# Creating a CloudWatch Dashboard for EC2 Instance

Level: **Fundamental**

Amazon EC2 Amazon CloudWatch Amazon Web Services

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End Lab

Open Console

Validation

## Lab Credentials

**User Name**

Whiz_User_62241.23278897

**Password**

9d04f019-ca9a-46c3-9d6e-39c4ae1010db

**Access Key**

AKIAW6VO7MOWPELCGOE5

**Secret Key**

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

## Support Documents

## Need help?

How to use Hands on Lab

Troubleshooting Lab

FAQs

Lab Overview | Lab Steps

Cloud Administrator

Compute, Management & Governance

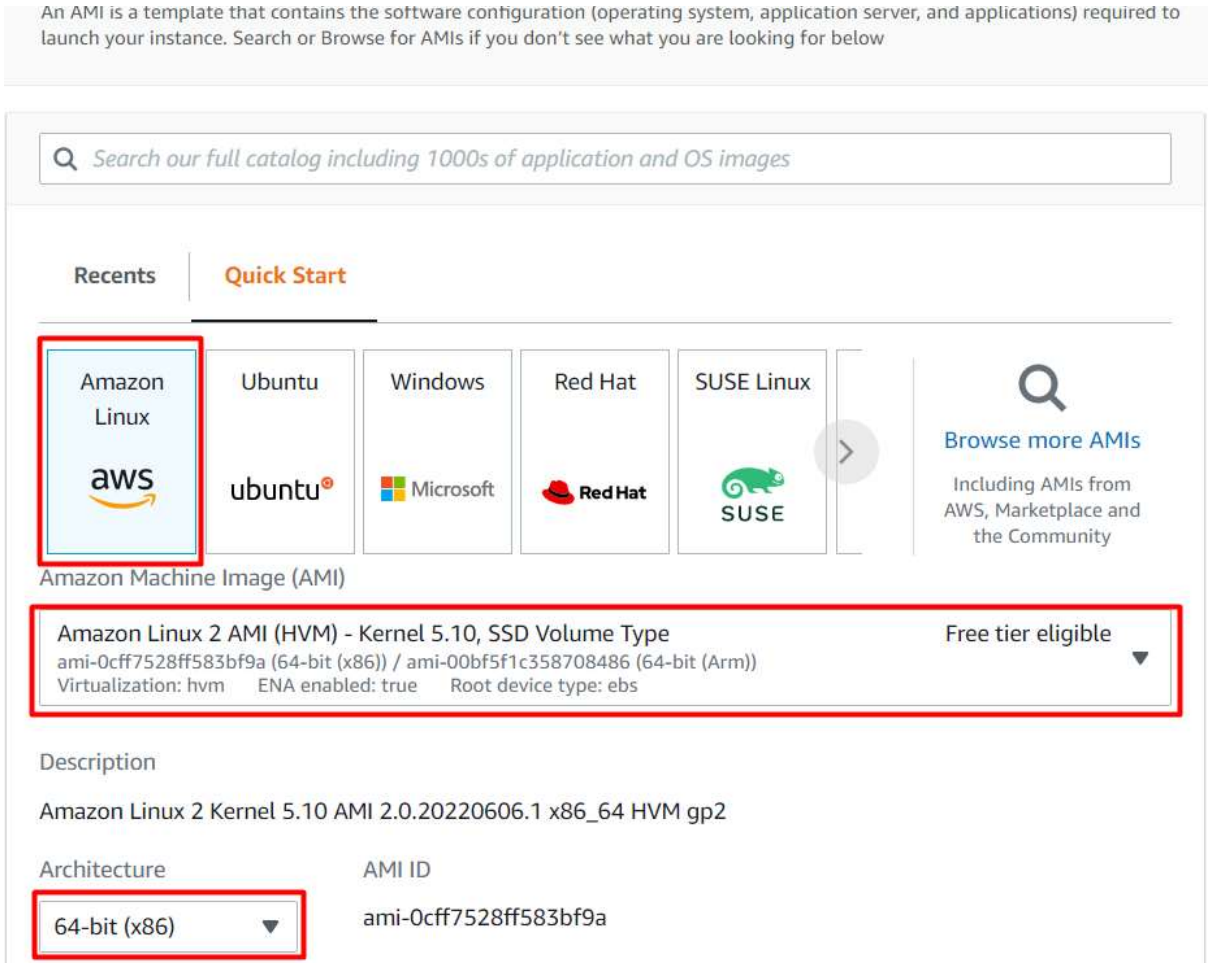
# Lab Steps

## Task 1: Sign in to AWS Management Console

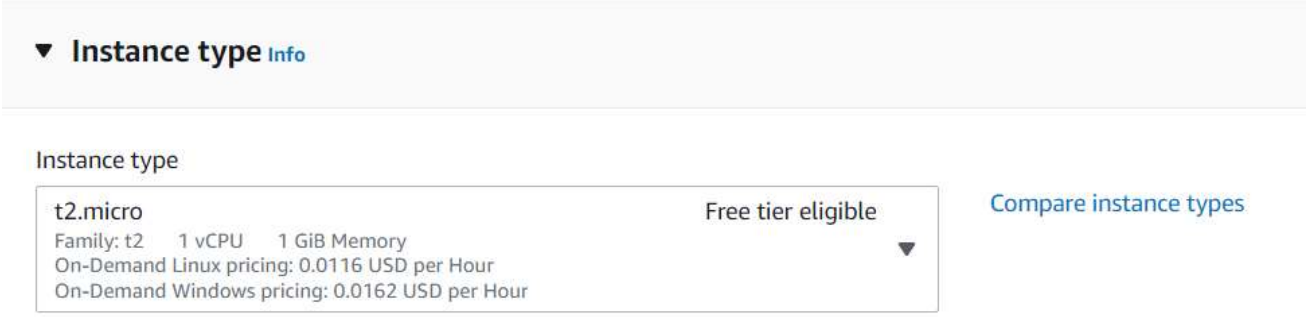
1. Click on the Open Console button, and you will get redirected to AWS Console in a new browser tab.
2. On the AWS sign-in page,
    - Leave the Account ID as default. Never edit/remove the 12 digit Account ID present in the AWS Console. otherwise, you cannot proceed with the lab.
    - Now copy your **User Name** and **Password** in the Lab Console to the **IAM Username and Password** in AWS Console and click on the **Sign in** button
3. Once Signed In to the AWS Management Console, Make the default AWS Region as **US East (N. Virginia) us-east-1.**

## Task 2: Launch an EC2 instance

1. Make sure you are in the **N.Virginia Region.**
2. Navigate to EC2 by clicking on the Services menu in the top, then click on **EC2** in the **Compute** section.
3. Navigate to **Instances** from the left side menu and click on Launch instance
4. Enter **Name** as **whizlabs.**
5. Choose an Amazon Machine Image (AMI): Select **Amazon Linux 2 AMI** in the drop-down.
6. Choose **architecture** as **64-bit(x86)**



