Day 2

Page No.:
Date:

* Elastic Block storage: (Root directory)
  - Default storage of EC2
  - created by default as we launch the ec2 service
  - scale vertical/horizontal architecture is followed.

In Linux, Root directory : '/'

Root directory of windows : 'C:\'

Root directory of Macos X : '/'

Android: '/'

Note: Throughput: work per unit time
IOPS → Input Output operation per second
Snapshot → Backup

* Elastic Bean stalk is different from Elastic Block Storage.
Elastic Bean stalk is used more.

Streaming: Data changes frequently: Hot Data

Static data is used in EBS.
Hot Data is used in DynamoDB

* Elastic file system:
  - Its an synchronized File system (storage)
  - Works realtime
  - Works with Archieve Data/Hot Data/Cold data

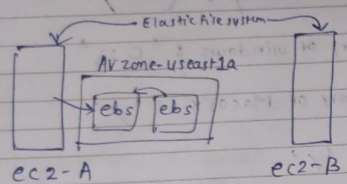
ebs less

Root vol

ebs ebs combination provides more storage

↓

Scale Horizontal (add resources)



Use case of - Elastic file system

ec2-A, ec2-B, Elastic file system या दोघांचा

AV zone → us east 1a या झोन

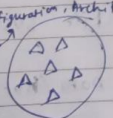
store in ec2-A, sync in ec2-B

Github / Google drive is Elastic file system

Cluster मधे multiple ec2's

Δ → सारी → configuration, Architecture, deployment

Δ : प्रत्येकासाठी



मला

EFS बनवायचा

EFS is best in storage & sync. eg. github.

Wednesday 6:20 PM

lab 1 Day 2:

ec2 → Elastic Block Store → Volumes

↑ Size → Scale vertical

↑ block → scale horizontal

lab 2:

create ec2 instance with linux

↓

click on that instance → modify IAM role

& then click on connect

↓

ec2 instance connect

↓

connect

↓

Black window opens. Type sudo yum update

↓

Type y

↓

~~Then type~~

Now go to ec2 instance created,

↓

see left side 'volumes' → click on create volume

Select the same availability zone as when creating instance.

Untick encrypt this volume (default aws/ebs) → Create vol.

edit name of created volume

then click on ~~volume ID~~ (+) sign in that row of where vol is created

then click on the volume created

↓

go to Actions → Attach volume

Then, Instance मध्ये जो instance create केलाय त्याचा id शोधणे व select करणे

eg. i-026b8c54cee85408

Note: instance created is on us-east-2c availability zone
then, volume creation should be done on
same us-east-2c zone

Click on Attach volume.

Now go to ec2 dashboard → select the instance created
↓
click on storage tab
Just see

we see two volumes, first wala default आहे
second wala default नाहीं

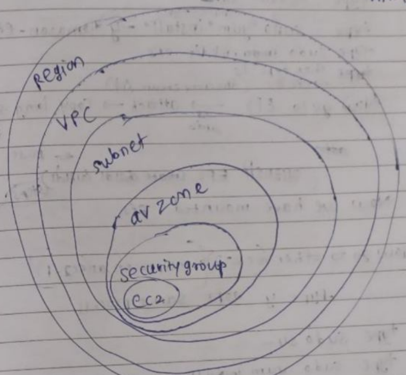
so we have to detach the default wala. id बघून लेणा
so go to volumes dashboard
tick the volume with id.
click Actions → detach volume

But default volume cannot be detached.

