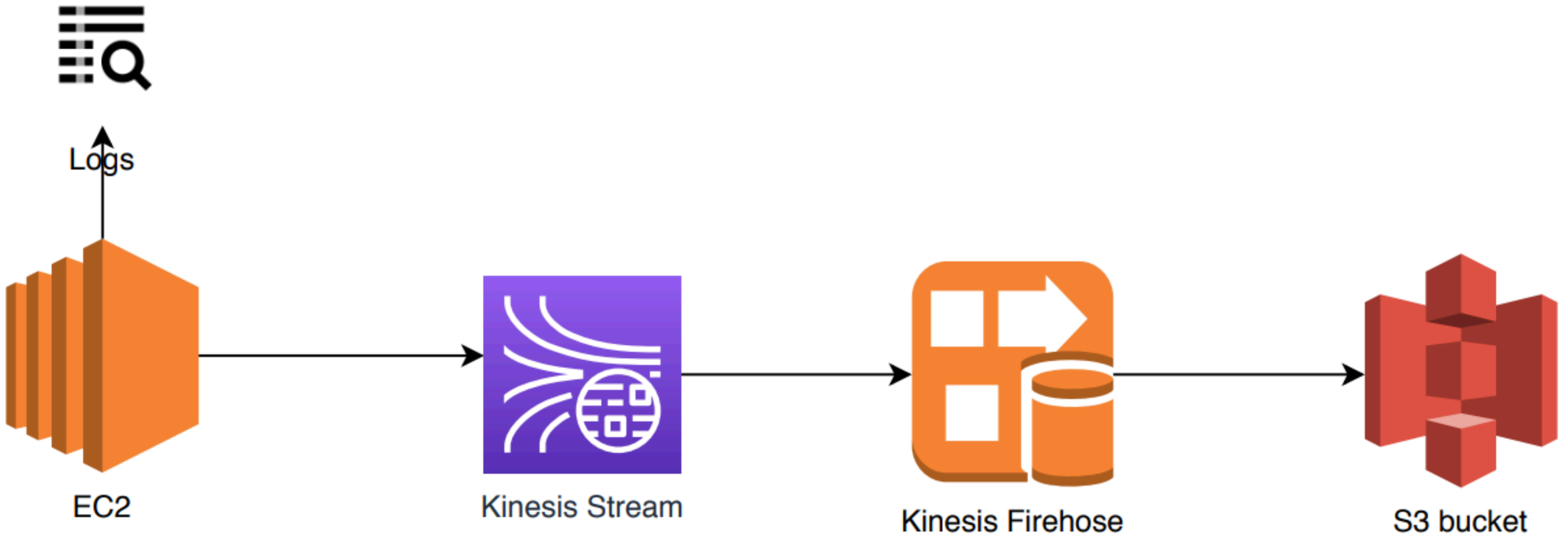
Kinesis Data Stream

— Manish



Real time streaming flow

Steps to configure Kinesis Data Stream

1- Create User role and give access to Data Stream , S3 and EC2.

2- Configure EC2 Instance.

3- Create Data Stream.

4-Download data test data from my GitHub repository.

5- Login to EC2 instance from your local terminal.

6- install Agent in the EC2 instance.

7- configure stream data file in EC2.

Login to EC2 instance.

1. Change the permission of .pem file.

Eg . Chmod 400 File name

2. ssh -i "Kinesis_stream.pem" ec2-user@ec2-100-26-142-240.compute-1.amazonaws.com

3. Elevate your permission to root.

  Sudo su

Install the Kinesis agent

Latest version.

```
sudo yum install -y https://s3.amazonaws.com/streaming-data-agent/aws-kinesis-agent-latest.amzn1.noarch.rpm
```

Install Specific version:

```
sudo yum install -y https://streaming-data-agent.s3.amazonaws.com/aws-kinesis-agent-1.1.4-1.amzn1.noarch.rpm
```

Configure Data stream json

Go to the logs inside /var and create the folder called weather. mkdir weather

```
{
  "cloudwatch.emitMetrics": true,
  "kinesis.endpoint": "",
  "firehose.endpoint": “”,

  "awsAccessKeyId": “AKIATPF6UVKKPZJGNHHD”,
  "awsSecretAccessKey": “TBidJNOGxTqfLtUhDn5O5ysnFJMhphtDFsYPEDUq",

  "flows": [
    {
      "filePattern": “/var/log/weather/.log*",
      "kinesisStream": "Kinesis-Data-Stream-City-Temp",
      "partitionKeyOption": “RANDOM”,
      “dataProcessingOptions": [
         {
             “optionName” : “CSVTOJSON”
             “customFieldNames” : [ “Region”,”Country”,”City”,”Month”,”Day”,”Year”,”AvgTemperature”]
         }
      ]
    }
  ]

}
```

```
sudo service aws-kinesis-agent start
sudo chkconfig aws-kinesis-agent on

sudo service aws-kinesis-agent stop

sudo service aws-kinesis-agent restart
```

Copy data into EC2 from local

scp -i “kinesis-demo.pem” /Users/msingh/AWS/KINESIS/city_temperature_first.log ec2-user@ec2-34-207-61-167.compute-1.amazonaws.com: /var/log/weather

1- Add the www group to your EC2 instance with the following command:

```
[ec2-user ~]$ sudo groupadd weather
```

2- Add the ec2-user user to the weather group:

```
[ec2-user ~]$ sudo usermod -a -G weather ec2-user
```

3- To refresh your permissions and include the new www group, log out:

```
[ec2-user ~]$ exit
```

4- Log back in again and verify that the www group exists with the groups:

```
[ec2-user ~]$ groups
> ec2-user wheel weather
```

5- Change the group ownership of the `/var/weather` directory and its contents to the www group:

```
[ec2-user ~]$ sudo chown -R root:weather /var/log/weather
```

6- Change the directory permissions of `/var/www` and its subdirectories to add group write permissions and set the group ID on subdirectories created in the future:

```
[ec2-user ~]$ sudo chmod 2775 /var/log/weather
[ec2-user ~]$ find /var/log/weather -type d -exec sudo chmod 2775 {} +
```

Thank you