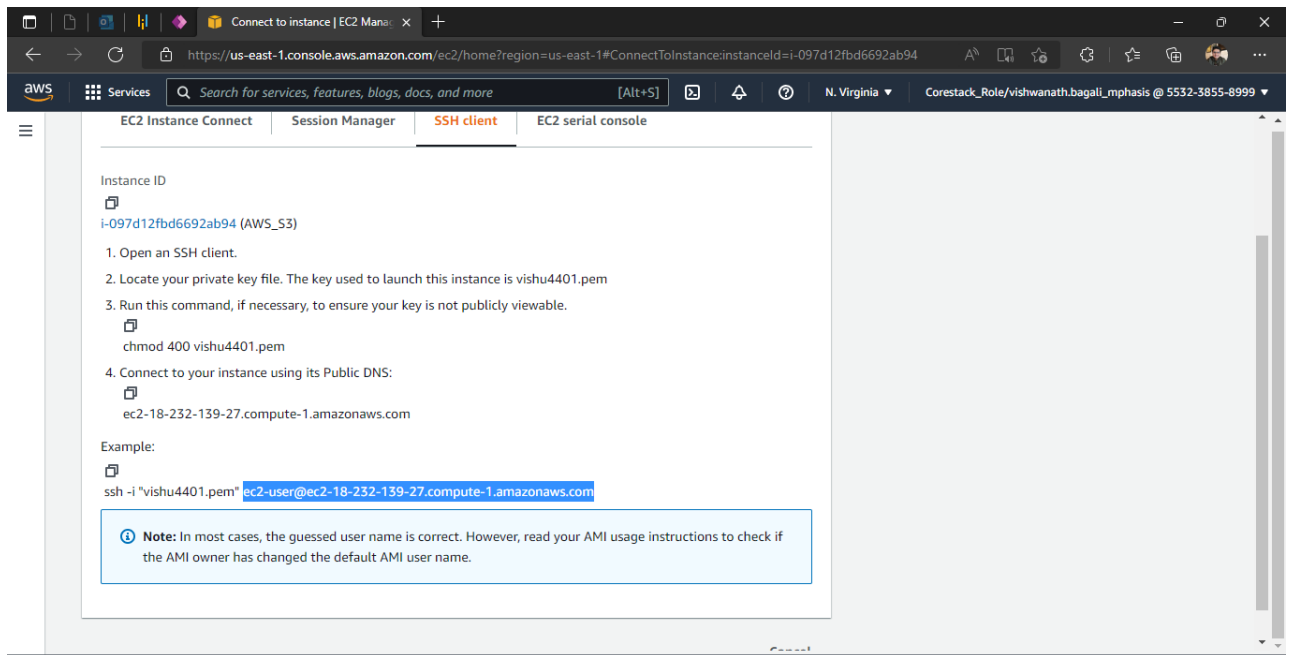


Deploy Application on Cloud

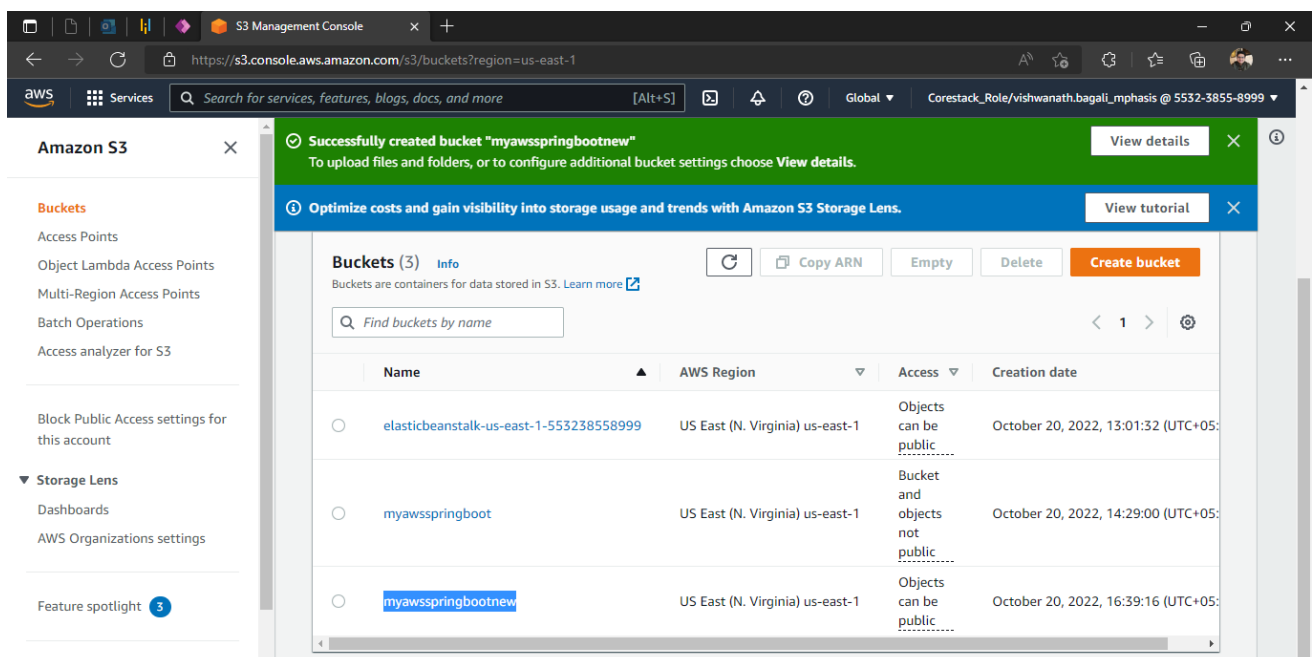
Project objective:

As a developer, deploy your Spring Boot application on Cloud.

