Docker Image

for

Alfresco Site Activities Reporting

on ELK

# Project Objective

The aim of this Docker image is to provide a full ELK (Elasticsearch, Logstash and Kibana) environment with the necessary configuration and scripts to collect and present data from Alfresco Site Activities.

# Install Docker on Host machine

Install Docker on your host machine i.e. laptop as per Docker website. Please note the Docker Community Edition is sufficient to run this project (<https://www.docker.com/community-edition>)

# Virtual Memory

Elasticsearch uses a hybrid mmapfs / niofs directory by default to store its indices. The default operating system limits on mmap counts is likely to be too low, which may result in out of memory exceptions. On Linux, you can increase the limits by running the following command as root on the host machine:

# sysctl -w vm.max\_map\_count=262144

To set this value permanently, update the vm.max\_map\_count setting in /etc/sysctl.conf. To verify the value has been applied run sysctl vm.max\_map\_count.

# Download “Docker-Alfresco-Site-Activities” image

The “Docker-Alfresco-Site-Activities” image can be downloaded to the host machine with the following command:

# docker pull miguel220369/docker-elk-alfresco-site-activities

Verify the image has been downloaded:

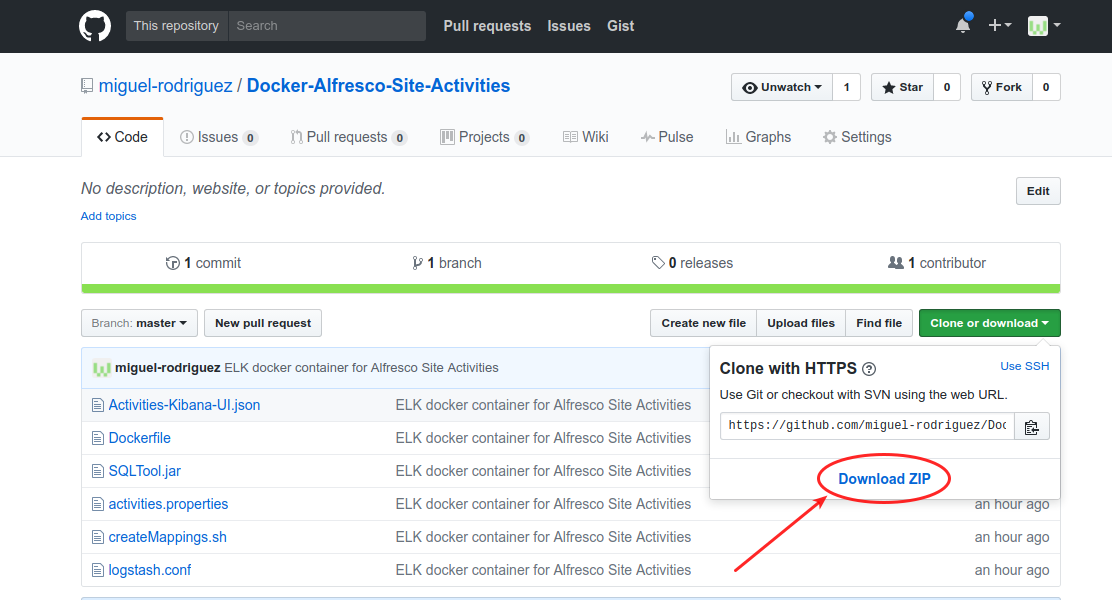
# docker images

REPOSITORY TAG IMAGE ID CREATED SIZE

miguel220369/docker-elk-alfresco-site-activities latest 8cbbc0a53592 2 hours ago 981 MB

# Download “Docker-Alfresco-Site-Activities” container software

Download the software to create the Docker container from GitHub: <https://github.com/miguel-rodriguez/Docker-Alfresco-Site-Activities> and extract the files to the file system.



