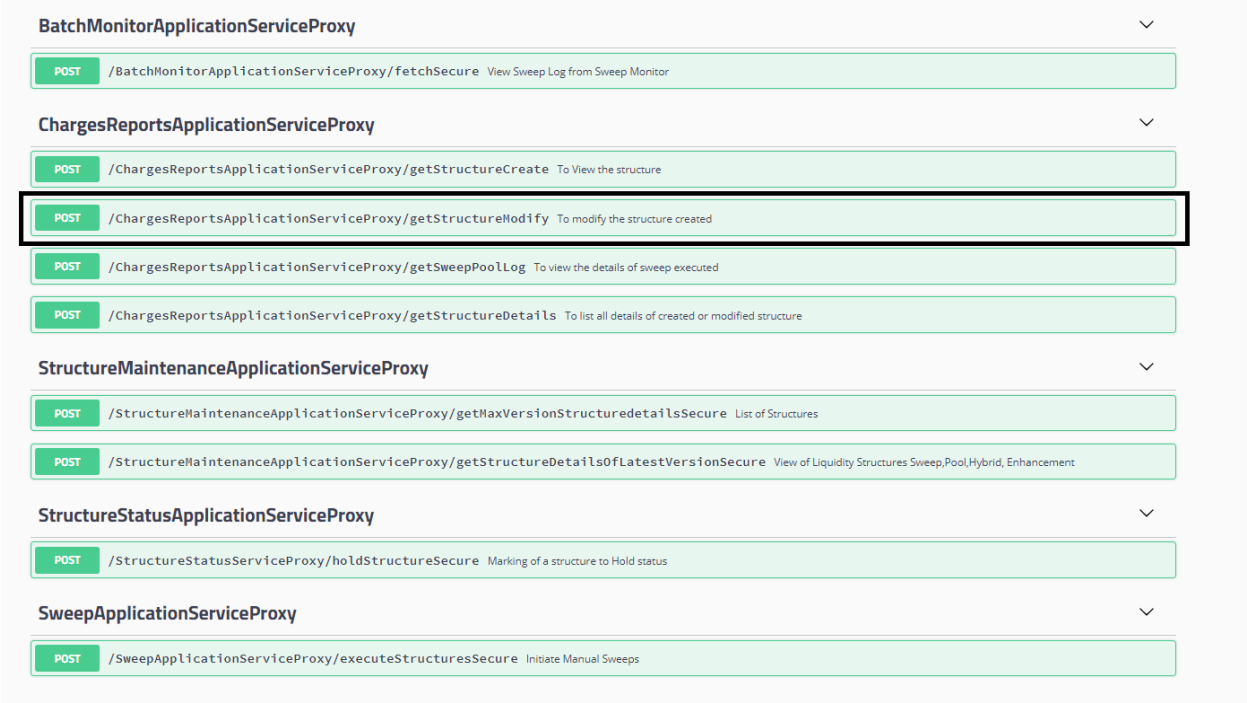


Service 7 : Structure Modify Details for charges

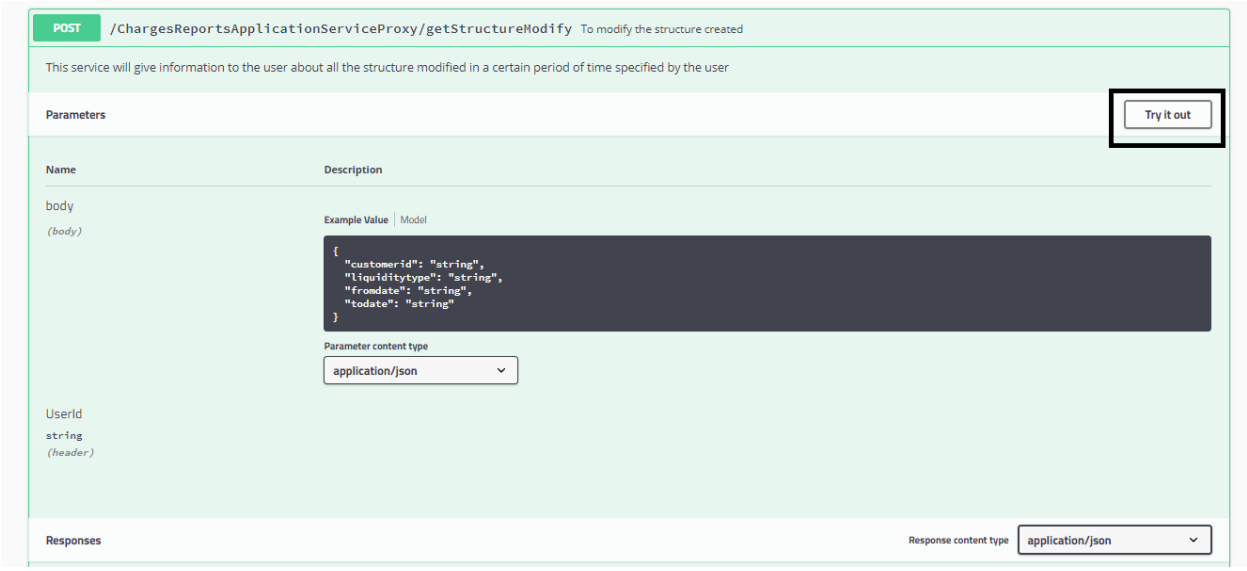
Description:

This service will give information to the user about all the structure modified in a certain period of time specified by the user.