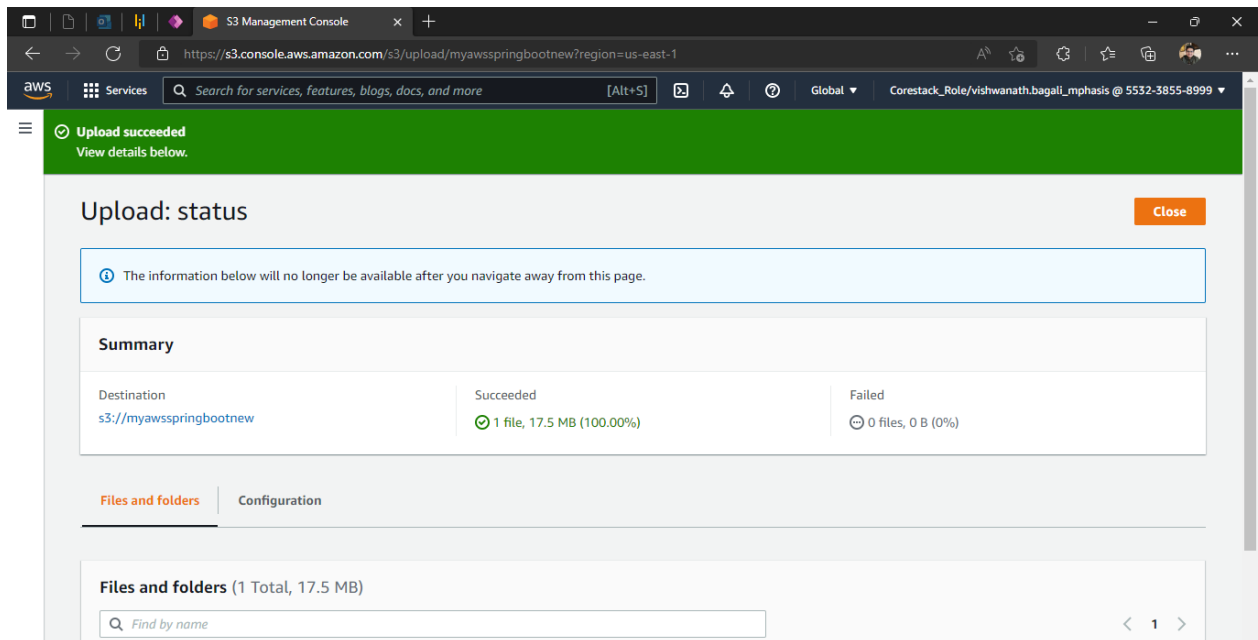
Screenshots



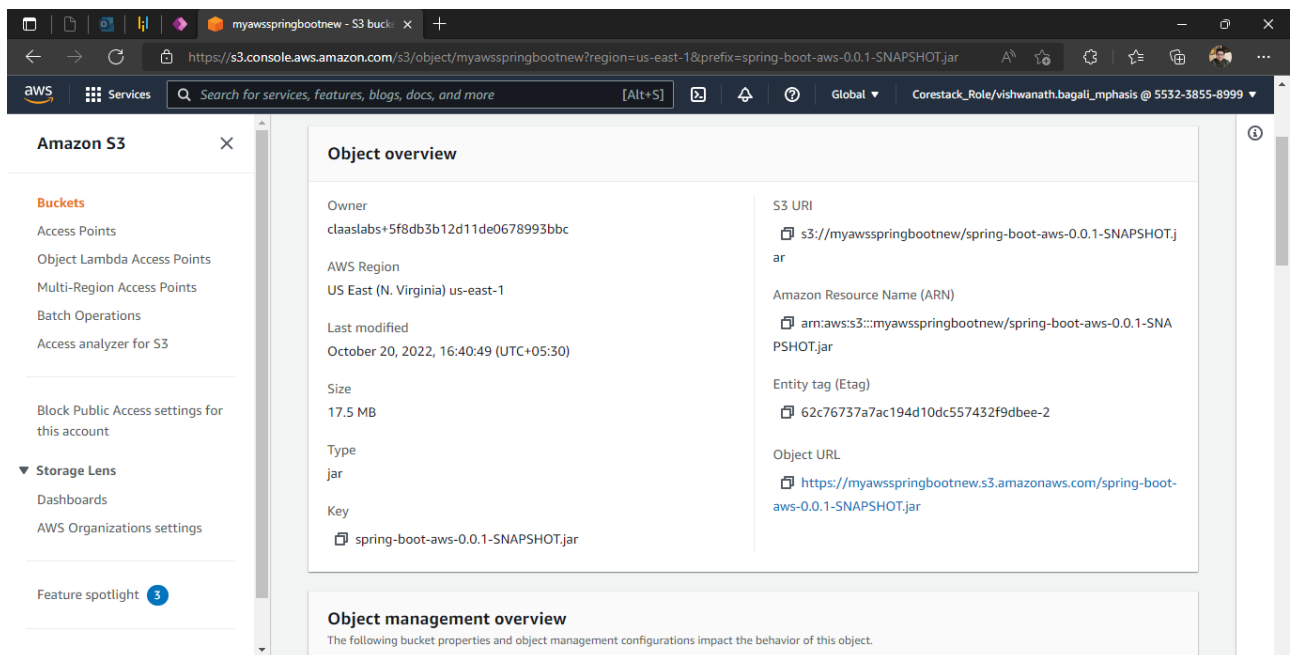
An instance named AWS_S3 is created, this highlighted text is used for connection



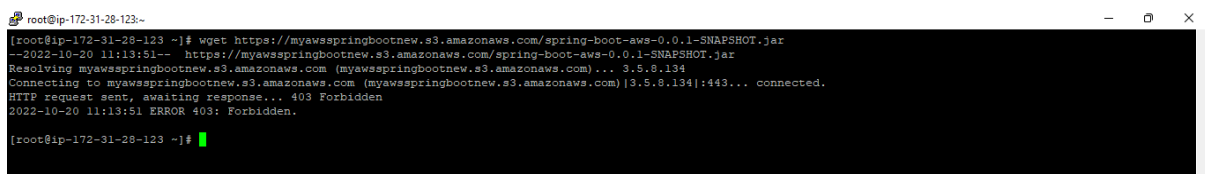
Bucket creation to upload the file(jar) and launch the connected instance