# Creating the Docker Container

Before creating the container we need to configure access to Alfresco database from the Docker container. Assuming the files have been extracted to /opt/docker-projects/Docker-Alfresco-Site-Activities-master, edit file activities.properties and set the access to the DB server as appropriate, for example:

#postgresql settings

db\_type=postgresql

db\_url=jdbc:postgresql://172.17.0.1:5432/alfresco

db\_user=alfresco

db\_password=admin

**Note:** make sure the DB server allows for remote access to “alfresco” database.

From the command line execute the following command to create the Docker container:

# docker create -p 5601:5601 -it --name elk miguel220369/docker-elk-alfresco-site-activities

Unable to find image 'miguel220369/docker-elk-alfresco-site-activities:latest' locally

latest: Pulling from miguel220369/docker-elk-alfresco-site-activities

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# Starting the Docker Container

Once the Docker container has been created it can be started with the following command:

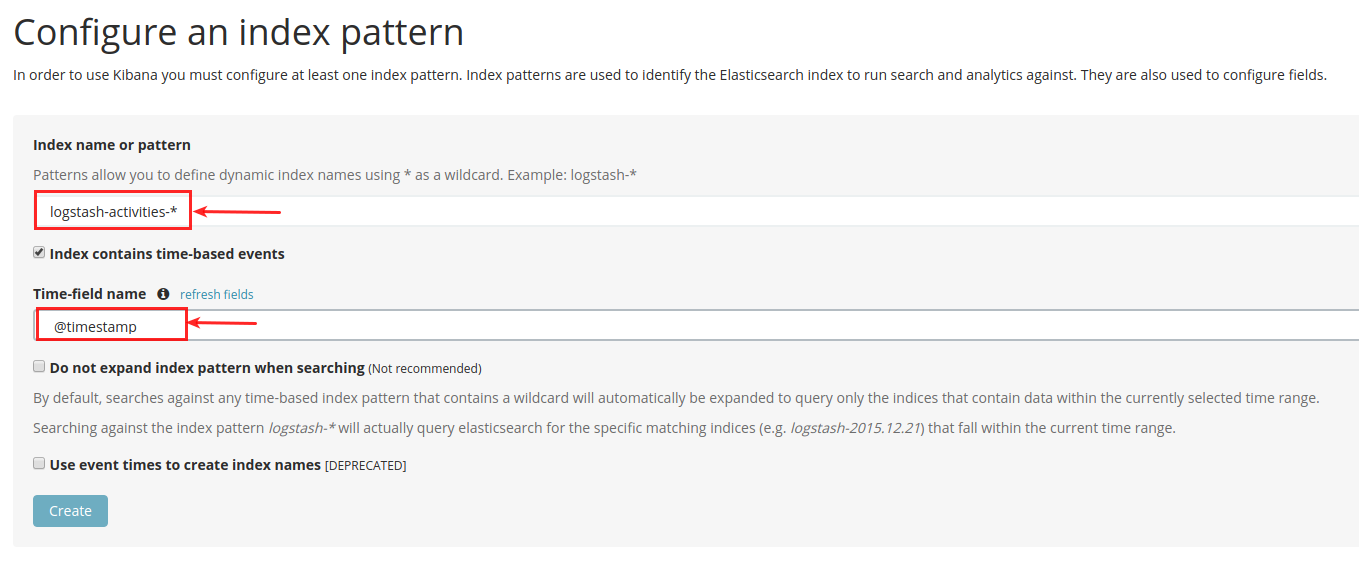
# docker start elk

Verify the ELK stack is running by accessing Kibana on <http://localhost:5601> on the host machine.