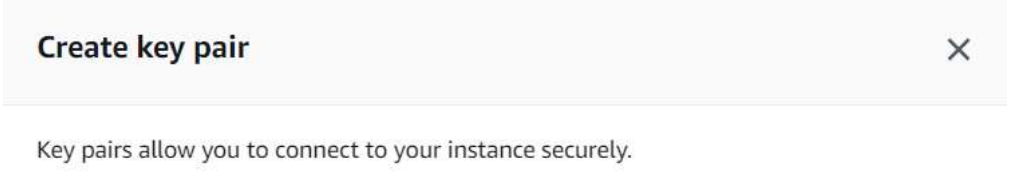

7. Choose an **Instance Type**: Select ***t2.micro*.**

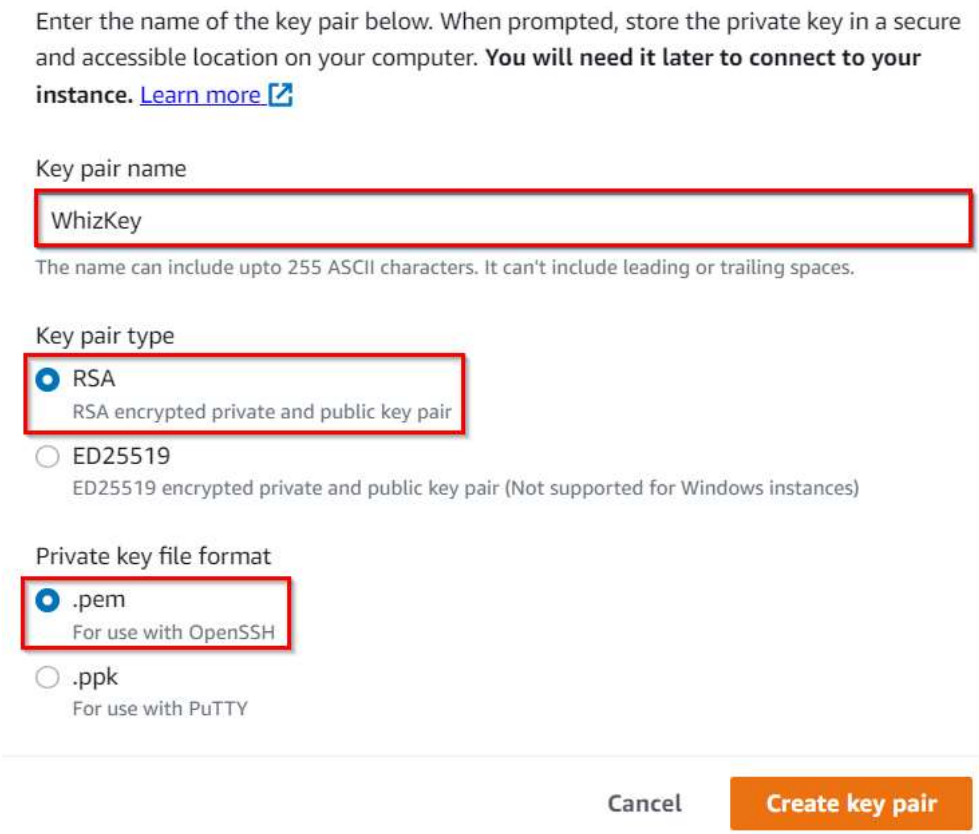



8. **For Key pair:** Select **Create a new key pair** Button

- Key pair name: **WhizKey**
- Key pair type: **RSA**
- Private key file format: **.pem**

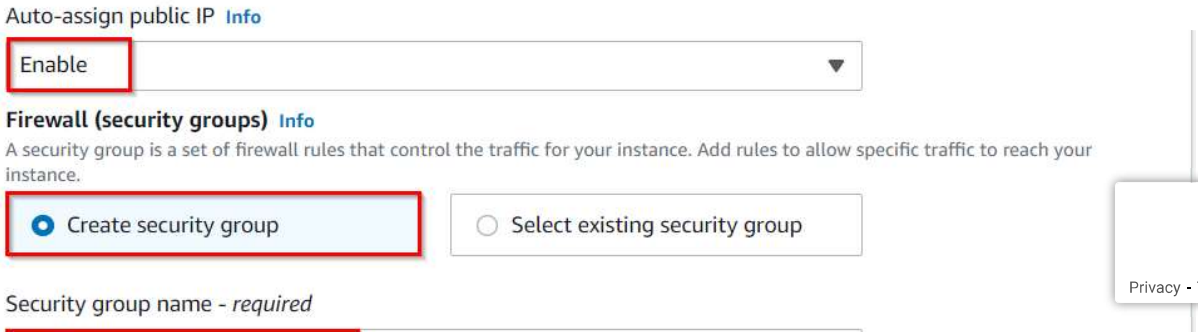
9. Select **Create key pair** Button.

