

Phase-5

Deploying ELK Stack on Docker Container

DESCRIPTION

Project objective:

You have to deploy ELK Stack on a Docker container to implement continuous monitoring.

Code Snippets

docker-compose.yml

```
version: '3.6'

services:

  Elasticsearch:

  image: elasticsearch:7.16.2
  container_name: elasticsearch
  restart: always
  volumes:
    - elastic_data:/usr/share/elasticsearch/data/
  environment:
    ES_JAVA_OPTS: "-Xmx256m -Xms256m"
  discovery.type: single-node
  ports:
    - '9200:9200'
    - '9300:9300'
  networks:
    - elk

  Logstash:

  image: logstash:7.16.2
  container_name: logstash
  restart: always
  volumes:
    - ./logstash:/logstash_dir
```

command: logstash -f /logstash_dir/logstash.conf

depends_on:

- Elasticsearch

ports:

- '9600:9600'

environment:

LS_JAVA_OPTS: "-Xmx256m -Xms256m"

networks:

- elk

Kibana:

image: kibana:7.16.2

container_name: kibana

restart: always

ports:

- '5601:5601'

environment:

- ELASTICSEARCH_URL=http://elasticsearch:9200

depends_on:

- Elasticsearch

networks:

- elk

volumes:

elastic_data: { }

networks:

elk:

logstash.conf

```
input {  
  file {  
    path => "/root/temp/inlog.log"  
  }  
}
```

```
}  
Output {  
    elasticsearch {  
        hosts => [http://elasticsearch:9200]  
    }  
}
```

[inlog.log](#)

This is a test file

This is the log file that is fetched from logstash conf file

Commands Used: -

mkdir

To create the new directory

ls

To list the files in the repository

vi

Vi editor to enter the contents as text to execute the file

[docker-compose up](#)

Aggregates the output of each container