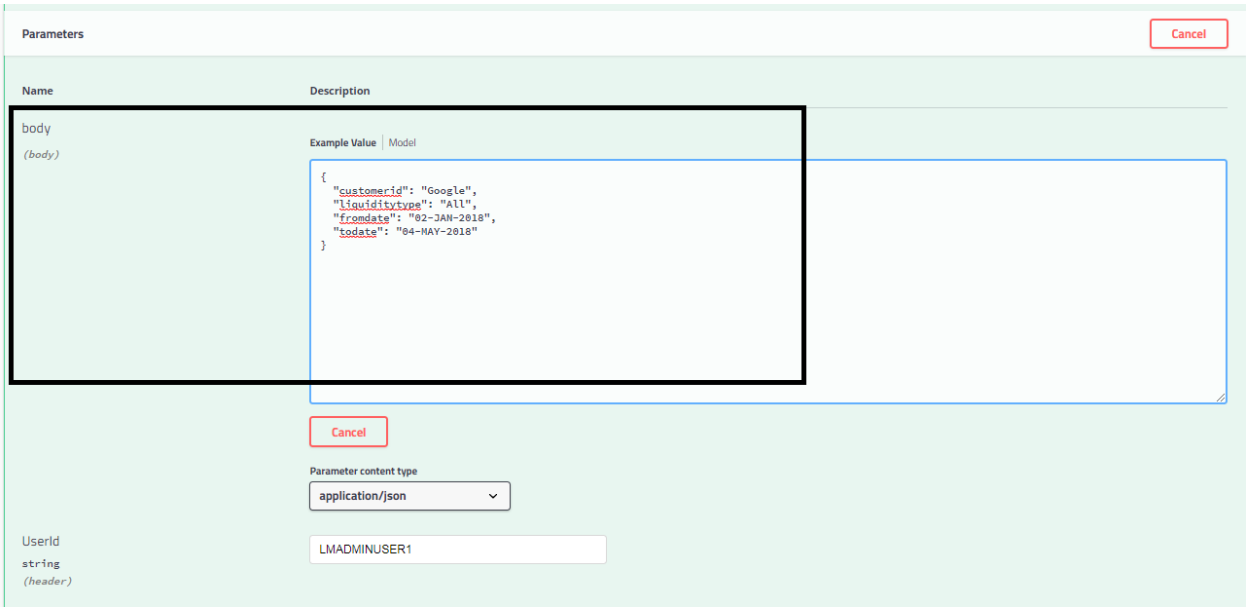
1. Click on to modify the structure service which is highlighted below,



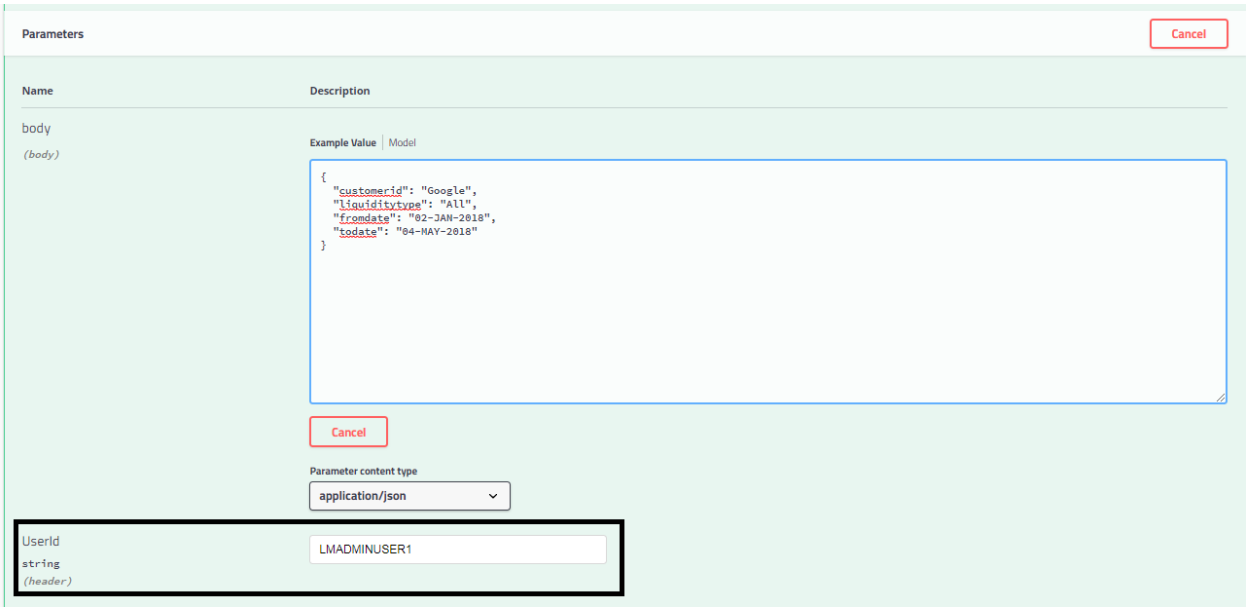
2. Click on Try it out as shown below.



