Lambda2nd_Function   **Savita Nalawade**
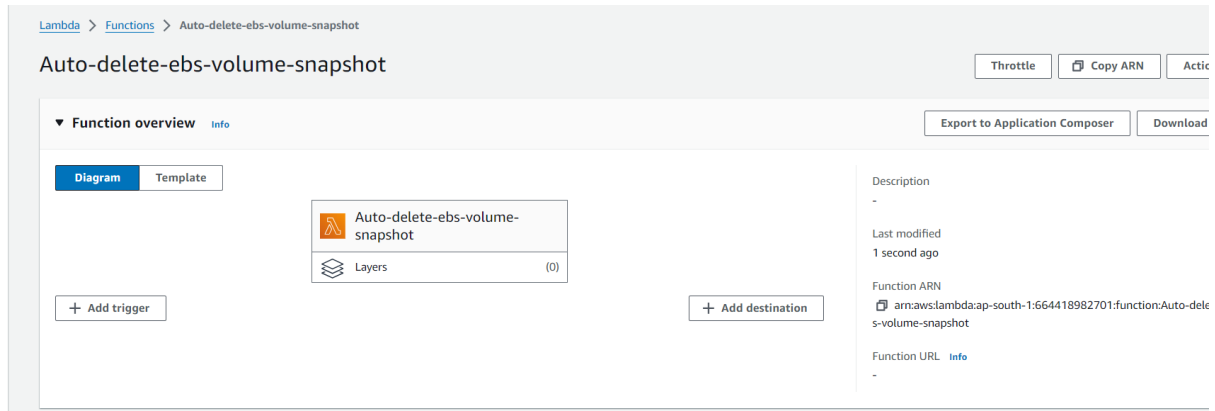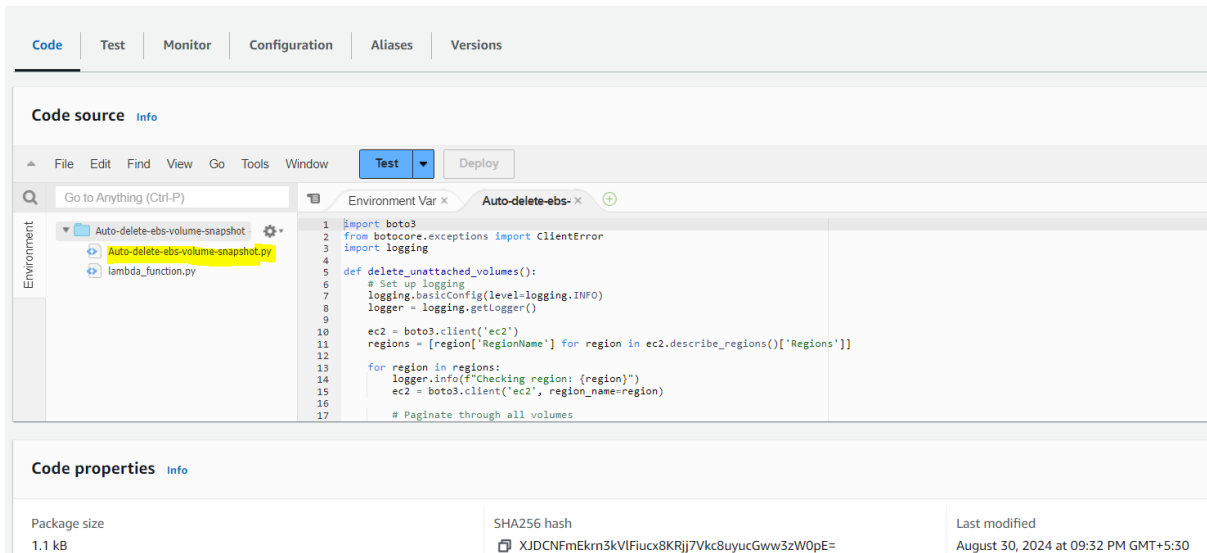
 Delete unused EBS Volume Across Regions

1) Create lambda function (**Auto-delete-ebs-volume-snapshot**)

2) Create **Auto-delete-ebs-volume-snapshot.py** file

3) Update the Handler name as (**Auto-delete-ebs-volume-snapshot.lambda_handler**)

