

# Exercises

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## Download and start elasticsearch

- Download elasticsearch from <http://elastic.co>
- Unpack
- Start elasticsearch using `bin/elasticsearch.bat`
- See that it started by accessing <http://localhost:9200>

## Download and start Kibana

- Download Kibana from <http://elastic.co>
- Unpack
- Start Kibana using `bin/kibana.bat`
- Access the console on <http://localhost:5601>
- Test that it can connect to elasticsearch by issuing the request `GET /`

## Configure beat to read access log

- Download filebeat for your OS from <http://elastic.co>
- Unpack
- Configure in `filebeat.yml`
  - prospector path pointing to your file
  - if necessary configure elasticsearch output
- Run filebeat

```
filebeat.exe -c filebeat.yml
```

- Make sure the log events are in elasticsearch. In Kibana console issue:

```
GET /filebeat-*/_search
```

- See the structure of the events

## Configure Logstash

- Stop the filebeat process
- Delete the registry file in the beats data dir (data/registry for .tar.gz, /var/lib/filebeat/registry for DEB and RPM packages, c:\ProgramData\filebeat\registry for the Windows zip file)
- Delete the filebeat-\* index in elasticsearch (in Kibana console: DELETE filebeat-\*)
- Create a logstash configuration that pipes the logs to elasticsearch
  - Filters: One grok filter for COMBINEDAPACHELOG
- Configure filebeat output to send events to Logstash
- Start logstash

```
logstash.bat -f logstash.conf
```

- Start filebeat
- Check the structure of the documents in Kibana

## Kibana

- Create an index pattern for filebeat-\*

localhost:5601/app/kibana#/management/kibana/index?\_g=()

**kibana** Management / Kibana

Index Patterns Saved Objects Advanced Settings

**Warning**  
No default index pattern.  
You must select or create one to continue.

## Configure an index pattern

In order to use Kibana you must configure at least one index pattern for search and analytics against. They are also used to configure field lists.

**Index pattern** [advanced options](#)

filebeat-\*

Patterns allow you to define dynamic index names using \* as a wildcard. For example, filebeat-\* will match all indices named filebeat-\*. You can also use a date range to filter the results, such as filebeat-\*:2015-01-01 to 2015-01-31.

**Time Filter field name** ⓘ [refresh fields](#)

@timestamp

☐ Expand index pattern when searching [DEPRECATED]

With this option selected, searches against any time-based index pattern that contain data within the currently selected time range.

Searching against the index pattern `logstash-*` will actually query Elasticsearch's current time range.

With recent changes to Elasticsearch, this option should no longer be necessary.

☐ Use event times to create index names [DEPRECATED]

Create







- Check the distribution of events across time (you might have to adjust the date picker in the top right)
- Search for all resources that have a status of 404 (in the query bar: status:404)
- Create a new visualization
- Select bar chart

**kibana** Visualize / New

### Select visualization type

Search visualization types...

**Basic Charts**

|   |   |   |  |  |   |
|---|---|---|--|--|---|
| <br>Area | <br>Heat Map | <br>Horizontal Bar | <br>Line | <br>Pie | <br>Vertical Bar |
|---|---|---|--|--|---|

- Display the count of documents per Verb

Search... (e.g. status:200 AND extension:PHP)

Uses lucene query syntax

Add a filter +

filebeat-\*

DataMetrics & AxesPanel Settings

buckets

X-Axis

Aggregation

Terms

Field

verb

Order By

metric: Count

Order

Descending

Size

5

Custom Label

Advanced

