

CloudWatch+ CloudWatch agent+Bootstrapp

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Problem Statement- Monitoring disk/CPU/Memory utilization

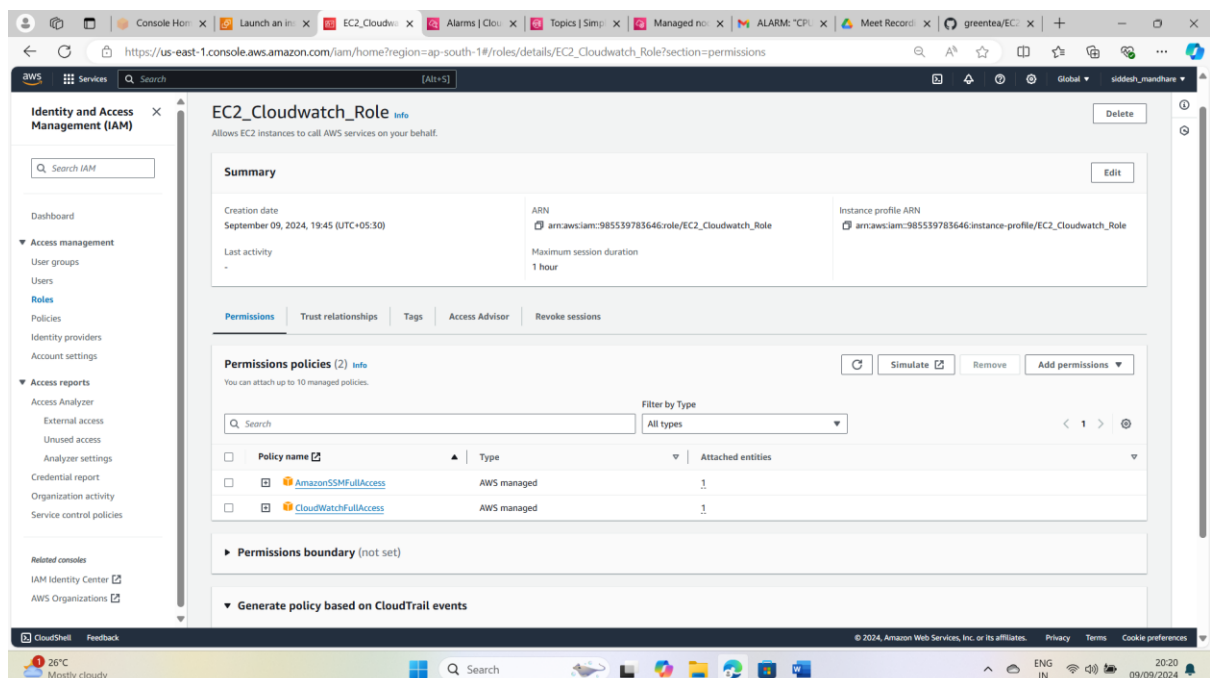
Step 1: Create an AWS EC2 IAM Role and add CloudWatch and SSM Full Access. - Role Name: EC2-CloudWatch-Role. \

Step 2: Create a Parameter in Systems Manager with the name "/alarm/AWS-CWAgentLinConfig" and store the value. \

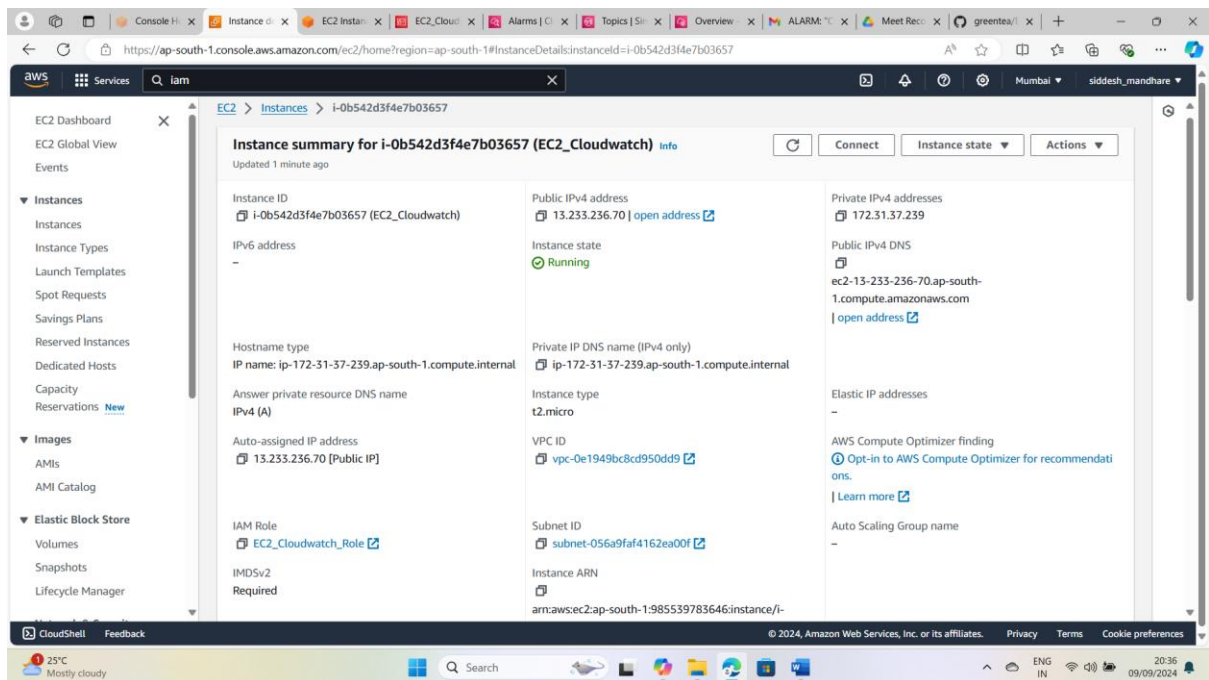
Step 3: Create an EC2 Instance, Attach the role created in Step 1 and Add the commands in the Userdata Section.