So go to volumes dashboard → click on replace root vol
Then create replacement task

jmp#12y+

vhH42#gm



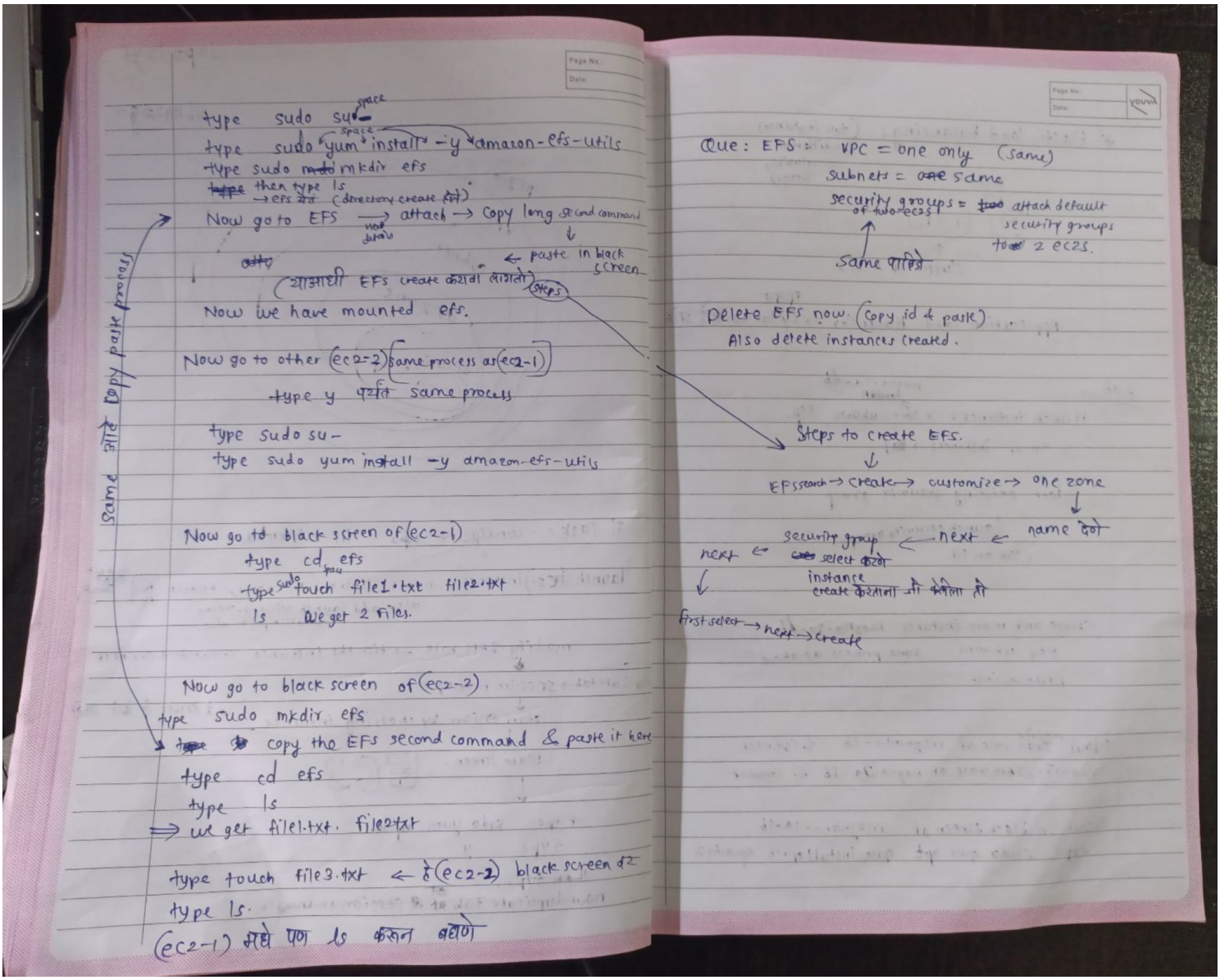
Task: Configure efs in ubuntu

launch (ec2-) instance: name, linux, key name, enable ☑ ☑ subnet create
also add launch wizard-megna in description also.