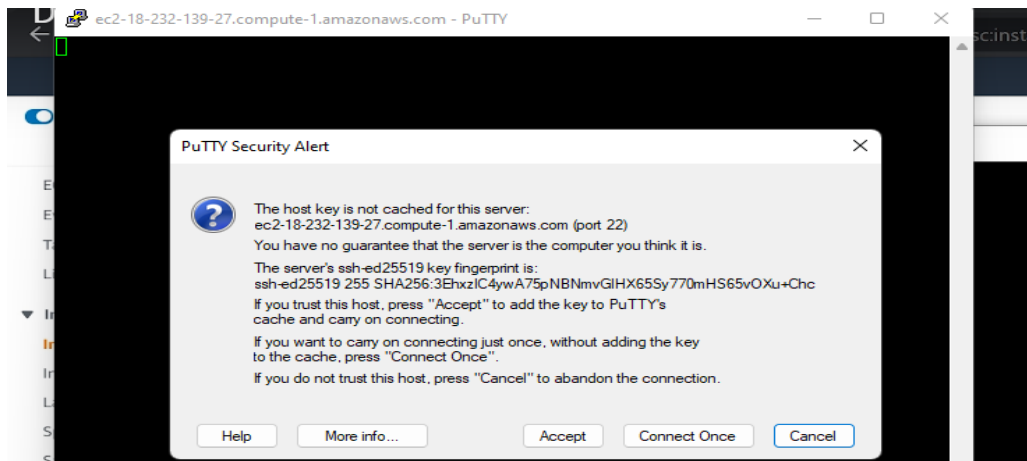
The jar file is uploaded into the s3 bucket (Status of file uploaded successfully)



Object Overview of s3 bucket after file uploading, object URL can be used to fetch the file on cloud to deploy on to the cloud



Forbidden error after the trying to access the snapshot, due to the bucket is not provided to access publicly



After the Putty is provided with valid credentials the user is prompted for Security alert to launch the instance to run the commands

```
root@ip-172-31-28-123:~
--2022-10-20 11:13:51-- https://myawsspringbootnew.s3.amazonaws.com/spring-boot-aws-0.0.1-SNAPSHOT.jar
Resolving myawsspringbootnew.s3.amazonaws.com (myawsspringbootnew.s3.amazonaws.com)... 3.5.8.134
Connecting to myawsspringbootnew.s3.amazonaws.com (myawsspringbootnew.s3.amazonaws.com)|3.5.8.134|:443... connected.
HTTP request sent, awaiting response... 403 Forbidden
2022-10-20 11:13:51 ERROR 403: Forbidden.

root@ip-172-31-28-123 ~]# wget https://myawsspringbootnew.s3.amazonaws.com/spring-boot-aws-0.0.1-SNAPSHOT.jar
--2022-10-20 11:22:19-- https://myawsspringbootnew.s3.amazonaws.com/spring-boot-aws-0.0.1-SNAPSHOT.jar
Resolving myawsspringbootnew.s3.amazonaws.com (myawsspringbootnew.s3.amazonaws.com)... 52.217.192.217
Connecting to myawsspringbootnew.s3.amazonaws.com (myawsspringbootnew.s3.amazonaws.com)|52.217.192.217|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 18380941 (18M) [application/x-www-form-urlencoded]
Saving to: 'spring-boot-aws-0.0.1-SNAPSHOT.jar'

100%[=====] 18,380,941 28.3MB/s in 0.6s

2022-10-20 11:22:19 (28.3 MB/s) - 'spring-boot-aws-0.0.1-SNAPSHOT.jar' saved [18380941/18380941]

root@ip-172-31-28-123 ~]#
```

