Lab 1. Elastic Search

In this lab, we will start the following services:

1. Elastic Search
2. Kibana

Running Elasticsearch

Elasticsearch can be downloaded as a ZIP, TAR, DEB, or RPM package. We will use the ZIP format as it is the least intrusive and the easiest for development purposes

1. Elasticsearch has been already downloaded at following path: `/elasticstack/elasticsearch-7.12.1` and bin folder is added to `PATH` variable.
2. Important: Switch to `elasticsearch` user as we cannot run elkastic as **root** user and type elasticsearch to start from /elasticstack/logstash-7.12.1/bin.

```
$  su elasticsearch
$  elasticsearch
```

3. Run `curl http://localhost:9200` or open the URL in Midori browser (launch from Desktop).

You should see an output like this:

```
elasticsearch@48c9c0818cad:~$ curl http://localhost:9200?pretty
{
  "name" : "48c9c0818cad",
  "cluster_name" : "elasticsearch",
  "cluster_uuid" : "Z2G3NoNrTBO9U0E8vGhTCA",
  "version" : {
    "number" : "7.12.1",
    "build_flavor" : "default",
    "build_type" : "tar",
    "build_hash" : "3186837139b9c6b6d23c3200870651f10d3343b7",
    "build_date" : "2021-04-20T20:56:39.040728659Z",
    "build_snapshot" : false,
    "lucene_version" : "8.8.0",
    "minimum_wire_compatibility_version" : "6.8.0",
    "minimum_index_compatibility_version" : "6.0.0-beta1"
  },
  "tagline" : "You Know, for Search"
}
elasticsearch@48c9c0818cad:~$
```

Congratulations! You have just set up a single-node Elasticsearch cluster.

Running Kibana

Kibana can be downloaded as a ZIP, TAR, DEB, or RPM package. We will use the ZIP format as it is the least intrusive and the easiest for development purposes.

1. Kibana has been already downloaded at following path: `/elasticstack/kibana-7.12.1-linux-x86_64` and bin folder added to `PATH` variable.

2. Important: Switch to `elasticsearch` user and type `kibana` to start the service.

```
$  su elasticsearch
$  kibana
```

3. Open `http://localhost:5601` in Midori browser. We will use Kibana in the next lab.

Congratulations! You have a working setup of Elasticsearch and Kibana.

Summary

In this lab, we started Elasticsearch and Kibana to begin the journey of learning about the Elastic Stack.

In the next lab, we will understand the core concepts of Elasticsearch. We will learn about indexes, types, shards, datatypes, mappings, and other fundamentals. We will also interact with Elasticsearch by using **Create**, **Read**, **Update,** and **Delete** (CRUD) operations, and learn the basics of searching.