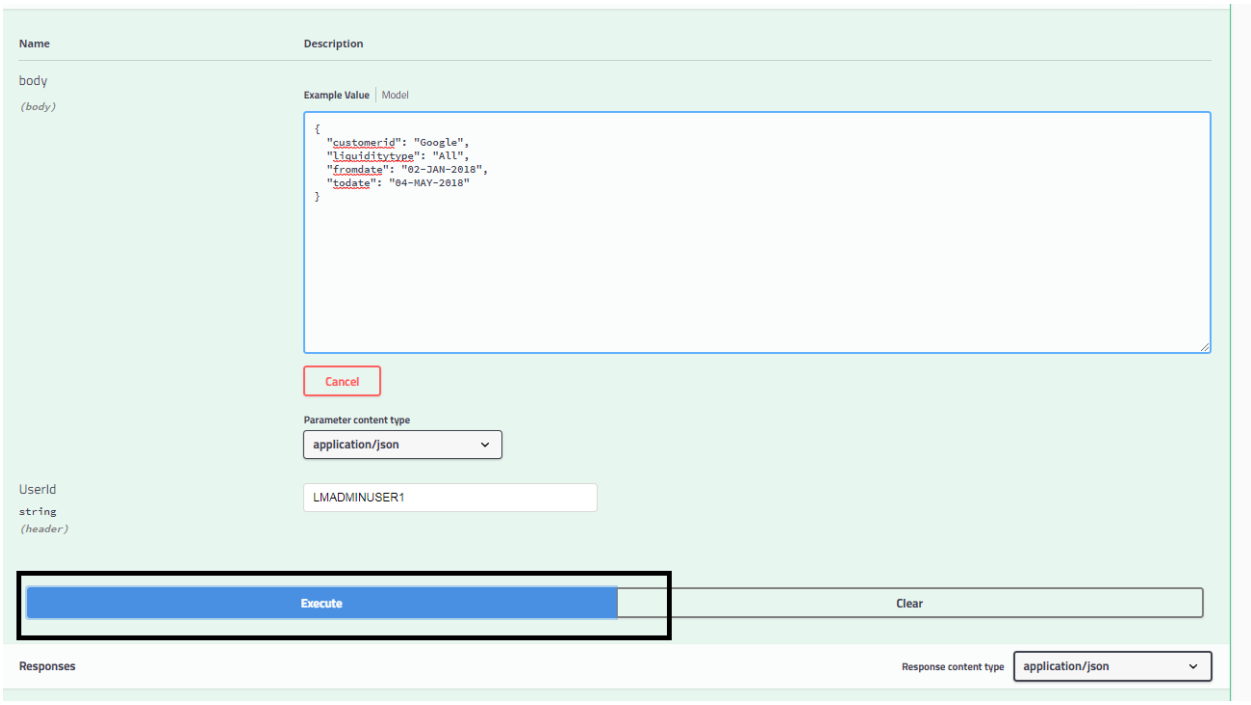
3. Give the corresponding input in body section,



4. Give UserId for the service EX :(LMADMINUSER1).



5. Click on Execute.



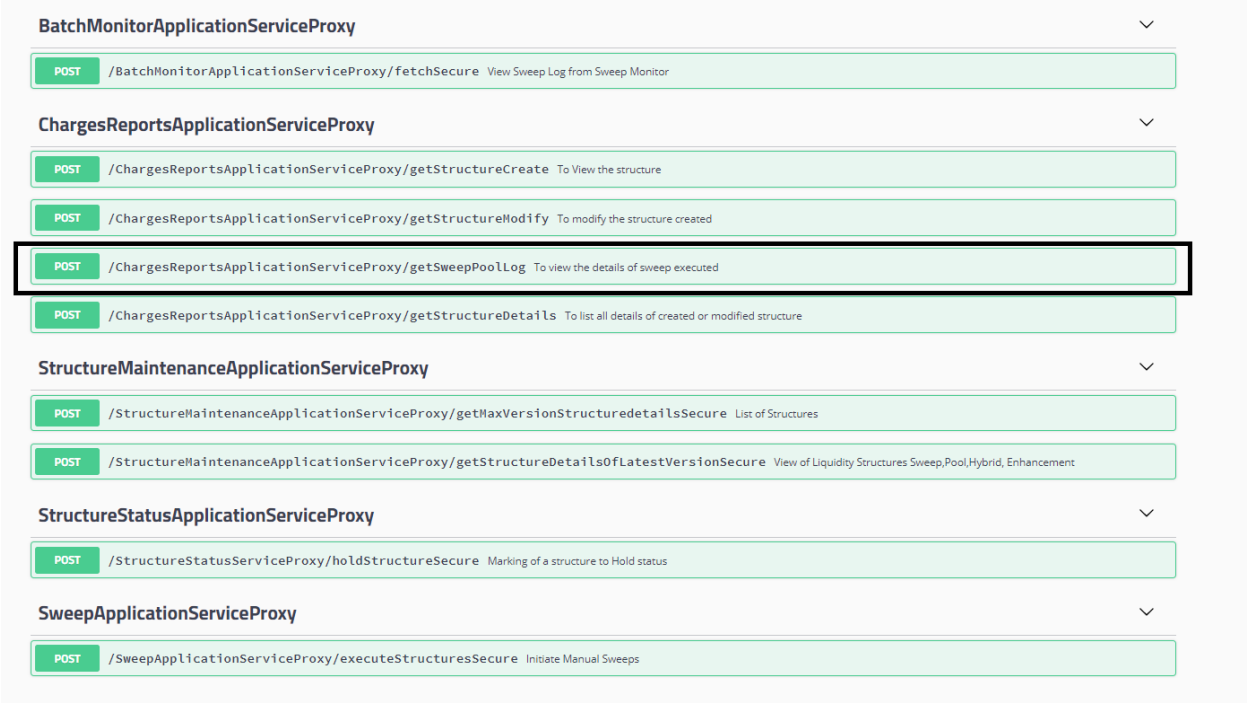
6. Response is populated after executing the service as shown below,

