



DevOps Lab

ELK INTRODUCTION

Home tasks

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TASK 1

1. Spin-up VM-1 using by Vagrant. It must match next conditions:
 - a. OS Centos should be installed (use sbeliakou/centos image)
 - b. Tomcat appserver should be installed
 - c. "Testapp" application should be deployed and running on the server
 - d. Logstash should be installed and configured for working with VM-2

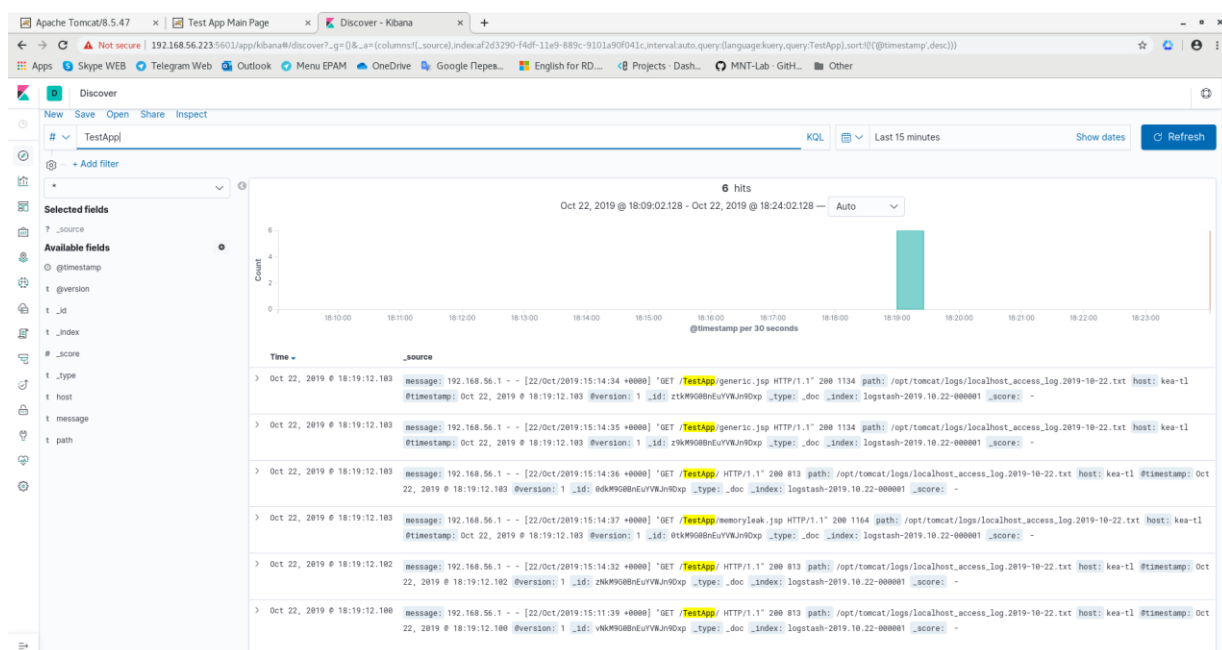
TASK 2

1. Spin-up second VM-2 using by Vagrant. It must match next conditions:
 - a. OS Centos should be installed (use sbeliakou/centos image)
 - b. Elasticsearch should be installed and configured
 - c. Kibana should be installed and configured

TASK 3

1. Analyze application workflow using by Kibana, provide screenshots

Here we see Tomcat's access log elements:



2. Perform several deploying-undeploying operations (Testapp), check changes, overview logstash logs using by Kibana UI; provide appropriate screenshots

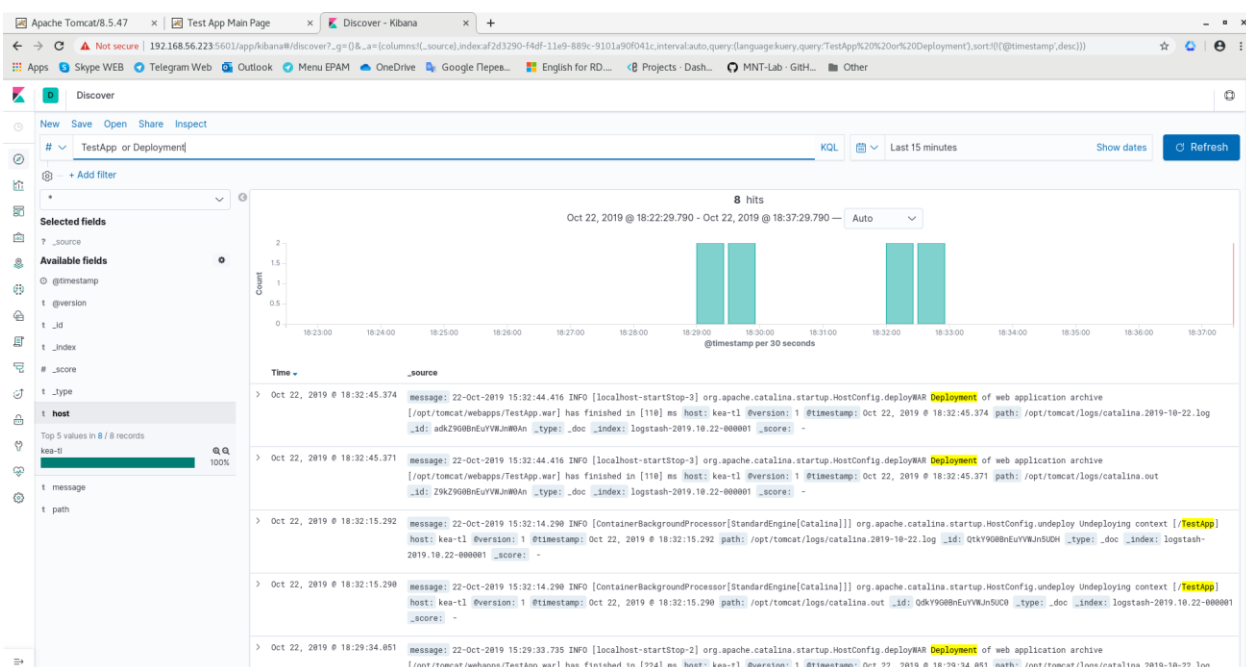
```

root@kea-tl:~
File Edit View Search Terminal Help

[root@kea-tl ~]# ls /opt/tomcat/webapps/
docs examples host-manager manager ROOT TestApp TestApp.war
[root@kea-tl ~]# rm -r -f /opt/tomcat/webapps/TestApp
[root@kea-tl ~]# rm -r -f /opt/tomcat/webapps/TestApp.war
[root@kea-tl ~]# ls /opt/tomcat/webapps/
docs examples host-manager manager ROOT
[root@kea-tl ~]# cp /vagrant/TestApp.war /opt/tomcat/webapps/
[root@kea-tl ~]# ls /opt/tomcat/webapps/
docs examples host-manager manager ROOT TestApp TestApp.war
[root@kea-tl ~]# █

```

See the redeployment results:



HOMETASK REQUIREMENTS

1. Vagrantfile for provisioning required infrastructure
2. SH - scripts for installation/configuring of the necessary applications
3. Screenshots of the application's state (from Kibana)

HELPFUL MATERIALS

- “ELK introduction” presentation
- <https://www.elastic.co/guide/en/logstash/current/installing-logstash.html>

- <https://www.elastic.co/guide/en/elasticsearch/reference/current/rpm.html#install-rpm>
- <https://www.elastic.co/guide/en/kibana/7.2/rpm.html#rpm-repo>