



**Amazon Cloudwatch
Agent**

❖ AMAZON CLOUDWATCH AGENT:

- Amazon CloudWatch Agent is a software package that collects and monitors metrics and logs from Amazon EC2 instances, on-premises servers, and hybrid servers.
- Collect internal system-level metrics from Amazon EC2 instances across operating systems. The metrics can include in-guest metrics, in addition to the metrics for EC2 instances.
- Collect system-level metrics from on-premises servers. These can include servers in a hybrid environment as well as servers not managed by AWS.
- Retrieve custom metrics from your applications or services using the StatsD and collectd protocols. StatsD is supported on both Linux servers and servers running Windows Server. collectd is supported only on Linux servers.
- Collect logs from Amazon EC2 instances and on-premises servers, running either Linux or Windows Server.

➤ CLOUDWATCH AGENT SETUP:

STEP 1: Create IAM Role with CloudWatchAgentServerPolicy:

STEP 2: Launch EC2 Instance and attach previous created IAM role.

STEP 3: Connect an EC2 Instance.

STEP 4: Install Apache HTTPD Server

```
$sudo yum install httpd -y  
$sudo systemctl start httpd  
$sudo systemctl enable httpd
```

NOTE: Now verify the sample page in the web browser.

Log File Location: `$ls /var/log/httpd/
access_log & error_log`

STEP 5: Install cloudwatch agent package:

```
$sudo yum install amazon-cloudwatch-agent collectd -y
```

STEP 6: Now launch the cloudwatch agent configuration file and select proper metrics and log file paths:

```
$sudo /opt/aws/amazon-cloudwatch-agent/bin/amazon-cloudwatch-agent-config-wizard
```

NOTE: If we need to modify any field, we can modify **config.json** file which is located in below location:

```
$cd /opt/aws/amazon-cloudwatch-agent/bin/
```

STEP 6: Start the agent by executing below command:

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

Check the status of the agent.

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

```
$sudo systemctl restart amazon-cloudwatch-agent  
$sudo systemctl status amazon-cloudwatch-agent
```

OUTPUT:

- A new log group will be created in the cloudwatch log group field and you can see log files in that log group.
- In the metric group, we can see all metrics about our EC2 instance(e.g. CPU usage, disk_used_percent, mem_used_percent, swap_used_percent, etc.).