Service 8 : Structure Contribution Details for charges

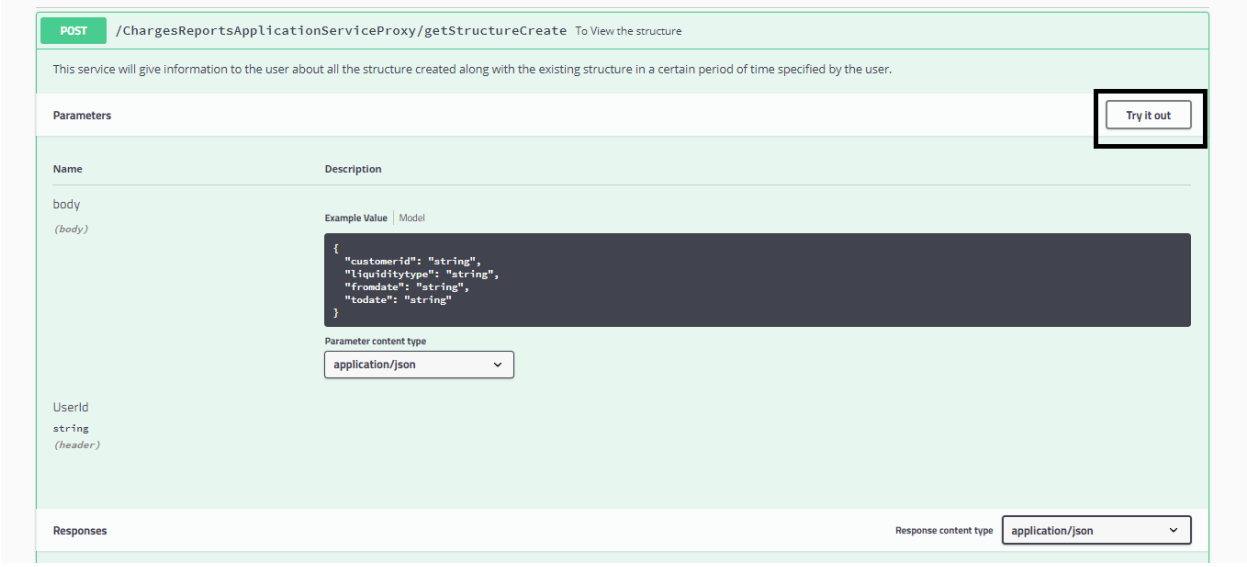
Description :

This service will give all the information to the user about the sweep and pool executed successfully in the given period of time specified by the user.

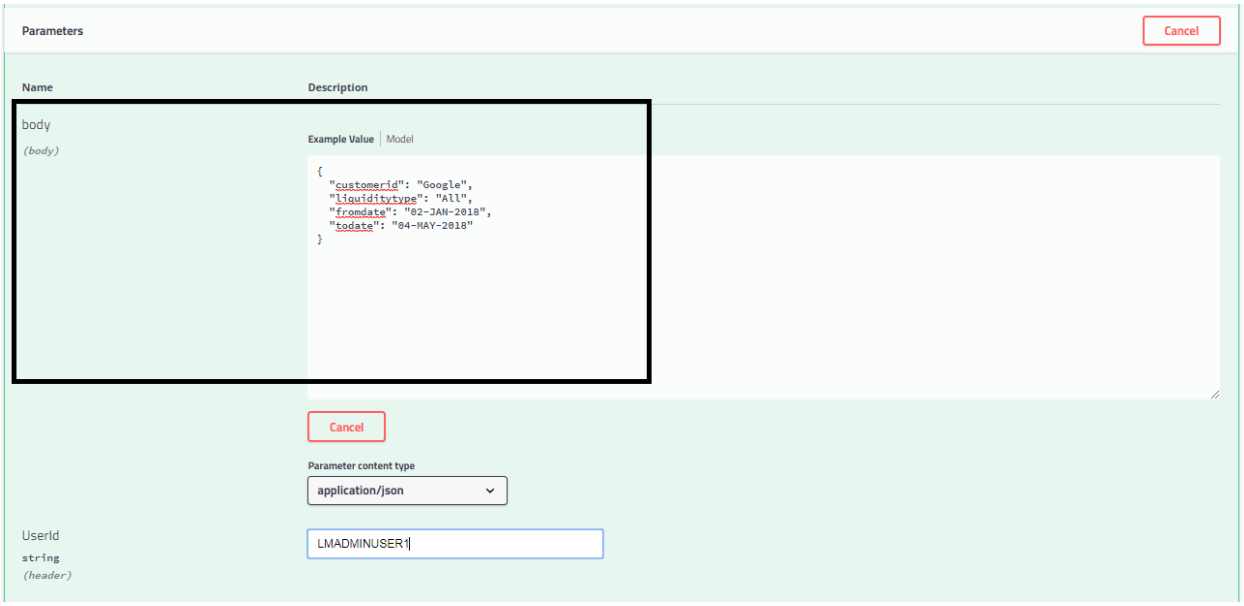
1. Click on to view Sweep details service which is highlighted below,