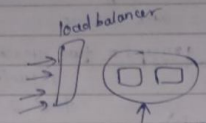
modify IAM role → tick the instance created → connect

duplicate tab → session manager
↓
start session by choosing instance ← हे तशाना ने केलं नाही
↓
Black screen. EC2
↓
type sudo yum update
type y

~~then type.~~
~~Now duplicate tab of session manager.~~


type sudo su-
type sudo yum install -y amazon-efs-utils
type sudo mkdir efs
then type ls
Now go to EFS → attach → copy long second command
paste in black screen
Now we have mounted efs.
Now go to other (ec2-2) same process as (ec2-1)
type y
type sudo su-
type sudo yum install -y amazon-efs-utils
Now go to black screen of (ec2-1)
type cd efs
type sudo touch file1.txt file2.txt
ls we get 2 files.
Now go to black screen of (ec2-2)
type sudo mkdir efs
copy the EFS second command & paste it here
type cd efs
type ls
we get file1.txt. file2.txt
type touch file3.txt
type ls.
Same file copy paste process
Que: EFS: VPC = one only (same)
Subnets = same
security groups = attach default security groups to 2 ec2s.
Same पाहिजे
Delete EFS now. (copy id & paste)
Also delete instances created.
Steps to create EFS.
EFS search → create → customize → one zone
name देणे
next ← security group ← next ←
select करणे
instance create करताना जी केलेला ती
first select → next → create

* Elastic load balancing: (two instances on different availability zones)



Application load Balancer → फक्त syllabus मध्ये आहे

Lab

launch instance: name, ubuntu, key, no of instances → 2

megna-1a-lb

select existing security group

launch security group

Click on id.

Create one more instance megna-2a-lb

key ubuntu same process as above

launch inst.

Now modify IAM role of meghala-lb & connect

modify IAM role of megna-2a-lb & connect

Now on black screen of meghana-1a-lb

type sudo space apt space install space apache2

y

Type sudo space apt space update in instance second ec2

y y in ec2-1

sudo apt update in ec2-1

Now in second ec2 named megna2a-lb

~~Type sudo apt update~~

Type sudo apt install apache2

y

Type sudo space systemctl status apache2 ← हे first ec2 मध्ये

Now duplicate EFS tab.

type ec2 → ec2 → instances → megna-1a-lb tick ✓

↓

Open address IPV4

↓

http करणे

Now megna-2a-lb tick → open address IPV4 → http करणे

Now go to black screen megna-1a-lb,

type cd..

आता 1a-1b (First ec2 instance) चा Apache2 tab मध्ये

first paragraph मध्ये /var/www/html/index.ht...

हे copy करणे आणि black screen of ec2-1 वर paste

cd space /var/www/html

Type ls

→ we get index.html

Now Type rm space index.html enter,

Then type sudo space rm space index.html

Type ls

Type touch space ~~html~~ ~~html~~ index.html

→ permission denied

Type sudo touch index.html

Type sudo passwd root

New password: Megna123

Retype

type sudo su -

type cd space /var/www/html

type ls

→ index.html

Now go to second ec2 black screen

type cd /var/www/html

type ls

→ index.html

type sudo rm index.html

ls

sudo touch index.html

ls

→ index.html

nano index.html

ls -l

sudo ~~cs~~ chmod space 777 space index.html

sudo nano index.html

Type <html>

<head> white

<title> no space 1B space </title>

</head>

<body>

<p> Load Balancer 1B </p>

↑ white

</body>

</html>

ctrl + x

yes

Now go to ~~second~~ first instance

type sudo chmod 777 index.html

sudo nano index.html

Type

<html>

<head>

<title> no space 1A </title>

</head>

<body>

<p>Load balancer 1A </p>

</body>

</html>

yes ✓

~~In new chrome tab,~~ In ec2 dashboard

↓

Load balancers → create

↓

Application → create → name दो loadbalancerMp → select availability zones of ec2's created (Subnets are different)

→ security groups → launch wizard ☐ select

→ create target group → name दो → next select ec2's → pending → create → see started page

Page

Tick the created target group

in the load balancer tab,

select a target group मधे
created target group select करा

↓

Create load balancer
Tick the created load balancer
Copy the DNS name

paste in new chrome tab (inprivate tab)

http ✓

→ we get load balancer 1A

refresh page
we see load Balancer 1B

Day 2 completed