4) Change the timeout value for 3 seconds to 1 minute in Configuration settings

5) Created one volume which is in available state

Volume ID		Type		Size		IOPS		Throughput		Snapshot ID		Created		Availability Zone		Volume state		Ala
vol-013fc07ff25f1f4b1		gp2		8 GiB		100		-		snap-0b5f827...		2024/08/30 20:18 GMT+5:...		ap-south-1b		⊘ In-use		No
vol-0dc91100f1bcca8b1		gp2		8 GiB		100		-		snap-0b5f827...		2024/08/30 20:18 GMT+5:...		ap-south-1b		⊘ In-use		No
vol-094cdf207a8cbc896		gp3		10 GiB		3000		125		-		2024/08/30 21:33 GMT+5:...		ap-south-1a		⊘ Available		No

6) Now, Run the code, It should delete the free volume

7) volume is deleted successfully

Name		Volume ID		Type		Size		IOPS		Throughput		Snapshot ID		Created		Availability Zone		Volu
–		vol-013fc07ff25f1f4b1		gp2		8 GiB		100		-		snap-0b5f827...		2024/08/30 20:18 GMT+5:...		ap-south-1b		⊘ I
–		vol-0dc91100f1bcca8b1		gp2		8 GiB		100		-		snap-0b5f827...		2024/08/30 20:18 GMT+5:...		ap-south-1b		⊘ I

Bootstrapping   30th August 2024

1) Create a EC2 instance with stuffing and installing some package

#!/bin/bash
useradd savii01
useradd nalawade
groupadd aws-devops
usermod -a -G aws-devops savii01
yum install httpd -y
yum install telnet -y

2) The instance is created successfully

3) Connected the BootStarapping-VM01 via putty


```
login as: ec2-user
Authenticating with public key "AWSdevops"
Last login: Fri Aug 30 17:37:37 2024 from 103.221.74.93

       #_
   ~\_  ####_          Amazon Linux 2
  ~~  \_#####\
  ~~     \###|          AL2 End of Life is 2025-06-30.
  ~~       \#/ ___
   ~~       V~' '->
    ~~~         /        A newer version of Amazon Linux is available!
      ~~._.   _/
         _/ _/          Amazon Linux 2023, GA and supported until 2028-03-15.
       _/m/'              https://aws.amazon.com/linux/amazon-linux-2023/

[ec2-user@ip-172-31-35-36 ~]$ sudo su -
Last login: Fri Aug 30 17:38:12 UTC 2024 on pts/0
[root@ip-172-31-35-36 ~]# cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
sync:x:5:0:sync:/sbin:/bin/sync
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
games:x:12:100:games:/usr/games:/sbin/nologin
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin
nobody:x:99:99:Nobody:/:/sbin/nologin
systemd-network:x:192:192:systemd Network Management:/:/sbin/nologin
dbus:x:81:81:System message bus:/:/sbin/nologin
rpc:x:32:32:Rpcbind Daemon:/var/lib/rpcbind:/sbin/nologin
```

4) Check the users are created or not

```
[root@ip-172-31-35-36 ~]# id savii01
uid=1001(savii01) gid=1001(savii01) groups=1001(savii01),1003(aws-devops)
[root@ip-172-31-35-36 ~]# id nalawade
uid=1002(nalawade) gid=1002(nalawade) groups=1002(nalawade)
[root@ip-172-31-35-36 ~]# cat /etc/groups
```

5) Check the if user is added or not as per stuffing (cat /etc/group)

```
ec2-user:x:1000:
savii01:x:1001:
nalawade:x:1002:
aws-devops:x:1003:savii01
apache:x:48:
[root@ip-172-31-35-36 ~]#
```

6) Check the memory

```
[root@ip-172-31-35-36 ~]# free -m
              total        used        free      shared  buff/cache   available
Mem:            952          73         278           0         600         744
Swap:             0           0           0
[root@ip-172-31-35-36 ~]#
```

7) Check the harddisk

```
[root@ip-172-31-35-36 ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        467M     0  467M   0% /dev
tmpfs           477M     0  477M   0% /dev/shm
tmpfs           477M  404K  476M   1% /run
tmpfs           477M     0  477M   0% /sys/fs/cgroup
/dev/xvda1      8.0G  1.8G  6.3G  23% /
tmpfs            96M     0   96M   0% /run/user/1000
[root@ip-172-31-35-36 ~]# lsblk
NAME    MAJ:MIN RM SIZE RO TYPE MOUNTPOINT
xvda    202:0    0   8G  0 disk
└─xvda1 202:1    0   8G  0 part /
[root@ip-172-31-35-36 ~]#
```