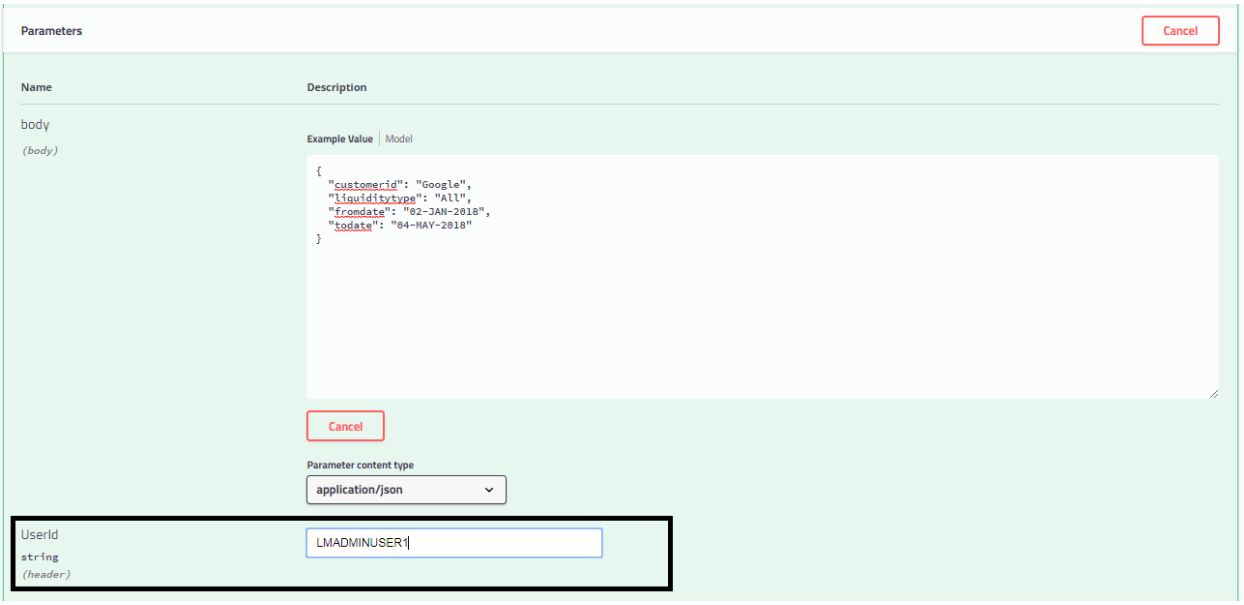
2. Click on Try it out as shown below.



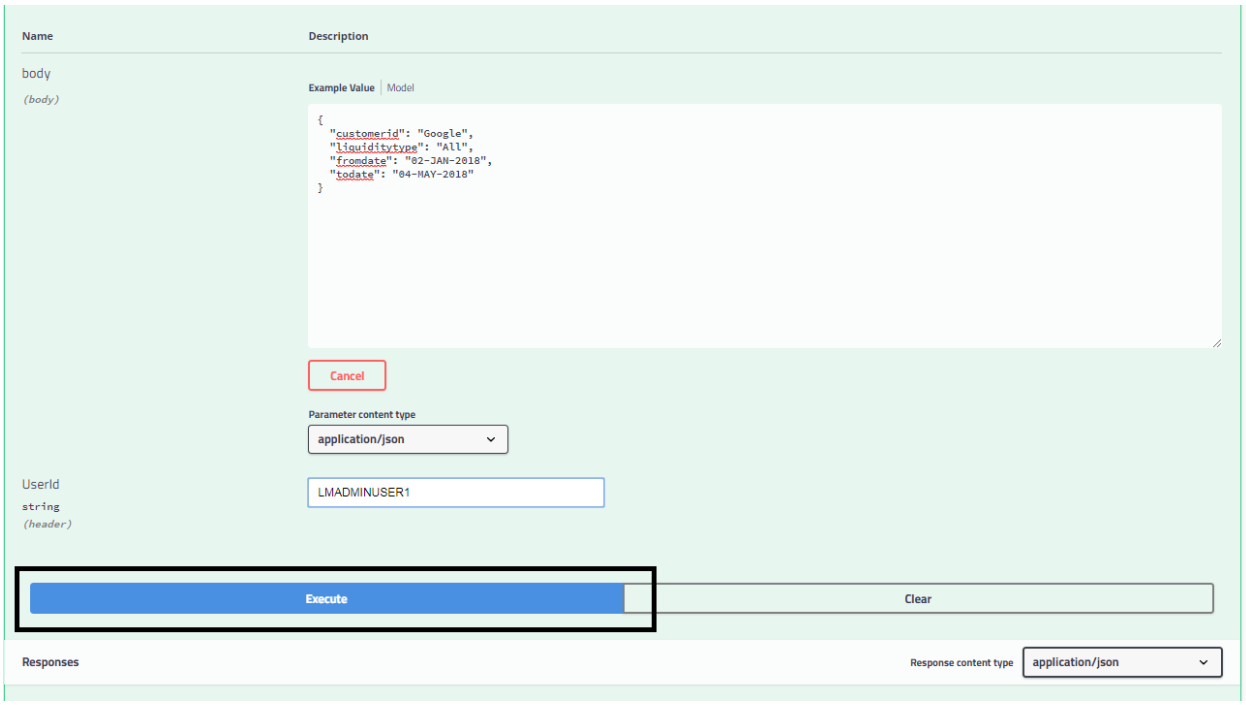
3. Give the corresponding input in body section,