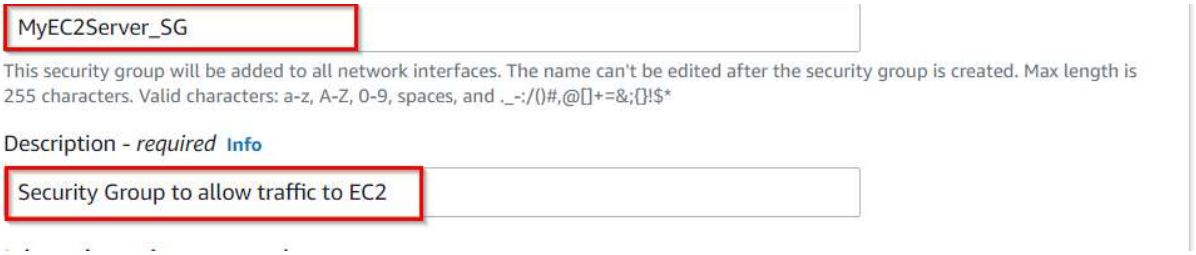





10. In Network Settings Click on **Edit** Button:

- Auto-assign public IP: **Enable**
- Select **Create new Security group**
- Security group name : Enter ***MyEC2Server_SG***
- Description : Enter ***Security Group to allow traffic to EC2***



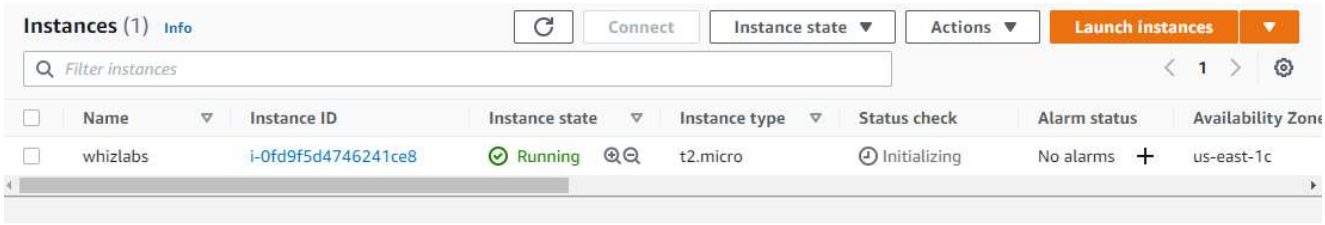



- Check Allow SSH from and Select Anywhere from dropdown
- To add **SSH**,
  - Choose Type: SSH
  - Source: Select Anywhere

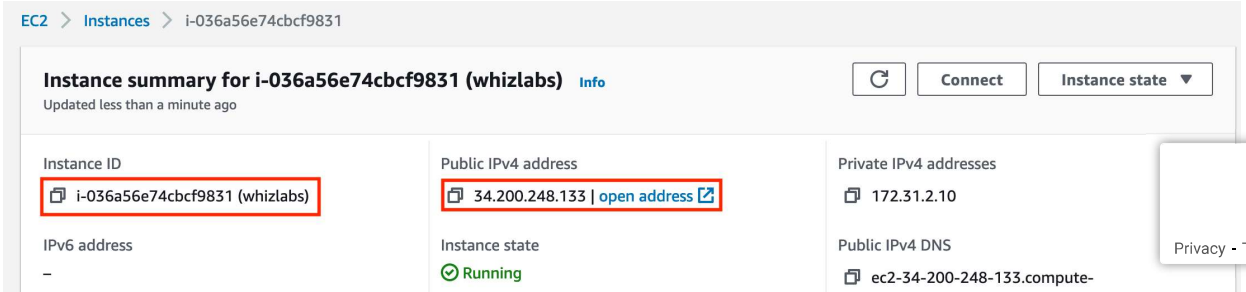
8. **Leave** the rest of the things as default.

9. Click on the **Launch instance**

10. **Launch Status:** Your instance is now launching. Click on the instance ID and wait for complete initialization of instance (until the status changes to Running).

