**KSA ELASTICSEARCH UPDATE ACTIVITY**

**POINTS TO BE DONE ON THIS ACTIVITY**

* **Stop Alerts from App-1, App-2 & DB Server**
* **Supevisor service stop from App-1 & App-2**
* **Take ES Configuration file Backup**
* **Take a ES backup from prod DB Server: 192.168.10.4**
* **Restore ES backup on APP-1 Server: 192.168.10.119**
* **Cross check Indices on both side**
* **Purge & Installation of Elasticsearch 7.8 on Prod DB Server 192.168.10.4**
* **Adding Local Snapshot repo Path**
* **Restart supervisorctl on App-1 & App-2**
* **Start Alerts from App & DB Servers**

**NOTE: Before doing activity need to stop Alerts from Server.**

1. **Stop Cronjob on App-1, App-2 & DB Server**

* **DB Server Cronjob – Need to be Stop**

###Elastic search backup#####

0 0 \* \* \* sh /scripts/db\_backups/elastic\_backup.sh >> /scripts/db\_backups/logs/es\_backup.log

#### service check ########

\*/1 \* \* \* \* sh /scripts/monitor\_scripts/service\_check.sh >> /scripts/monitor\_scripts/logs/monitor\_script\_`\/bin\/date +\%Y\%m\%d`.log

* **App-1 Server Cronjob – Need to be Stop**

\*/1 \* \* \* \* sh /script/monitor\_script/supervisor\_monitor.sh ksa-prod-1 http://ksabot.surbo.io >> /script/monitor\_script/logs/monitor\_script\_`\/bin\/date +\%Y\%m\%d`.log

\*/1 \* \* \* \* sh /script/monitor\_script/supervisor\_monitor.sh ksa-prod-1 http://ksachat.surbo.io >> /script/monitor\_script/logs/monitor\_script\_`\/bin\/date +\%Y\%m\%d`.log

\* \* \* \* \* sh /script/monitor\_script/monitor\_502.sh dashboard >>/dev/null 2>&1

\* \* \* \* \* sh /script/monitor\_script/monitor\_502.sh chatbot >>/dev/null 2>&1

**-> App-2 Server Cronjob – Need to be Stop**

\*/1 \* \* \* \* sh /script/monitor\_script/supervisor\_monitor.sh ksa-prod-2 http://ksabot.surbo.io >> /script/monitor\_script/logs/monitor\_script\_`\/bin\/date +\%Y\%m\%d`.log

#\*/1 \* \* \* \* sh /script/monitor\_script/supervisor\_monitor.sh ksa-prod-2 http://ksachat.surbo.io >> /script/monitor\_script/logs/monitor\_script1\_`\/bin\/date +\%Y\%m\%d`.log

\* \* \* \* \* sh /script/monitor\_script/monitor\_502.sh dashboard >>/dev/null 2>&1

\* \* \* \* \* sh /script/monitor\_script/monitor\_502.sh chatbot >>/dev/null 2>&1

1. **Stop Supervisor Service**

**RUN ON APP-1**

systemctl stop supervisorctl

**RUN ON APP-2**

supervisorctl stop celeryd channels channels\_1 chatapi\_celeryd chatbot\_api\_uwsgi chatbot\_api\_uwsgi\_1 cherry\_dashboard cherry\_dashboard\_1 cherry\_dashboard\_2 cherry\_dashboard\_3 ml\_prediction ml\_prediction\_1 nlp surbo\_clients tornado-9001 tornado-9002

1. **Elasticsearch Conf directory Backup on DB Server**

Copy configuration file /etc/elasticsearch

1. **Take a ES backup from prod DB Server: 192.168.10.4**

**ES S3 & Local Dump on DB Server**

sh /scripts/db\_backups/elastic\_backup\_s3.sh  
sh /scripts/db\_backups/elastic\_backup.sh

* **Take Snapshot name from below location**

**log\_file=/var/log/backups/es\_snapshot.log**

<<<<<<<---------------Taking Snapshot of cluster-------------------->>>>>>>>>

====>>>>Taking snapshot of elasticsearch named: **snapshot\_25012021-000001**  
====>>>>Time@Snapshot is started:000001  
====>>>>Total time taken for snapshotting:  
====>>>>snapshot:snapshot\_25012021-000001 status:completed  
<<<<<<<<<---------------End of snapshotting--------------------->>>>>>>>>>>

