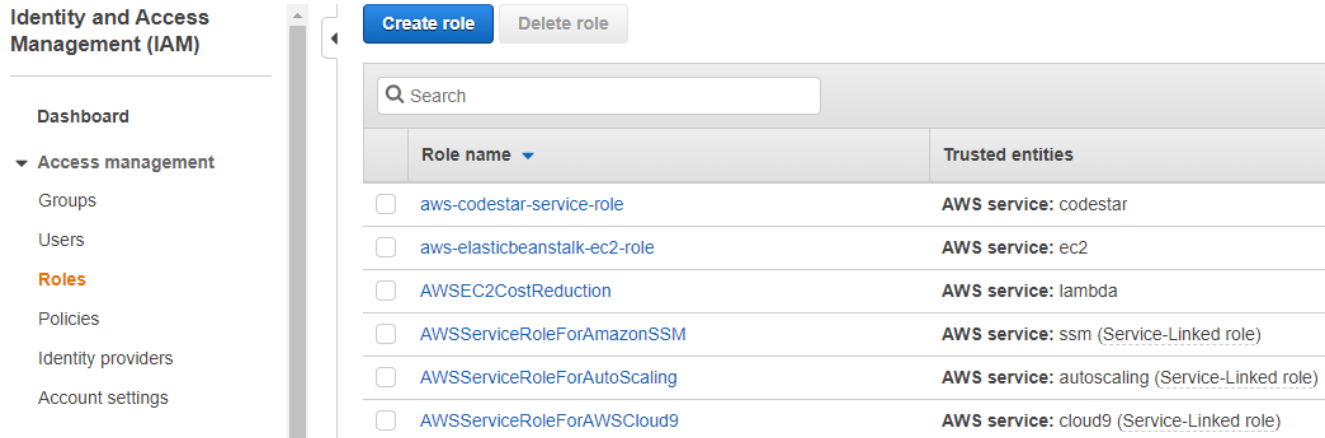# Installation of CloudWatch Agent on Amazon Linux2 AMI

Overview

This document is to install the CloudWatch Agent on linux 2 machines, and to monitor the custom metrics in CloudWatch dashboard.

Navigate to the 'Roles' and click on the 'Create role' button to create new role.
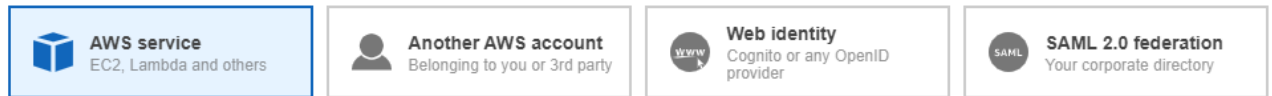

Choose the service that you want to allow the EC2 to call the AWS Services and then click on 'Next : Permissions' button.

Attach permissions policies, by selecting one by one and then click on 'Next : Tags' button.

Create role

(1) (**2**) (3) (4)

▾ **Attach permissions policies**

Choose one or more policies to attach to your new role.

[Create policy]   ⟳

Filter policies ⌄	🔍 CloudWatchAgent		Showing 2 results
	Policy name ▾		**Used as**
☑ ▸	🟧 CloudWatchAgentAdminPolicy		Permissions policy (1)
☑ ▸	🟧 CloudWatchAgentServerPolicy		Permissions policy (1)

▸ **Set permissions boundary**

* Required   Cancel   [Previous]   [**Next: Tags**]

Create role

Add tags (optional)

IAM tags are key-value pairs you can add to your role. Tags can include user information, such as an email address, or can be descriptive, such as a job title. You can use the tags to organize, track, or control access for this role. Learn more

Key	Value (optional)	Remove
Add new key		

You can add 50 more tags.

Cancel   Previous   Next: Review

Create a Tag by specifying the Key & Value and then click on 'Next : Review' button.

Create role

1 2 3 **4**

Review

Provide the required information below and review this role before you create it.

Role name* `AWS_CW_Agent`

Use alphanumeric and '+=,.@-_' characters. Maximum 64 characters.