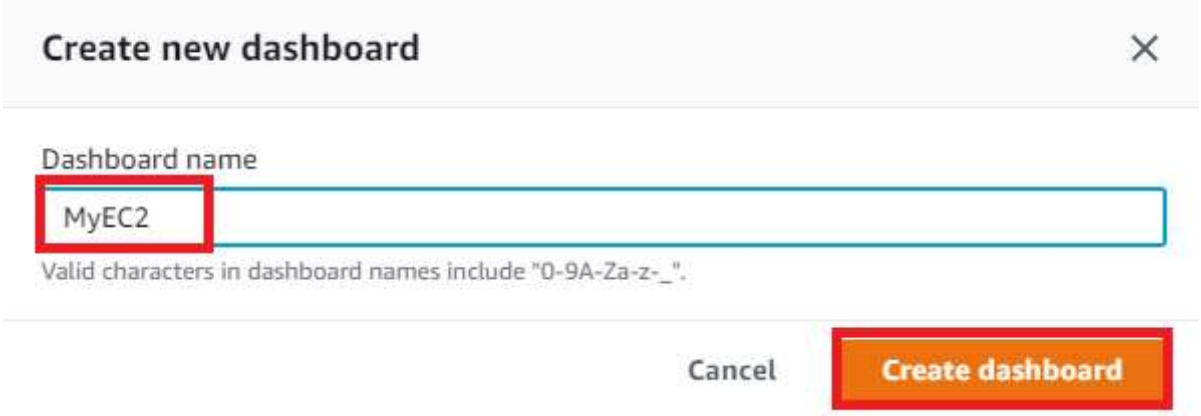



11. Note the **Public IPv4 Address** and **Instance ID** of the EC2 instance. A sample is shown in the screenshot below.

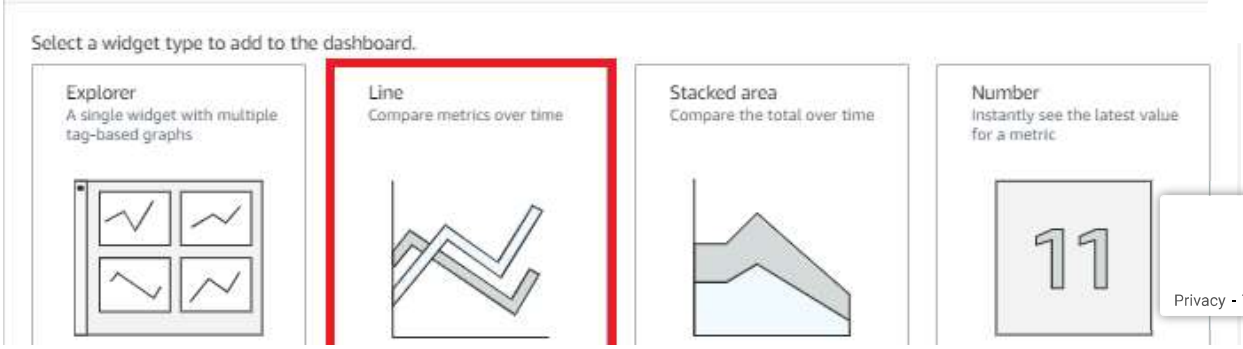


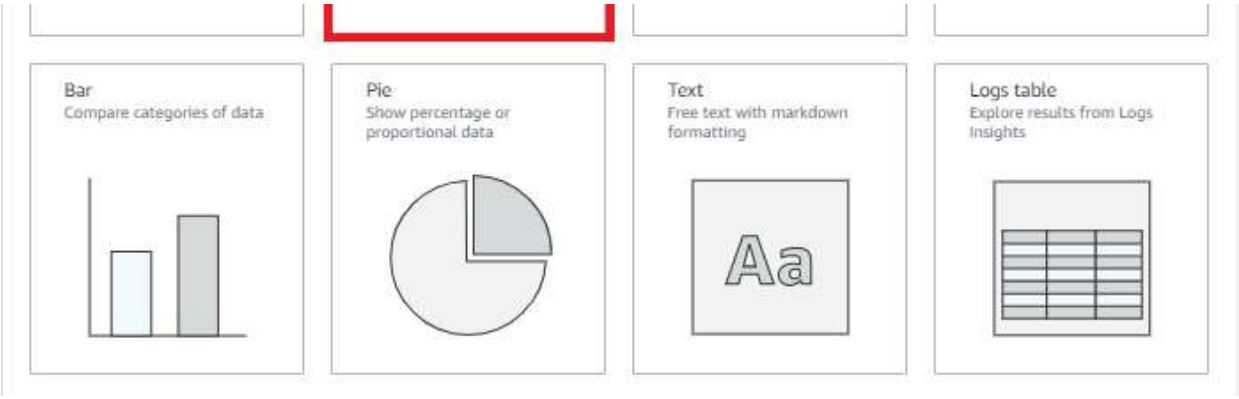

## Task 3: Creating a CloudWatch Dashboard

1. Wait for 5-10 minutes for CloudWatch to gather metrics from EC2 Instance.
2. Navigate to **CloudWatch** by clicking on the **Services** menu at the top of the page, then click on **CloudWatch** in the **Management and Governance section.**