1. **Restore ES backup on APP-1 Server: 192.168.10.119**

**We already have Indexing on App-1 Server so we have to first remove them**#curl 192.168.10.119:9200/\_cat/indices  
#cd /var/lib/elasticsearch/nodes/0/indices/  
#rm -rf \*  
#curl -X DELETE "192.168.10.119:9200/\_snapshot/esbackup"  
#systemctl restart elasticsearch.service  
#curl 192.168.10.119:9200/\_cat/indices  
#curl -XGET 'http://192.168.10.119:9200/\_snapshot/\_all?pretty'  
#curl -XPUT -H "Content-Type: application/json;charset=UTF-8" 'http://192.168.10.119:9200/\_snapshot/esbackup' -d '{ "type": "fs", "settings": { "location": "/elasticseacrhData/es-backup", "compress": true }}'  
#curl -XGET 'http://192.168.10.119:9200/\_snapshot/\_all?pretty'  
#curl -XPOST [http://192.168.10.119:9200/\_snapshot/esbackup/snapshot\_25012021-000001/\_restore](http://10.1.26.66:9200/_snapshot/esbackup/snapshot_25012021-000001/_restore)  
#curl 192.168.10.119:9200/\_cat/indices

* **Copy Data Directory from DB to App Server**

scp –r –P 1709 sunny@192.168.10.4:/database-backup/elasticsearch /tmp

cp –r /tmp /elasticseacrhData/es-backup/

chown –R elasticsearch.elasticsearch /elasticseacrhData/es-backup/

* **ES Restore on App Server**

curl -XPOST [http://192.168.10.119:9200/\_snapshot/esbackup/snapshot\_???????????/\_restore](http://10.1.26.66:9200/_snapshot/esbackup/snapshot_???????????/_restore)

1. **Cross check Data/Indices from below command on both side**

curl 192.168.10.119:9200/\_cat/indices - APP SERVER

curl 192.168.10.4:9200/\_cat/indices - DB SERVER

1. **Purge Elasticsearch on DB Server:**

apt purge elasticsearch

rm –rf /var/lib/elasticsearch /var/log/elasticsearch /etc/elasticsearch/

**Remove data from data directory**

mv /database-backup/elasticsearch /database-backup/elasticsearch\_28jan2021  
mkdir /database-backup/elasticsearch  
chown –R elasticsearch.elasticsearch /database-backup/elasticsearch

**ES Installation**

**NOTE: Before installation check compatible JDK version installed or not. For 7.8 we need JDK 11.08 which we have on server. IF not updated JDK then update Java.**

1. **JAVA Installation 11.09**

sudo apt-get update

sudo apt-get install openjdk-11-jdk-headless

java -version

1. **Elasticsearch 7.8 Installation**  
   **Import the Elasticsearch PGP Key**

wget -qO - https://artifacts.elastic.co/GPG-KEY-elasticsearch | sudo apt-key add -

### Installing from the APT repository

sudo apt-get install apt-transport-https

echo "deb https://artifacts.elastic.co/packages/7.x/apt stable main" | sudo tee /etc/apt/sources.list.d/elastic-7.x.list

**You can install the Elasticsearch Debian package with:**

sudo apt-get update &&

For Stable

sudo apt-get install elasticsearch

For Specific Version

sudo apt-get install elasticsearch=7.8.0

**Elasticsearch can be started and stopped using the service command:**

sudo -i service elasticsearch start

sudo -i service elasticsearch stop

### Running Elasticsearch with systemd

sudo /bin/systemctl daemon-reload

sudo /bin/systemctl enable elasticsearch.service

sudo systemctl start elasticsearch.service

sudo systemctl stop elasticsearch.service

### Checking that Elasticsearch is running

curl -X GET "192.168.10.4:9200/?pretty"

**Update local IP on elasticsearch.yml file**

vi /etc/elasticsearch/elasticsearch.yml

path.data: /var/lib/elasticsearch  
path.logs: /var/log/elasticsearch  
  
network.host: 192.168.10.4  
  
**then add below lines**  
**discovery.type: single-node**path.repo: ["/database-backup/elasticsearch"

**Allowing Insecure settings**

**Default 2g**

-Xms2g

-Xmx2g

**Add the below line:  -Des.allow\_insecure\_settings=true It is working for me. there is an undocumented system property**  
🡪 **cd /etc/elasticsearch/jvm.options**  
-Des.allow\_insecure\_settings=true

systemctl restart elasticsearch

1. **Adding Local BACKUP PATH**

curl -XPUT -H "Content-Type: application/json;charset=UTF-8" 'http://192.168.10.4:9200/\_snapshot/esbackup' -d '{ "type": "fs", "settings": { "location": "/database-backup/elasticsearch", "compress": true }}'

1. **Restart Supervisor Service on APP1**

**Run on App-1**

Systemctl restart supervisorctl

**Run on App-2**

supervisorctl start celeryd channels channels\_1 chatapi\_celeryd chatbot\_api\_uwsgi chatbot\_api\_uwsgi\_1 cherry\_dashboard cherry\_dashboard\_1 cherry\_dashboard\_2 cherry\_dashboard\_3 ml\_prediction ml\_prediction\_1 nlp surbo\_clients tornado-9001 tornado-9002

1. **Start Cron Services from ALL DB & APP Servers.**