Role description `Allows EC2 instances to call AWS services on your behalf.`

Maximum 1000 characters. Use alphanumeric and '+=,.@-_' characters.

Trusted entities AWS service: ec2.amazonaws.com

Policies
- AmazonSNSFullAccess ⬲
- CloudWatchFullAccess ⬲
- CloudWatchAgentAdminPolicy ⬲
- CloudWatchAgentServerPolicy ⬲

Permissions boundary Permissions boundary is not set
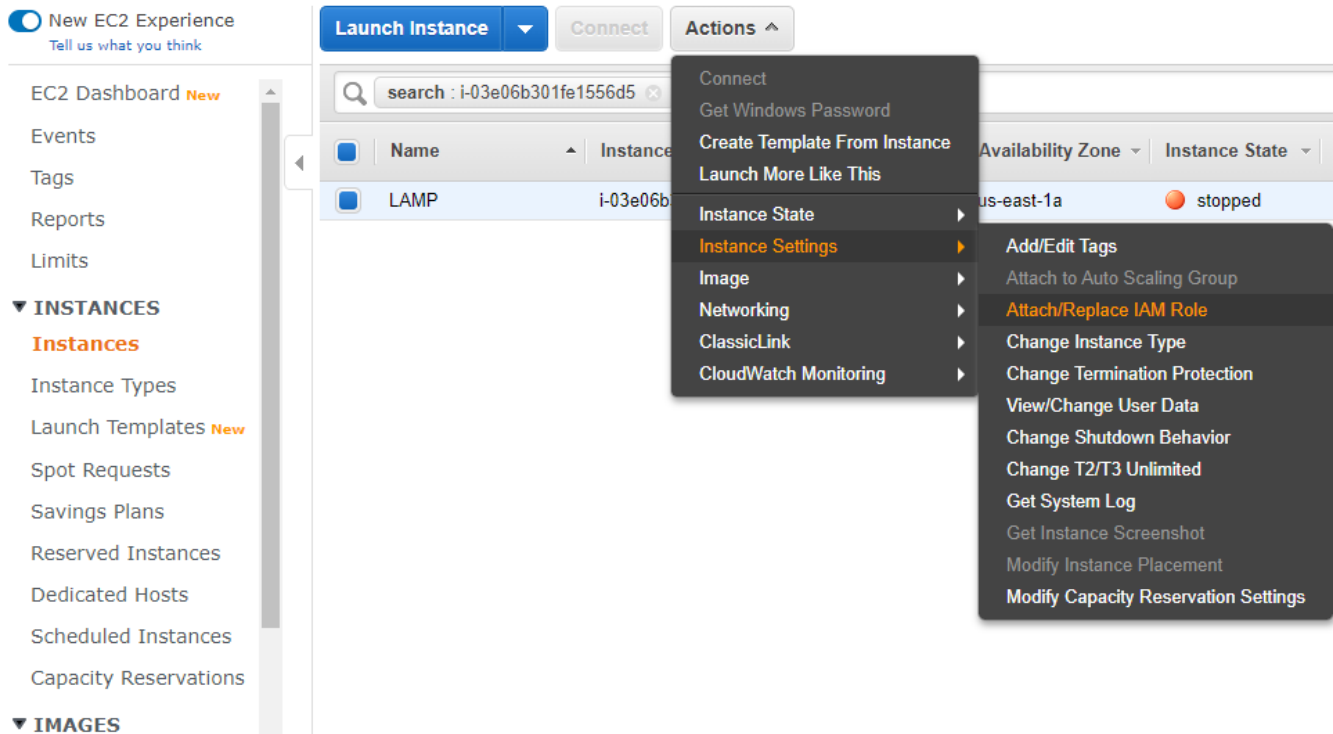
No tags were added.

* Required   Cancel   **Previous**   **Create role**

After review, navigate to the EC2 console, select the instance then attach the newly created role to the instance.