3. Click on **Dashboards** on the left panel.
4. Click on **Create dashboard**.
5. Give a name to your dashboard.
    - Dashboard name: Enter **MyEC2**
    - Click on **Create dashboard** button.




5. We have to select a widget type to configure and add to this dashboard. Select **Line.**

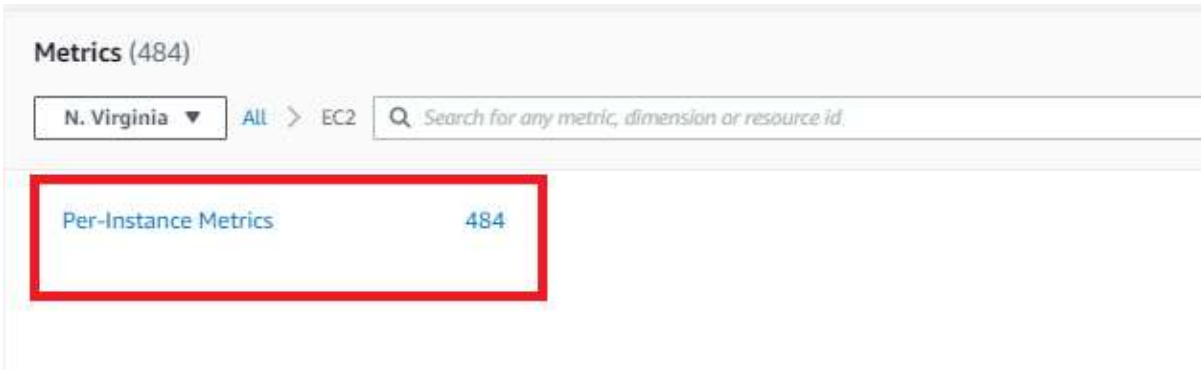




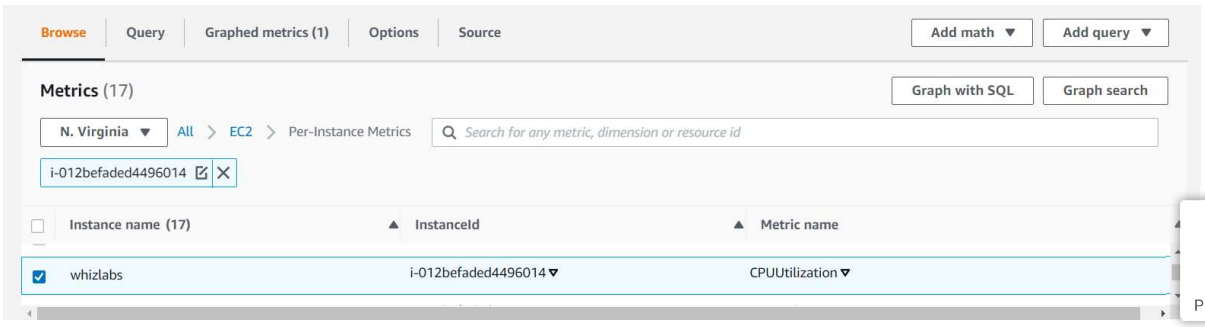

6. Select **Metrics** as data source.


7. You will see a metric graph. Under **All metrics**, search and choose **EC2** (since we are going to watch the metrics of EC2 which we created earlier).

