

AWS- Cloud Watch+ Cloud Watch agent + Bootstrap

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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 User data Section.

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

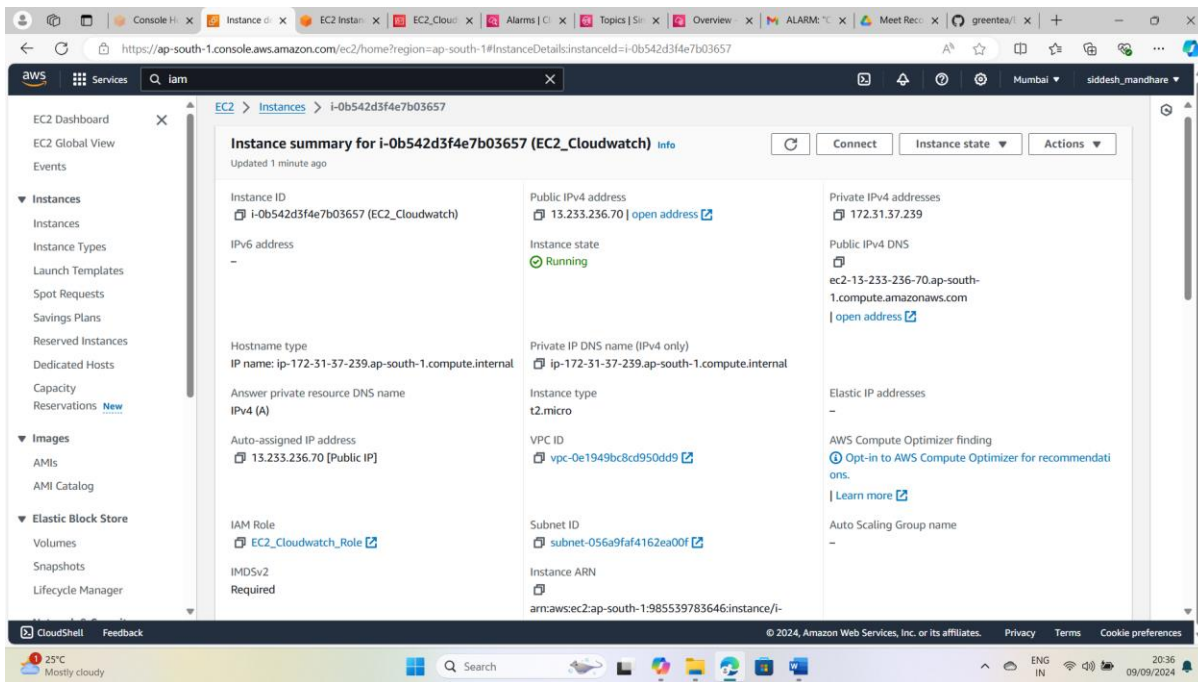
1) Create role and give permission policies (“cloud watch full access” & “SSM full access”)

The screenshot displays the AWS IAM console interface for the 'EC2_Cloudwatch_Role'. The left sidebar shows the 'Identity and Access Management (IAM)' menu with options like Dashboard, Access management, Roles, Policies, and Access reports. The main content area shows the role's summary and permissions. The 'Permissions' tab is active, displaying a table of attached policies.

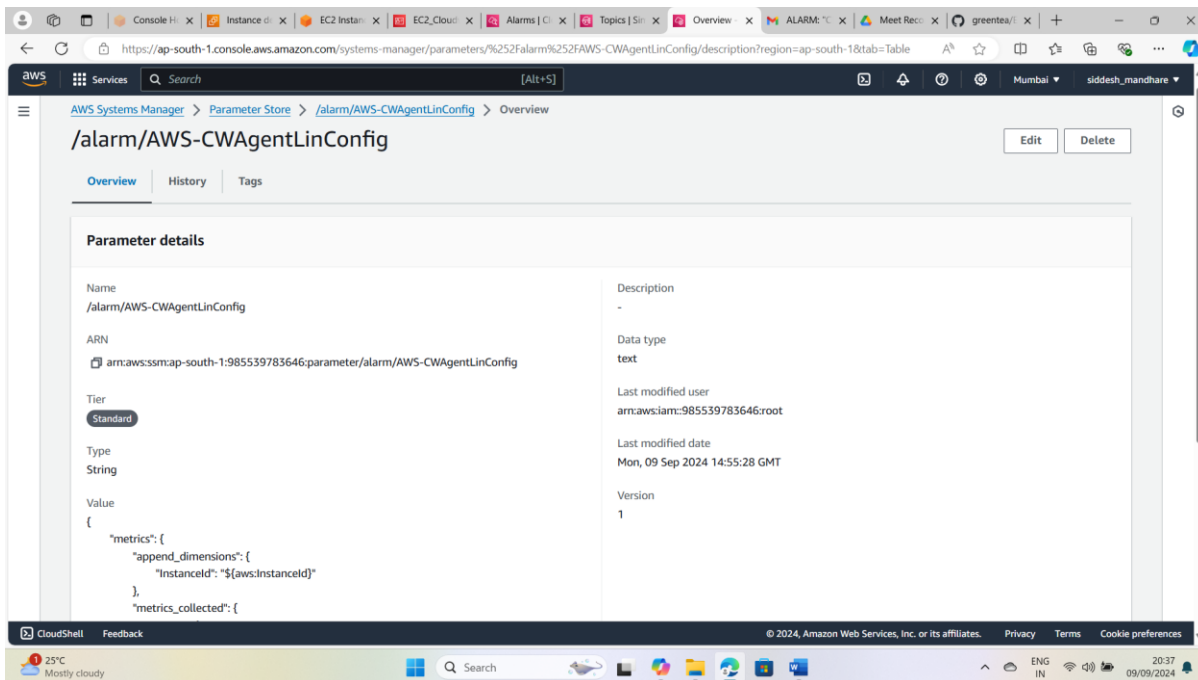
Policy name	Type	Attached entities
AmazonSSMFullAccess	AWS managed	1
CloudWatchFullAccess	AWS managed	1

Below the table, there is a section for 'Permissions boundary (not set)' and a link to 'Generate policy based on CloudTrail events'.

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 console showing the addition of metrics to a dashboard.

Metrics (1)

Mumbai > All > CWAgent > InstanceId

Search for any metric, dimension, resource id or account id

Instance name 1/1	InstanceId	Metric name	Alarms
EC2_Cloudwatch	i-0b542d3f4e7b0...	mem_used_percent	No alarms

Metrics (1)

Mumbai > All > CWAgent > InstanceId, device, fstype, path

Search for any metric, dimension, resource id or account id

Instance name 1/1	InstanceId	device	fstype	path	Metric name	Alarms
EC2_Cloudwatch	i-0b542d3f4e7b0...	xvda1	xfs	/	disk_used_percent	No alarms

Metrics (16)

Mumbai > All > EC2 > Per-Instance Metrics

Search for any metric, dimension, resource id or account id

Instance name 16/16	InstanceId	Metric name	Alarms
No name specified	i-047f82ea04482...	CPUUtilization	No alarms

6) Dashboard successfully created