After successfully assign public permission to the bucket, the connection is successfully connected

```
root@ip-172-31-28-123:~
Resolving myawsspringbootnew.s3.amazonaws.com (myawsspringbootnew.s3.amazonaws.com)... 3.5.8.134
Connecting to myawsspringbootnew.s3.amazonaws.com (myawsspringbootnew.s3.amazonaws.com)|3.5.8.134|:443... connected.
HTTP request sent, awaiting response... 403 Forbidden
2022-10-20 11:13:51 ERROR 403: Forbidden.

root@ip-172-31-28-123 ~]# wget https://myawsspringbootnew.s3.amazonaws.com/spring-boot-aws-0.0.1-SNAPSHOT.jar
--2022-10-20 11:22:19-- https://myawsspringbootnew.s3.amazonaws.com/spring-boot-aws-0.0.1-SNAPSHOT.jar
Resolving myawsspringbootnew.s3.amazonaws.com (myawsspringbootnew.s3.amazonaws.com)... 52.217.192.217
Connecting to myawsspringbootnew.s3.amazonaws.com (myawsspringbootnew.s3.amazonaws.com)|52.217.192.217|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 18380941 (18M) [application/x-www-form-urlencoded]
Saving to: 'spring-boot-aws-0.0.1-SNAPSHOT.jar'

100%[=====] 18,380,941 28.3MB/s in 0.6s

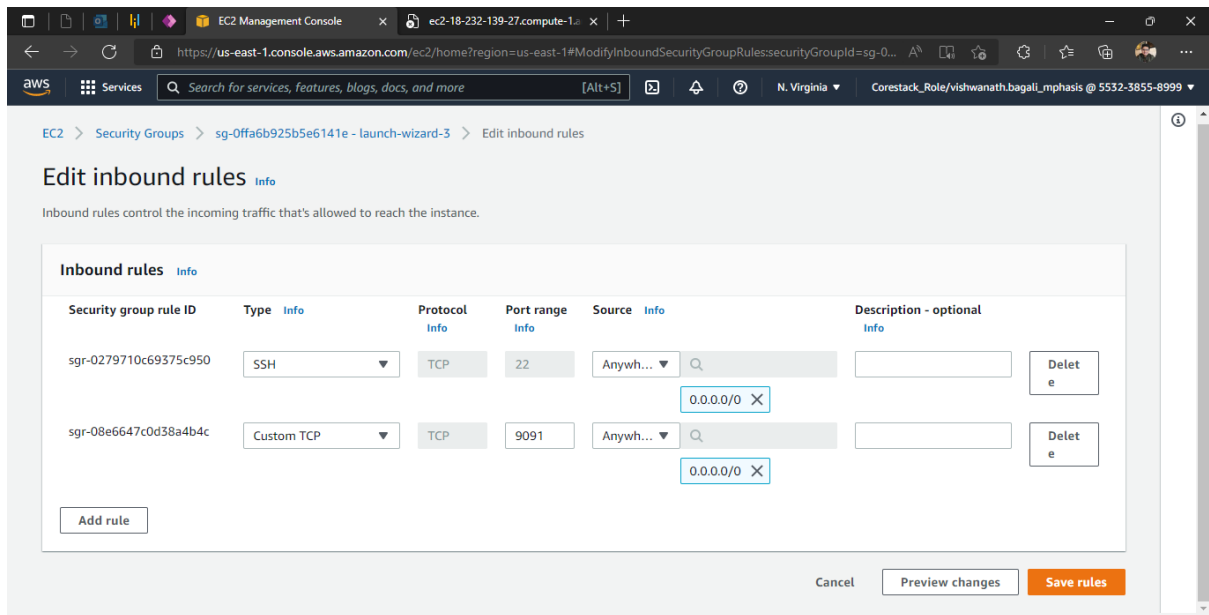
2022-10-20 11:22:19 (28.3 MB/s) - 'spring-boot-aws-0.0.1-SNAPSHOT.jar' saved [18380941/18380941]

root@ip-172-31-28-123 ~]# ls
spring-boot-aws-0.0.1-SNAPSHOT.jar
root@ip-172-31-28-123 ~]# java -jar spring-boot-aws-0.0.1-SNAPSHOT.jar

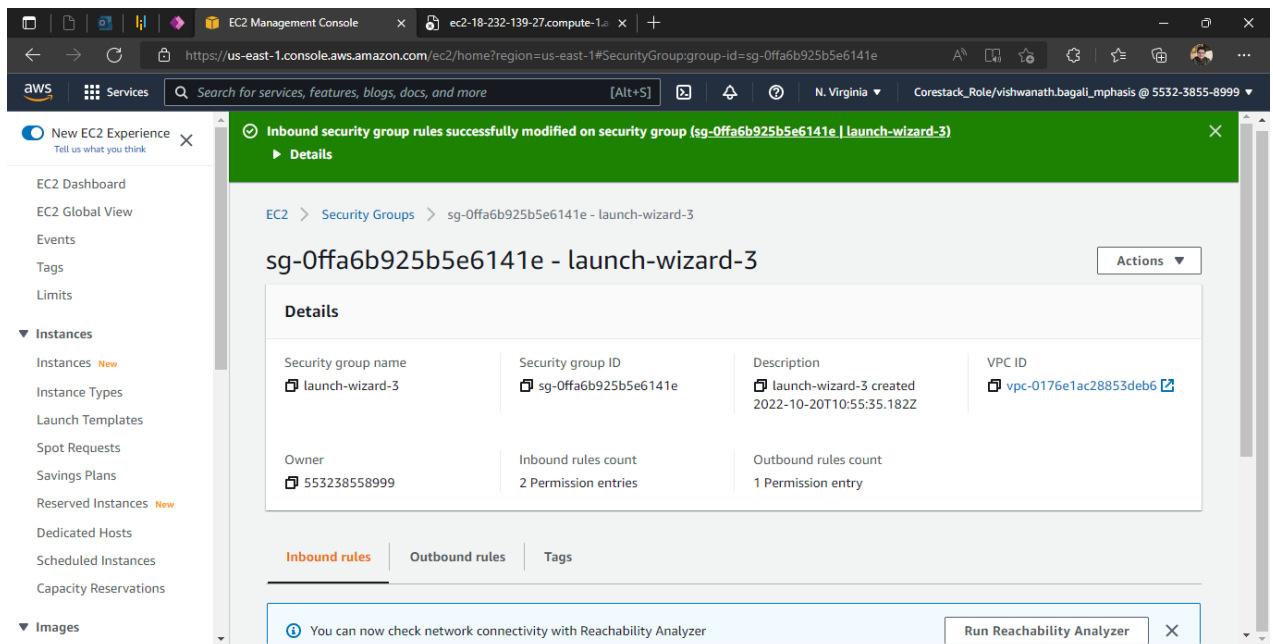
Spring Boot (v2.3.1.RELEASE)

2022-10-20 11:22:42.550 INFO 32386 --- [main] c.d.aws.SpringBootAwsApplication : Starting SpringBootAwsApplication v0.0.1-SNAPSHOT on ip-172-31-28-1
23.ec2.internal with PID 32386 (/root/spring-boot-aws-0.0.1-SNAPSHOT.jar started by root in /root)