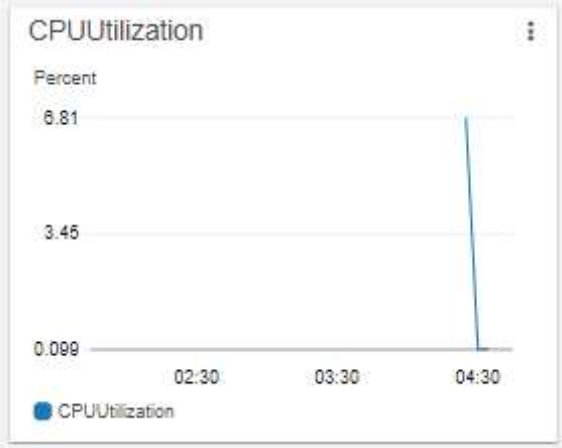
8. Under EC2, choose **Per-Instance Metrics.**




9. **Paste the copied Instance id** in the search bar and select the **CPUUtilization** from the metrics and click on **Create Widget** button.



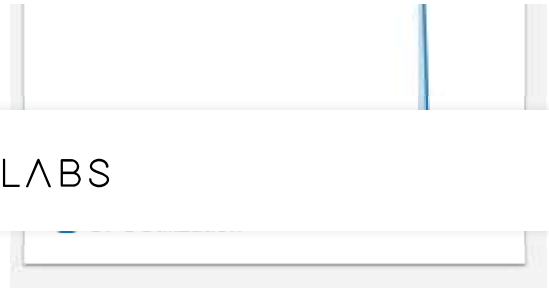
10. **Note: If you don't see the CPUUtilization metrics, wait for 5 minutes.**
11. You have successfully created a **Line widget** for CPU Utilization.




## Task 4: Creating different Widgets for same Metric

Stacked Area

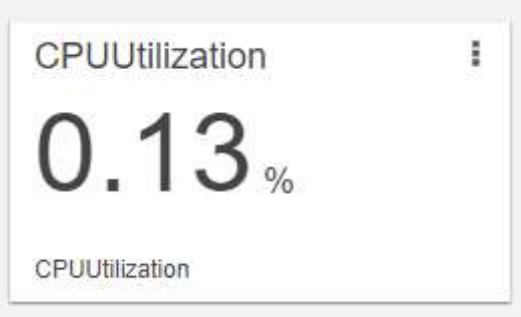
1. In the dashboard, click on **Add widget** and select **Stacked area.** Click on **Metrics.**
2. You will see a metric graph. Under **All metrics**, search and choose **EC2** (since we are going to watch the metrics of EC2 which we have created earlier).
3. Under EC2, choose **Per-Instance Metrics.**
4. Search and select the **CPUUtilization** from the metrics and click on **Create Widget** button.
5. You have successfully created a **Stacked Area widget** for CPU Utilization.





