# **Exercises**

### 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
  - o prospector path pointing to your file
  - o 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**

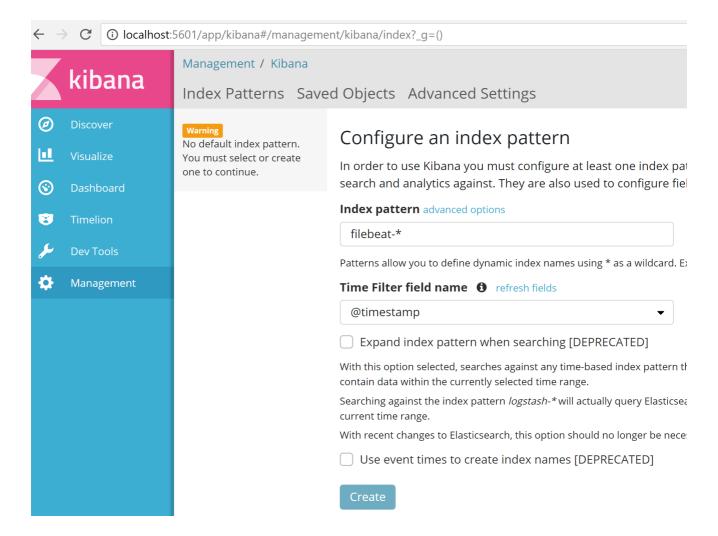
- Stop the filebeat process
- Delete the registry file in the beats data dir (data/registry for .tar.gz, /var/lib/filebeat/registry for DEB and RPM packages, c:\ProgramData\filebeat\registry for the Windows zip file)
- Delete the filebeat-\* index in elasticsearch (in Kibana console: DELETE filebeat-\*)
- 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

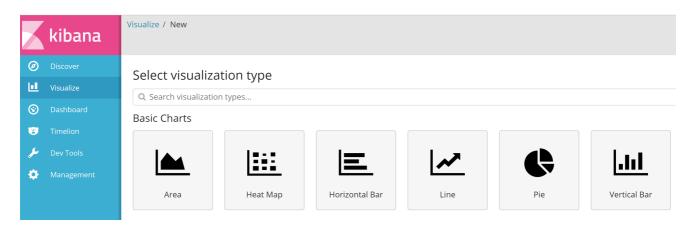
- Start filebeat
- Check the structure of the documents in Kibana

### Kibana

Create an index pattern for filebeat-\*



- 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



Display the count of documents per Verb

