

* Logs *

Go to IAM

click on roles

click on create role

select AWS service

select EC2 in common use cases.

→ click on Next

Q search cloud watch

select cloud-watch-log-full-access

→ click on Next

Give the name as sole-logs

Scroll Down and click on

→ create role

Go to EC2

click on launch Instance

Select AMI

Select t2.micro

click Next add storage

click Next Add tags

click Next configure Security Group

Review and launch Instance

HTTP &
SSH

Now Go to Instances

select Instance

click on Action

click on security

click on modify IAM Role

choose IAM role as

sole-logs

→ click on Save

Go to Instances

Select Instance

Click on connect

copy last command from ssh client

Open MoboXterm paste command

and connect to the Instance.

Use `sudo su -`

Use `cd /`

Use `yum install awslogs -y`

Use `cd /etc/awslogs`

Use `ls -lte`

We have to do changes in two files
they are ① `awslogs.conf` ② `awscli.conf`

Use `vi awscli.conf`

Now I am using ohio region so in region
I have used as `us-east-2` so make
changes accordingly and save file.

Use `vi awslogs.conf`

Go in the last

**Make Changes
Like This**

```
[application-1]
datetime_format = %b %d %H:%M:%S
file = /mnt/app.log
buffer_duration = 5000
log_stream_name = {instance_id}
initial_position = start_of_file
log_group_name = application
```



Save file

Use `service awslogs start`
~~service awslogs restart~~

Use `cd /mnt`
`touch app.log`
`echo "Hi" > app.log`
`echo "Hello" >> app.log`

Use `service awslogs restart`

Now Go to cloud watch

click on Log Groups

application is our log group name

click on application

click on log stream name which appears in blue colour you can see your logs.

Use `echo "Third message" >> app.log`

Now refresh ~~cloud~~ log events in cloudwatch so that we can see our latest log

Local log file / custom



To configure our ^{HTTP} server logs with cloud front.

Use `yum install httpd -y`
`service httpd start`

Use `cd /etc/httpd/logs`
`ls -lte`
`{ error-log }`
`{ access-log }`

We will these two files & have ~~two~~ to configure into our cloud front logs.

Use `cd /etc/awslogs`
`vi awslogs.conf`
paste code and save file.

Insert Below Code in last of awslogs.conf file and save

```
[server-access-logs]
datetime_format = %b %d %H:%M:%S
file = /etc/httpd/logs/access_log
buffer_duration = 5000
log_stream_name = {instance_id}
initial_position = start_of_file
log_group_name = http-server-access-logs
```

```
[server-error-logs]
datetime_format = %b %d %H:%M:%S
file = /etc/httpd/logs/error_log
buffer_duration = 5000
log_stream_name = {instance_id}
initial_position = start_of_file
log_group_name = http-server-error-logs
```

Use service awslogsd restart

Go to cloud Front
click on log Group

We can see our server access and
error log groups.

Metric filter

172.31.36.19

Rainbow

PAGE:

DATE: / /

Now we have to filter logs on ~~metric~~ ~~Pattern~~ Basis. They are like:

ERROR

INFO

RUN

OK

Now go to log group

~~click on metric filter~~

Click on Actions

Click on Create metric filter

In filter pattern insert ERROR

In Test Pattern

Select our instance id for select log data to test.

Click on test Pattern

Click on next

Enter filter name as es308-metric

In metric details

metric namespace - es308-metric

metric name - es308-metric

metric value - 1

unit - none

click on next

click on create metric filter

Now go to metric filter
Click on create Alarm

In metric

namespace — error-metric
Metric name — error-metric
Statistics — Sum
Period — 1 minute

In Conditions

Threshold Type — Static
When error-metric is — Greater threshold
define threshold value — 2
click on next

In Notification

Alarm state Times — In Alarm
Select an SNS Topic — Choose Existing
Send notification to — SNS-Topic-1
Click on next

In Name & Description

Alarm Name — error-metric-Alarm
description —

click on

next

Review

it

& click on create Alarm

Now Go to Mobaxterm.

use `cd /mnt`

use `ls -l`

we will see `app.log` file.

Now use

`echo "ERROR : this is error" >> app.log`

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`echo "ERROR : this is error" >> app.log`

Now wait for 2 min.

Go to ~~the~~ Cloudwatch.

click on All Alarms.

Check state of our alarm which is changed from OK to In Alarm.

Check our ^{Inbox} email also.

we will get an email notification as in our logs we have an ERROR pattern that crossed its threshold limit.