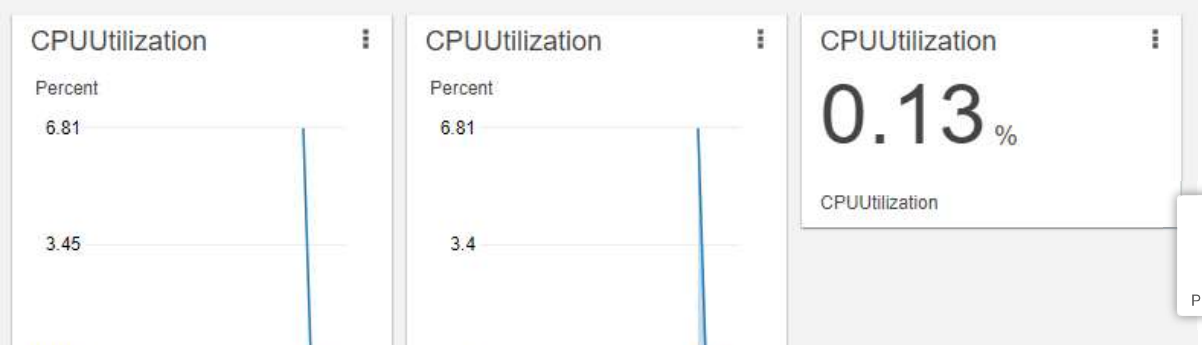
Number

1. In the dashboard, click on **Add widget** and select **Number.**
2. You can see a metric graph. Under **All metrics**, search and choose **EC2** (since we are going to watch the metrics of EC2 which we have created earlier).
3. Under EC2, choose **Per-Instance Metrics.**
4. Search and select the **CPUUtilization** from the metrics and click on **Create Widget** button.
5. You have successfully created a **Number widget** for CPU Utilization.



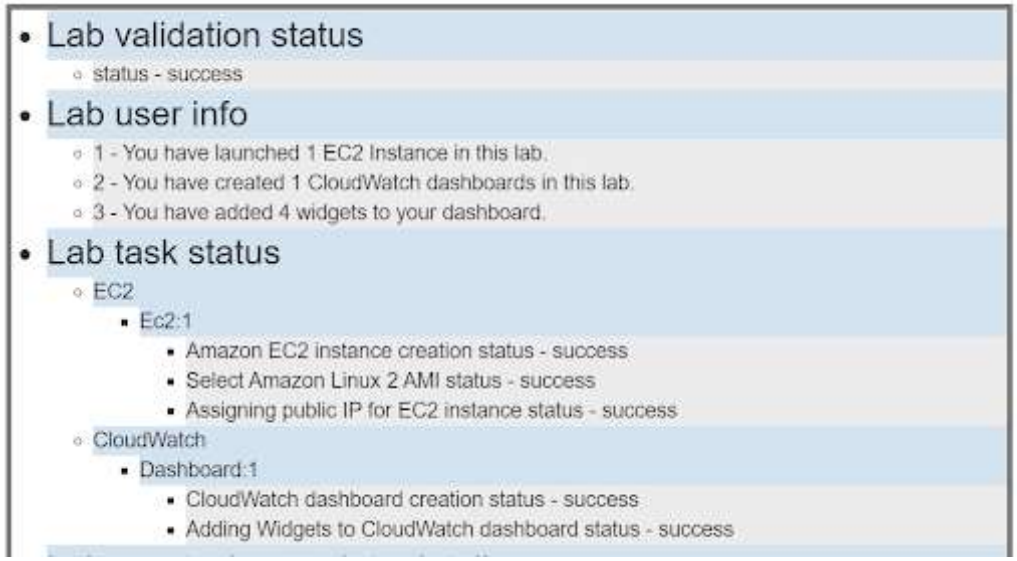

6. Click on  to save the widgets.

7. Refresh the page, until the metric value is shown.
8. Using these steps, you can use the widgets to create your own dashboard for metrics.
9. **Note:** The actual metric generated depends on the CPU Utilization.




Task 5: Validation Test

1. Once the lab steps are completed, please click on the Validation on the left side panel.
2. This will validate the resources in the AWS account and displays whether you have completed this lab successfully or not.
3. Sample output :




# Completion and Conclusion

1. You have successfully launched an EC2 Instance.
2. You have created a CloudWatch dashboard.
3. You have successfully created different widgets for the same metric.

# End Lab

1. Sign out of the AWS Account.
2. You have successfully completed the lab.
3. Once you have completed the steps, click on End Lab from your whizlabs dashboard.