4. Give UserId for the service EX :(LMADMINUSER1).



5. Click on Execute.



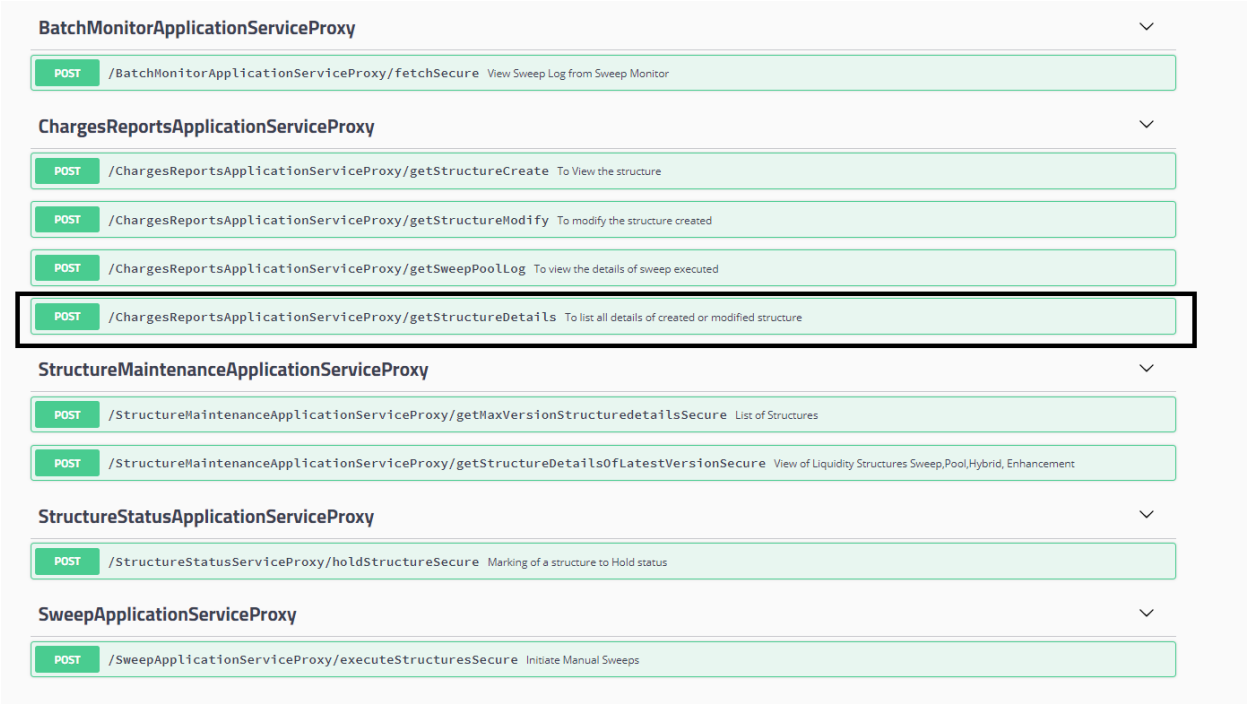
6. Response is populated after executing the service as shown below,

Service 9 : Structure Detail for charges

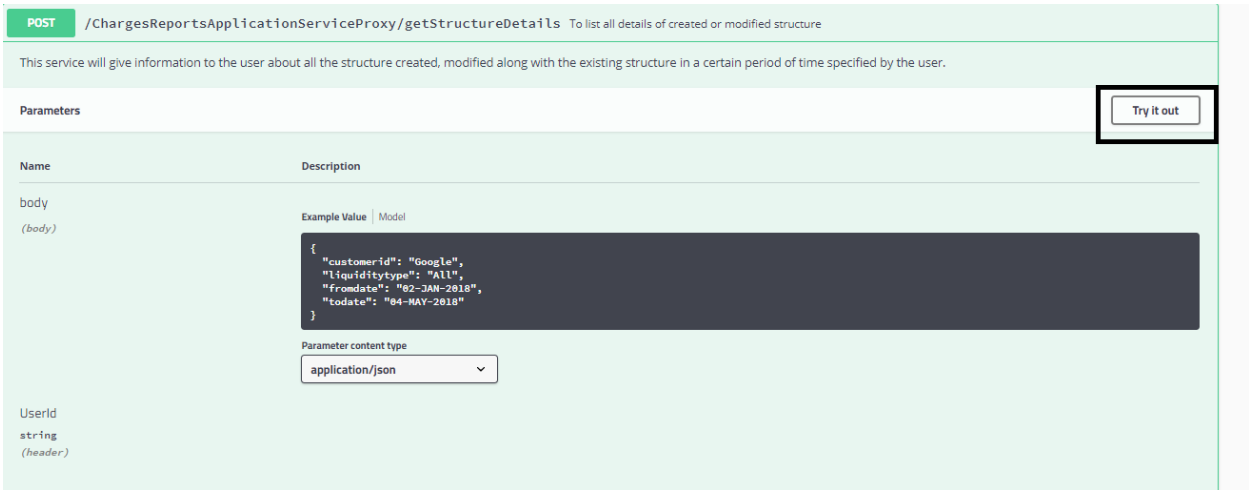
Description :

This service will give information to the user about all the structure created, modified along with the existing structure in a certain period of time specified by the user**.**