8) Run Top command to check running proceess

```
top - 17:48:32 up 12 min,  1 user,  load average: 0.00, 0.01, 0.00
Tasks:  94 total,   1 running,  52 sleeping,   0 stopped,   0 zombie
%Cpu(s):  0.0 us,   0.0 sy,   0.0 ni,100.0 id,   0.0 wa,   0.0 hi,   0.0 si,   0.0 st
KiB Mem :   975536 total,   285116 free,    74796 used,   615624 buff/cache
KiB Swap:        0 total,        0 free,        0 used.   762276 avail Mem

  PID USER      PR  NI    VIRT    RES    SHR S  %CPU %MEM     TIME+ COMMAND
 1723 root      20   0       0      0      0 S   0.3  0.0   0:00.16 xfsaild/xvda1
 3599 root      20   0  168828   4292   3760 R   0.3  0.4   0:00.01 top
    1 root      20   0  123596   5444   3868 S   0.0  0.6   0:02.27 systemd
    2 root      20   0       0      0      0 S   0.0  0.0   0:00.00 kthreadd
    3 root       0 -20       0      0      0 I   0.0  0.0   0:00.00 rcu_gp
    4 root       0 -20       0      0      0 I   0.0  0.0   0:00.00 rcu_par_gp
    6 root       0 -20       0      0      0 I   0.0  0.0   0:00.00 kworker/0:0H-ev
    8 root       0 -20       0      0      0 I   0.0  0.0   0:00.00 mm_percpu_wq
    9 root      20   0       0      0      0 S   0.0  0.0   0:00.00 rcu_tasks_rude_
   10 root      20   0       0      0      0 S   0.0  0.0   0:00.00 rcu_tasks_trace
   11 root      20   0       0      0      0 S   0.0  0.0   0:00.03 ksoftirqd/0
   12 root      20   0       0      0      0 I   0.0  0.0   0:00.15 rcu_sched
   13 root      rt   0       0      0      0 S   0.0  0.0   0:00.00 migration/0
   15 root      20   0       0      0      0 S   0.0  0.0   0:00.00 cpuhp/0
   17 root      20   0       0      0      0 S   0.0  0.0   0:00.00 kdevtmpfs
   18 root       0 -20       0      0      0 I   0.0  0.0   0:00.00 netns
   19 root      20   0       0      0      0 I   0.0  0.0   0:00.01 kworker/u30:1-e
   21 root      20   0       0      0      0 S   0.0  0.0   0:00.01 kauditd
  299 root      20   0       0      0      0 S   0.0  0.0   0:00.00 khungtaskd
  300 root      20   0       0      0      0 S   0.0  0.0   0:00.00 oom_reaper
  301 root       0 -20       0      0      0 I   0.0  0.0   0:00.00 writeback
  303 root      20   0       0      0      0 S   0.0  0.0   0:00.01 kcompactd0
  304 root      25   5       0      0      0 S   0.0  0.0   0:00.00 ksmd
  305 root      39  19       0      0      0 S   0.0  0.0   0:00.00 khugepaged
  361 root       0 -20       0      0      0 I   0.0  0.0   0:00.00 kintegrityd
  363 root       0 -20       0      0      0 I   0.0  0.0   0:00.00 kblockd
```

9) Check whether the package of httpd & telnet installed or not?

```
[root@ip-172-31-35-36 ~]# rpm -qa |grep httpd
httpd-tools-2.4.62-1.amzn2.0.2.x86_64
httpd-filesystem-2.4.62-1.amzn2.0.2.noarch
httpd-2.4.62-1.amzn2.0.2.x86_64
generic-logos-httpd-18.0.0-4.amzn2.noarch
[root@ip-172-31-35-36 ~]# rpm -qa |grep telnet
telnet-0.17-65.amzn2.x86_64
[root@ip-172-31-35-36 ~]#
```

10) Check the total number of packages installed on the system

```
[root@ip-172-31-35-36 ~]# rpm -qa | wc -l
465
[root@ip-172-31-35-36 ~]#
```

Task2)

1)h

2)h

3)f

User data - *optional*   Info

Upload a file with your user data or enter it in the field.

⬆ Choose file

```
#!/bin/bash
yum install -y httpd
aws s3 cp s3://bootbucket01-s3/index.html /var/www/html/
aws s3 cp s3://bootbucket01-s3/healthcheck.html /var/www/html/
service httpd start
chkconfig httpd on
```

4)h

EC2 > Instances > i-095365b2dad6b258c > Manage tags

Manage tags Info

A tag is a custom label that you assign to an AWS resource. You can use tags to help organize and identify your instances.

Key

Value - *optional*

🔍 Name   ✕   🔍 BootStrappingVM02   ✕   Remove

🔍 backup   ✕   🔍 yes   ✕   Remove

Add new tag   Use "yes"

You can add up to 48 more tags.

Cancel   **Save**

5)