

Cài đặt hệ thống logging tập trung sử dụng EFK (Elasticsearch Fluentd Kibana)

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Clone bài lab:

Git clone <https://github.com/trantiendt9/tranning-devops.git>

1. Cài đặt Elasticsearch

Huong dan install helm chart elastic-search

ref <https://artifacthub.io/packages/helm/elastic/elasticsearch>

1.Tao new namesapce

kubectl create namespace logging-efk

kubectl get ns

2. Download helm chart elastic

helm repo add elastic <https://helm.elastic.co>

helm repo update

helm search repo elastic --version 7

helm pull elastic/elasticsearch --version 7.17.3

3. Giai nen chart

tar -xvzf elasticsearch-7.17.3.tgz

4. Customize chart

cp elasticsearch/values.yaml values-customize.yaml

5. Install or upgrade helm chart / apply helm chart to K8S cluster

#chart from internet

helm upgrade -i elasticsearch -n logging-efk -f values-customize.yaml elastic/elasticsearch

#chart from already download and extract

helm upgrade -i elasticsearch -n logging-efk -f values-customize.yaml elasticsearch

#kiem tra ket qua:

```
helm ls -n logging-efk
kubectl get all -n logging-efk
kubectl get svc n logging-efk
```

2. Cài đặt Fluentd

Huong dan install helm chart fluentd

1. Tao new namesapce

```
kubectl create namespace logging-efk
kubectl get ns
```

2. Download helm chart fluentd

```
helm repo add kokuwa https://kokuwaio.github.io/helm-charts
helm search repo fluentd
helm pull kokuwa/fluentd-elasticsearch --version 11.15.0
```

3. Giai nen chart

```
tar -xvzf fluentd-elasticsearch-11.15.0.tgz
```

4. Customize chart

```
cp fluentd-elasticsearch/values.yaml values-customize.yaml
```

#chart from internet

```
helm upgrade -i fluentd -n logging-efk -f values-customize.yaml stable/fluentd-elasticsearch
```

#chart from already download and extract

```
helm upgrade -i fluentd -n logging-efk -f values-customize.yaml fluentd-elasticsearch
```

#kiem tra ket qua:

```
helm ls -n logging-efk
kubectl get all -n logging-efk
```

6. Helm delete/ uninstall chart from K8s Cluster

```
helm uninstall fluentd -n logging-efk
```

3. Cài đặt Kibana

Huong dan install helm chart kibana

1. Tao new namesapce

```
kubectrl create namespace logging-efk
```

```
kubectrl get ns
```

2. Download helm chart elastic

```
helm repo add elastic https://helm.elastic.co
```

```
helm repo update
```

```
helm search repo kibana --version 7
```

```
helm pull elastic/kibana --version 7.17.3
```

3. Giai nen chart

```
tar -xvzf kibana-7.17.3.tgz
```

4. Customize chart

```
cp kibana/values.yaml values-customize.yaml
```

5. Install or upgrade helm chart / apply helm chart to K8S cluster

#chart from internet

```
helm upgrade -i kibana -n logging-efk -f values-customize.yaml elastic/kibana
```

#chart from already download and extract

```
helm upgrade -i kibana -n logging-efk -f values-customize.yaml kibana
```

#kiem tra ket qua:

```
helm ls -n logging-efk
```

```
kubectrl get all -n logging-efk
```

6. Helm uninstall chart from K8s Cluster

```
helm uninstall kibana -n logging-efk
```

4. Cấu hình Kibana UI

Mở trình duyệt web: <http://192.168.59.100:32000/>

The screenshot shows the Kibana Index Patterns page. The browser address bar displays the URL `192.168.59.100:32000/app/management/kibana/indexPatterns?bannerMessage=To%20visualize%20and%20explore%20data%20in%20Kibana,%20you%20must%20create%20an%20index%20pattern%20to%20explore%20your%20data`. The left sidebar contains a menu with 'Discover' highlighted. The main content area features a tutorial titled 'You have data in Elasticsearch. Now, create an index pattern.' with a 'Create index pattern' button highlighted.

The screenshot shows the Kibana Discover page. The browser address bar displays the URL `192.168.59.100:32000/app/discover#/?_g=(filters:[{}],refreshInterval:(pause!value,0),time:(from:now-15m,to:now))&_a=(columns:[{}],filters:[{}],index:40253400-0c24-11ee-ae07-99e61e1a0810,interval:auto,query:...)`. The left sidebar contains a menu with 'Discover' highlighted. The main content area shows a search results table with 2,087 hits, including columns for Time and Document.`

elastic

Search Elastic

Stack Management

Index patterns

Management

Ingest

Data

Alerts and Insights

Kibana

Stack

Index Patterns

Index Lifecycle Policies

Snapshot and Restore

Rollup Jobs

Transforms

Remote Clusters

Rules and Connectors

Reporting

Machine Learning Jobs

Saved Objects

Tags

Search Sessions

Spaces

Advanced Settings

License Management

Upgrade Assistant

Create and manage the

Search...

Pattern

Create index pattern

Name

*

Timestamp field

@timestamp

Your index pattern matches 3 sources.

logstash-2023.06.05

logstash-2023.06.15

logstash-2023.06.16

Rows per page: 10

Close

Create index pattern

Your data is not secure

Don't lose one bit. Enable our free security features.

Don't show again

Enable security

Dismiss