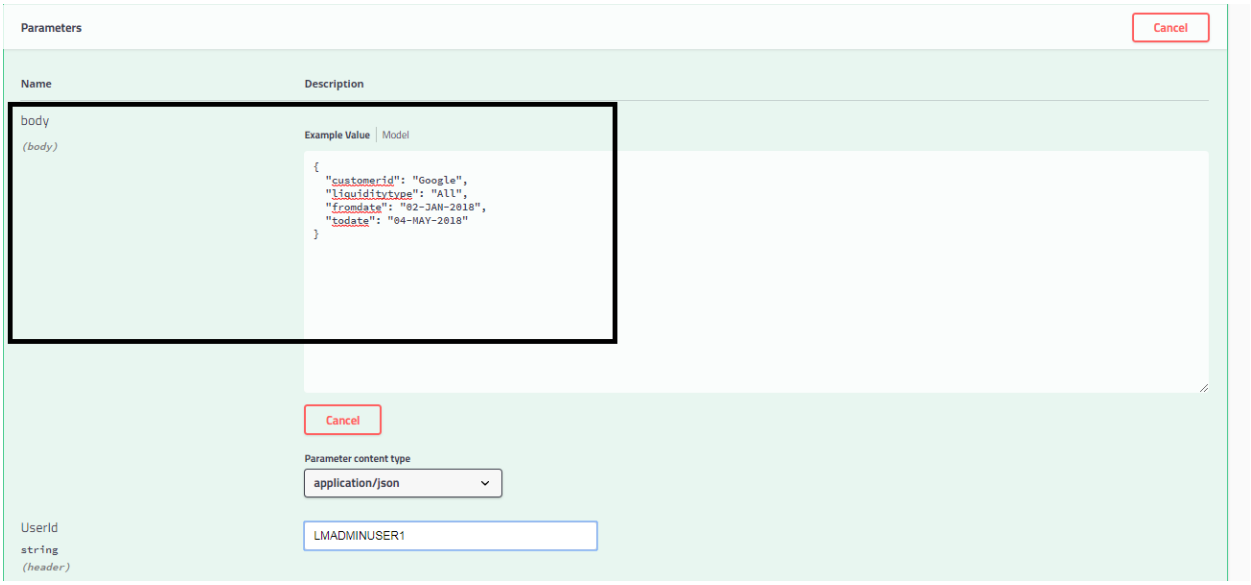
1. Click on to view the structure service which is highlighted below,



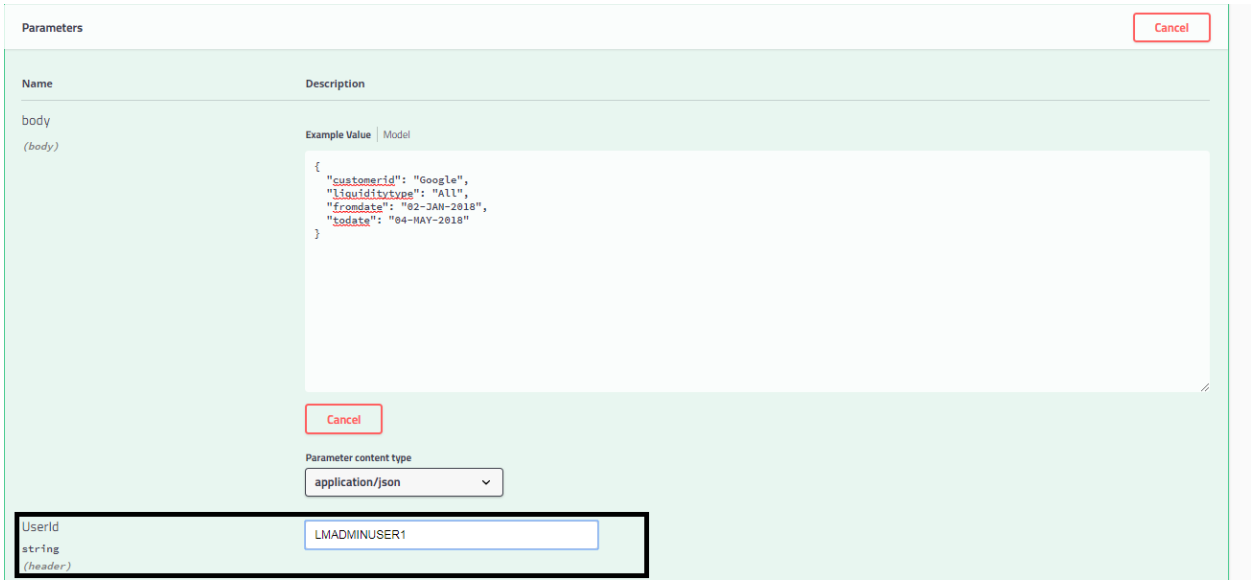
2. Click on Try it out as shown below.