Refer→greentea/EC2 Memory Disk Monitoring at master · satyam88/greentea (github.com)

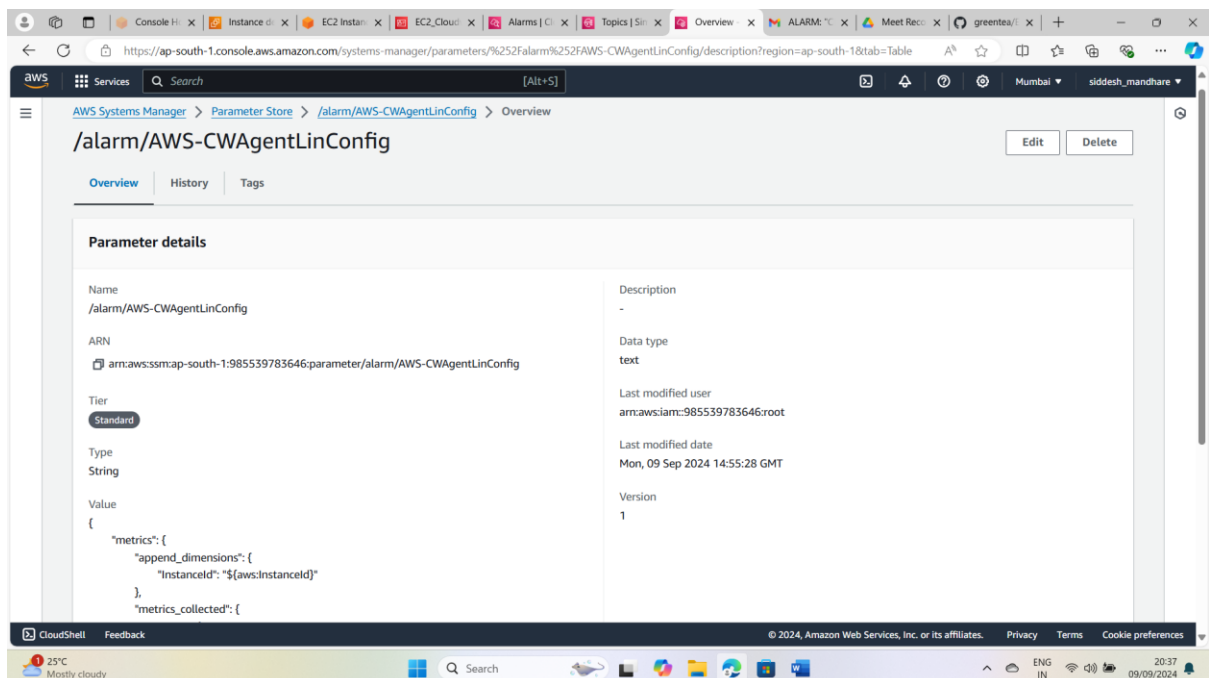
1) Create role and give permission policies (“cloud watch full access” & “SSM full access”)



2) Create instance (attached role and install Cloud watch agent as a bootstrap)



3) Create SSM parameter and add bash code (name-/alarm/AWS-CWAgentLinConfig)



4) Check is their CloudWatch agent is install or not on instance

```
aws
Services Search [Alt+S] Mumbai siddesh_mandhare
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023
last login: Mon Sep 9 15:04:10 2024 from 13.233.177.5
[ec2-user@ip-172-31-37-239 ~]$ sudo /opt/aws/amazon-cloudwatch-agent/bin/amazon-cloudwatch-agent-ctl -m ec2 -a status
{
  "status": "running",
  "starttime": "2024-09-09T14:59:26+00:00",
  "configstatus": "configured",
  "version": "1.300044.0b793"
}
[ec2-user@ip-172-31-37-239 ~]$
```

5) Go to CloudWatch>Dashboard >add below parameters in metrics

CloudWatch Metrics configuration steps:

Step 1: EC2 Cloudwatch

- Region: Mumbai
- Filter: All > CWAgent > InstanceId
- Search: Search for any metric, dimension, resource id or account id
- Table:

Instance name 1/1	InstanceId	Metric name	Alarms
<input checked="" type="checkbox"/>	EC2_Cloudwatch	i-0b542d3f4e7b0... mem_used_percent	No alarms

Step 2: xvda1

- Region: Mumbai
- Filter: All > CWAgent > InstanceId, device, fstype, path
- Search: Search for any metric, dimension, resource id or account id
- Table:

Instance name 1/1	InstanceId	device	fstype	path	Metric name	Alarms	
<input type="checkbox"/>	EC2_Cloudwatch	i-0b542d3f4e7b0...	xvda1	xfs	/	disk_used_percent	No alarms

Step 3: CPU Utilization

- Region: Mumbai
- Filter: All > EC2 > Per-Instance Metrics
- Search: Search for any metric, dimension, resource id or account id
- Table:

Instance name 16/16	InstanceId	Metric name	Alarms
<input checked="" type="checkbox"/>	No name specified	i-047f82ea04482... CPUUtilization	No alarms

6) Dashboard successfully created