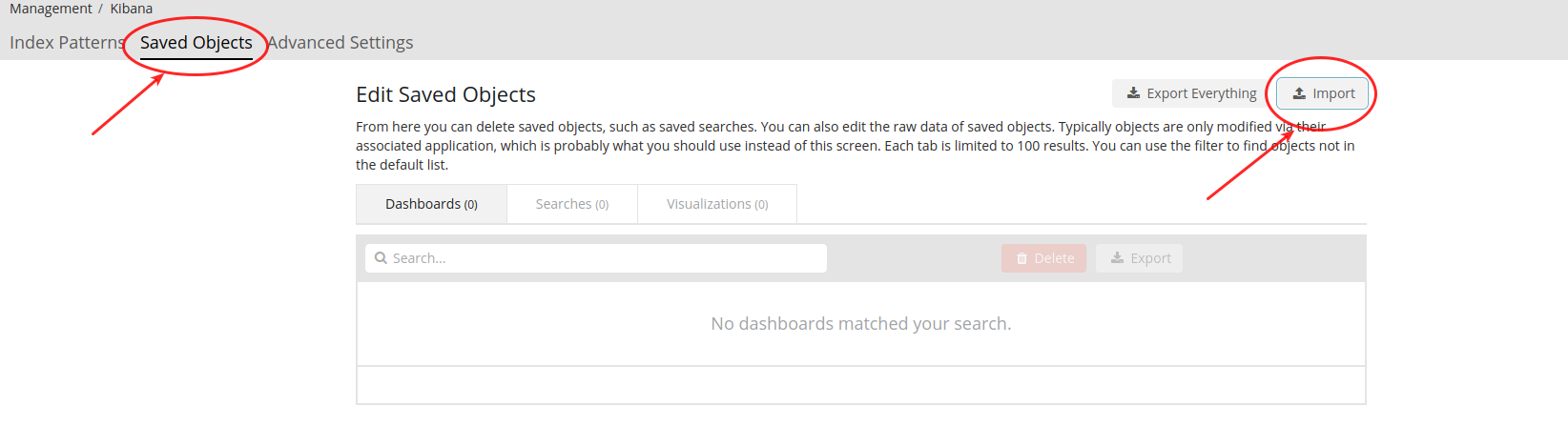
**Note:** At this point Elasticsearch and Kibana do not have any data…so we need to get Alfresco up and running to produce some content before creating the dashboards in Kibana.

# Configuring Kibana UI

Configure the index pattern for activities entries by entering “logstash-activities-\*” in the index name or pattern box and selecting “@timestamp” as the time-field name as shown below, then click on “Create” to finish.

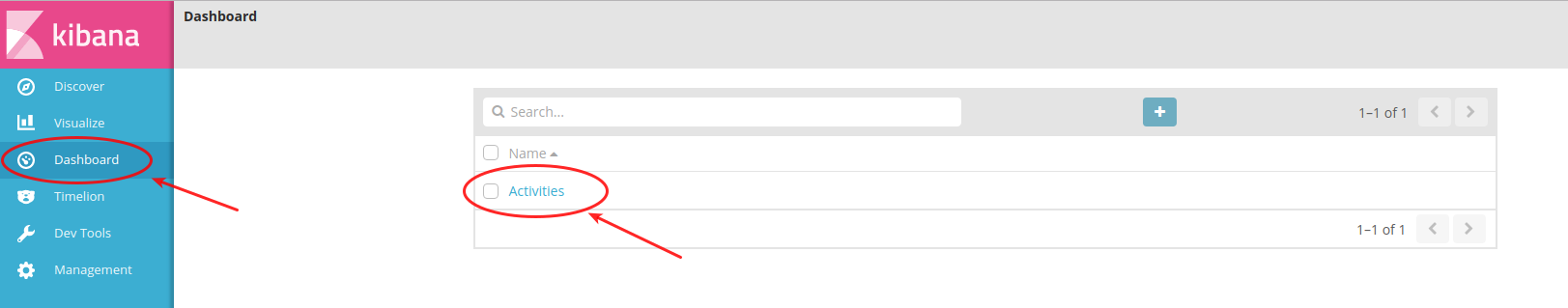


Next add the Dashboard to Kibana by clicking on “Saved Objects” link and then in “Import” link and select the file “Activities-Kibana-UI.json” file from the set of files downloaded from GitHub.



# Accessing the Dashboard

Finally access the dashboard by clicking on the “Dashboard” link on the left panel and then click on the “Activities” link.



The data should be available for the selected time period.

