Deploying Elk Stack on Docker Container Source Code

Pulling the Image

To pull the ELK image from the Docker registry, open the terminal and run:

```
sudo docker pull sebp/elk
```

Building the Image from Source Files

There are two ways to build the image from a source file. Use either vanilla Docker or Docker compose. In both cases, clone the Git repository and enter the directory:

```
git clone https://github.com/spujadas/elk-docker.git

cd elk-docker
```

To build the image

To build the Docker image with the **docker build** command, run:

```
sudo docker build -t elk-docker .
```

Installing Plugins

ELK provides various plugins to enrich the system with additional features and libraries. When running ELK on Docker,

use the Dockerfile to install plugins and build the image to run the installation.

Open the Dockerfile located in the repository directory:

```
sudo nano Dockerfile
```

Elasticsearch

To install an Elasticsearch plugin, do the following:

```
FROM sebp/elk

ENV ES_HOME /opt/elasticsearch

WORKDIR ${ES_HOME}

RUN yes | CONF_DIR=/etc/elasticsearch gosu
elasticsearch bin/elasticsearch-plugin \

install -b <plugin name or link>
```

Logstash

Follow the steps below to install Logstash plugins.

```
FROM sebp/elk

WORKDIR ${LOGSTASH_HOME}

RUN gosu logstash bin/logstash-plugin install <plugin
name>
```

Kibana

To install Kibana plugins, do the following:

FROM sebp/elk

WORKDIR ${KIBANA_HOME}

RUN gosu kibana bin/kibana-plugin install <plugin name or link>

Running the ELK Container

There are two ways to run the ELK container:

- From the image through the **docker run** command.
- Using Docker compose.