2022-10-20 11:22:42.593 INFO 32386 --- [main] c.d.aws.SpringBootAwsApplication : No active profile set, falling back to default profiles: default
2022-10-20 11:22:45.914 INFO 32386 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 9091 (http)
2022-10-20 11:22:45.943 INFO 32386 --- [main] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2022-10-20 11:22:45.949 INFO 32386 --- [main] org.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/9.0.36]
2022-10-20 11:22:46.101 INFO 32386 --- [main] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded WebApplicationContext
2022-10-20 11:22:46.105 INFO 32386 --- [main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 3405 ms
2022-10-20 11:22:47.333 INFO 32386 --- [main] o.s.s.concurrent.ThreadPoolTaskExecutor : Initializing ExecutorService 'applicationTaskExecutor'
2022-10-20 11:22:47.849 INFO 32386 --- [main] o.s.b.a.e.web.EndpointLinksResolver : Exposing 2 endpoint(s) beneath base path '/actuator'
2022-10-20 11:22:47.948 INFO 32386 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 9091 (http) with context path ''
2022-10-20 11:22:47.987 INFO 32386 --- [main] c.d.aws.SpringBootAwsApplication : Started SpringBootAwsApplication in 6.661 seconds (JVM running for 7.816s)
```

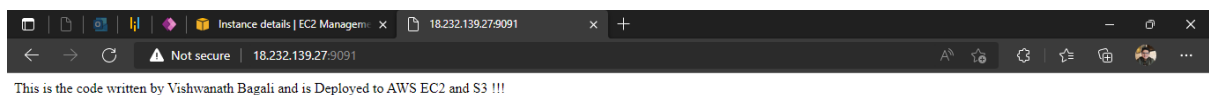
Is command is used to check whether the file is fetched on the console, along with that the jar file is executed using the command `java -jar spring-boot-aws-0.0.1-SNAPSHOT.jar`



Edit inbound rule by adding the type Custom TCP with Port range 9091



Save the rules, with security groups of inbound rules changed



Output of the instance launched with an IP address 18.232.139.27 and port number 9091