🔵 New EC2 Experience
Tell us what you think

Launch Instance ▾   Connect   **Actions** ⌃

🔍 search : i-03e06b301fe1556d5 ⊗

	Name	▲	Instance		Availability Zone ▾	Instance State ▾
☑	LAMP		i-03e06b		us-east-1a	🔴 stopped

EC2 Dashboard New
Events
Tags
Reports
Limits

▼ **INSTANCES**
Instances
Instance Types
Launch Templates New
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Scheduled Instances
Capacity Reservations

▼ **IMAGES**

Actions menu:
- Connect
- Get Windows Password
- Create Template From Instance
- Launch More Like This
- Instance State ▸
- **Instance Settings** ▸
- Image ▸
- Networking ▸
- ClassicLink ▸
- CloudWatch Monitoring ▸

Instance Settings submenu:
- Add/Edit Tags
- Attach to Auto Scaling Group
- **Attach/Replace IAM Role**
- Change Instance Type
- Change Termination Protection
- View/Change User Data
- Change Shutdown Behavior
- Change T2/T3 Unlimited
- Get System Log
- Get Instance Screenshot
- Modify Instance Placement
- Modify Capacity Reservation Settings

Install the CloudWatch Agent on Amazon Linux machine as shown below

cd /home/ec2-user

sudo wget sudo wget https://s3.amazonaws.com/amazoncloudwatch-agent/amazon_linux/amd64/latest/amazon-cloudwatch-agent.rpm

sudo rpm -U ./amazon-cloudwatch-agent.rpm

copy the below .json file in */opt/aws/amazon-cloudwatch-agent/etc/amazon-cloudwatch-agent.d/*location and run commands as shown in below

```
[ec2-user@ip-        ~]$ cd /opt/aws/amazon-cloudwatch-agent/etc/amazon-cloudwatch-agent.d/
[ec2-user@ip-        amazon-cloudwatch-agent.d]$ ll
total 0
[ec2-user@ip-        amazon-cloudwatch-agent.d]$ sudo vi amazon-cloudwatch-agent-new.json
[ec2-user@ip-        amazon-cloudwatch-agent.d]$ sudo /opt/aws/amazon-cloudwatch-agent/bin/amazon-cloudwatch-agent-ctl -a fetch-config -m ec2 -c file:/opt/aws/amazon-c
loudwatch-agent.d/amazon-cloudwatch-agent-new.json -s
/opt/aws/amazon-cloudwatch-agent/bin/config-downloader --output-dir /opt/aws/amazon-cloudwatch-agent/etc/amazon-cloudwatch-agent.d --download-source file:/opt/aws/amazon
-cloudwatch-agent.d/amazon-cloudwatch-agent-new.json --mode ec2 --config /opt/aws/amazon-cloudwatch-agent/etc/common-config.toml --multi-config default
Successfully fetched the config and saved in /opt/aws/amazon-cloudwatch-agent/etc/amazon-cloudwatch-agent.d/file_amazon-cloudwatch-agent-new.json.tmp
Start configuration validation...
/opt/aws/amazon-cloudwatch-agent/bin/config-translator --input /opt/aws/amazon-cloudwatch-agent/etc/amazon-cloudwatch-agent.json --input-dir /opt/aws/amazon-cloudwatch-a
gent.d --output /opt/aws/amazon-cloudwatch-agent/etc/amazon-cloudwatch-agent.toml --mode ec2 --config /opt/aws/amazon-cloudwatch-agent/etc/common-config.toml --multi-config default
2019/12/06 13:14:15 Reading json config file path: /opt/aws/amazon-cloudwatch-agent/etc/amazon-cloudwatch-agent.d/file_amazon-cloudwatch-agent-new.json.tmp ...
Valid Json input schema.
I! Detecting runasuser...
No csm configuration found.
Configuration validation first phase succeeded
/opt/aws/amazon-cloudwatch-agent/bin/amazon-cloudwatch-agent -schematest -config /opt/aws/amazon-cloudwatch-agent/etc/amazon-cloudwatch-agent.toml
Configuration validation second phase succeeded
Configuration validation succeeded
Created symlink from /etc/systemd/system/multi-user.target.wants/amazon-cloudwatch-agent.service to /etc/systemd/system/amazon-cloudwatch-agent.service.
Redirecting to /bin/systemctl restart amazon-cloudwatch-agent.service
[ec2-user@ip-        amazon-cloudwatch-agent.d]$ sudo /opt/aws/amazon-cloudwatch-agent/bin/amazon-cloudwatch-agent-ctl -m ec2 -a status
{
  "status": "running",
  "starttime": "2019-12-06T13:14:14+0000",
  "version": "1.231221.0"
}
[ec2-user@ip-        amazon-cloudwatch-agent.d]$
```