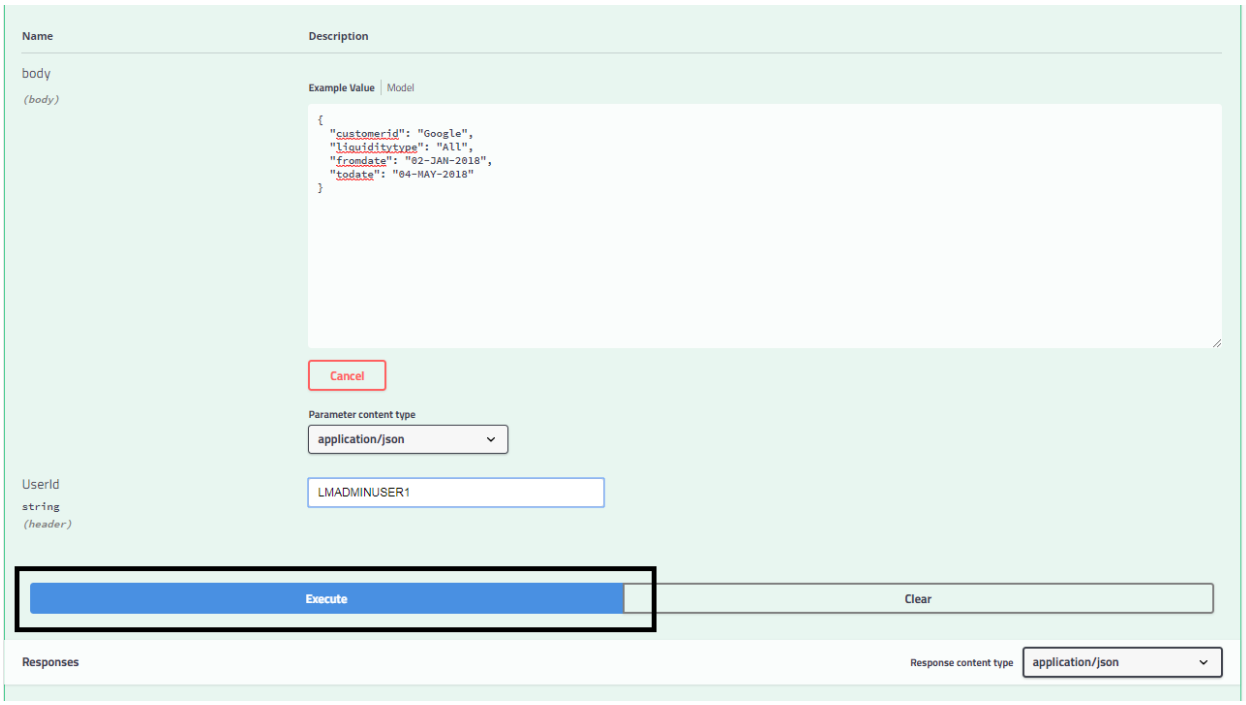
3. Give the corresponding input in body section,



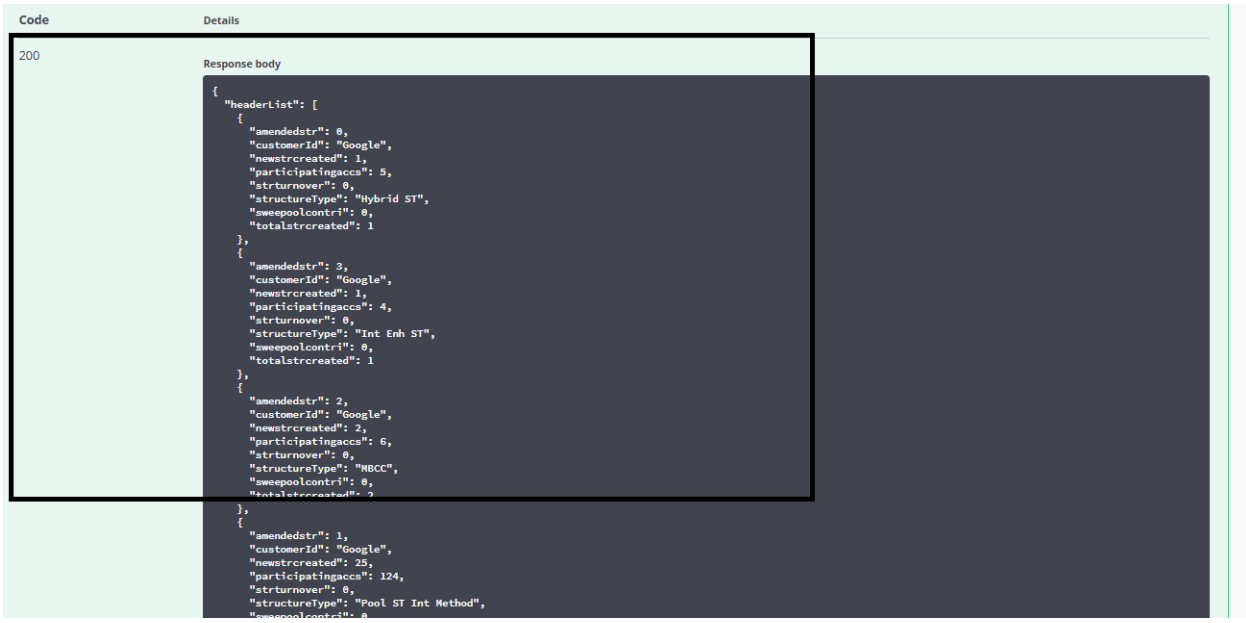
4.Give UserId for the service EX :(LMADMINUSER1).



5. Click on Execute.



6. Response is populated after executing the service as shown below,



Channel Setup
Oracle Banking Liquidity Management
Version 14.1.0.0.0
[May] [2018]

Oracle Financial Services Software Limited
Oracle Park
Off Western Express Highway
Goregaon (East)
Mumbai, Maharashtra 400 063
India

Worldwide Inquiries:
Phone: +91 22 6718 3000
Fax:+91 22 6718 3001
www.oracle.com/financialservices/

Copyright © 2017, 2018, Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.