sudo vi amazon-cloudwatch-agent-new.json

Download the below file and add the inside content to it. To add content, open the file with above command, and click on **i** symbol from keyboard,t then **vi** editor goes to the **Enter** mode, copy the content from file and right click on Linux black console.

amazon-cloudwatch-agent-new.json

sudo /opt/aws/amazon-cloudwatch-agent/bin/amazon-cloudwatch-agent-ctl -a fetch-config -m ec2 -c file:/opt/aws/amazon-cloudwatch-agent/etc /amazon-cloudwatch-agent.d/amazon-cloudwatch-agent-new.json -s

To check the status of agent, run this command

sudo /opt/aws/amazon-cloudwatch-agent/bin/amazon-cloudwatch-agent-ctl -m ec2 -a status

After running successfully, check CloudWatch console, you will get the CWAgent
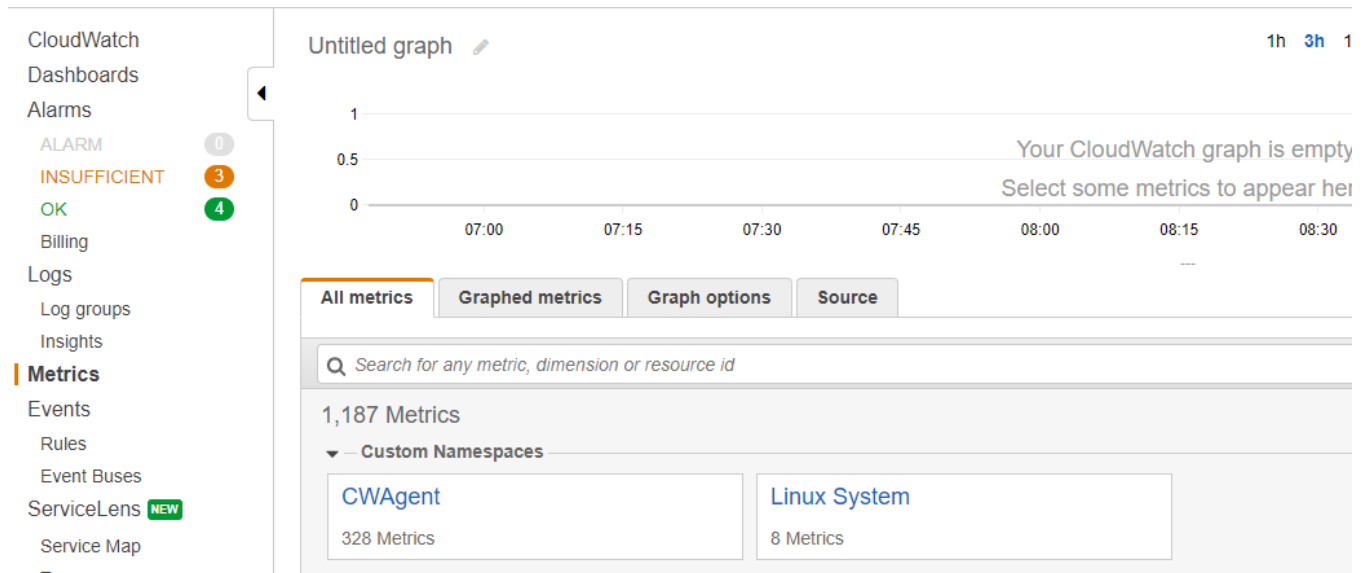
Whenever a person created a new machine, he/she needs to attach the IAM role to the instance to get the CWAgent metrics on CloudWatch console.