

Elasticsearch KSS

Agenda

1. Introduction to Elasticsearch
2. Setting up Elasticsearch on your local machine
3. Basic implementation / Demo
4. Q/A

Why use Elasticsearch?

**Fast full-text
search**

**Highly
Scalable**

What can Elasticsearch do

Document
Searching

Logging &
Analytic

Performance
Monitoring

Data
Visualization
& Analytic

Security
Analytic

What make Elasticsearch fast

Inverted Index

Pre computing
documents in the
indice

Documents are
distributed into
shards

Operating in
cache, flush to
disk afterward

However, Indices
are **Immutable**

Documents in the collection

Doc1

Wild
elephants
are rarely
found in the
land of
australia...

Doc 2

We now are
in the digital
world where
we are
connected to
everyone.....

Doc 3

John had an
apple with
him in his
bag, which
he had stolen
from the....

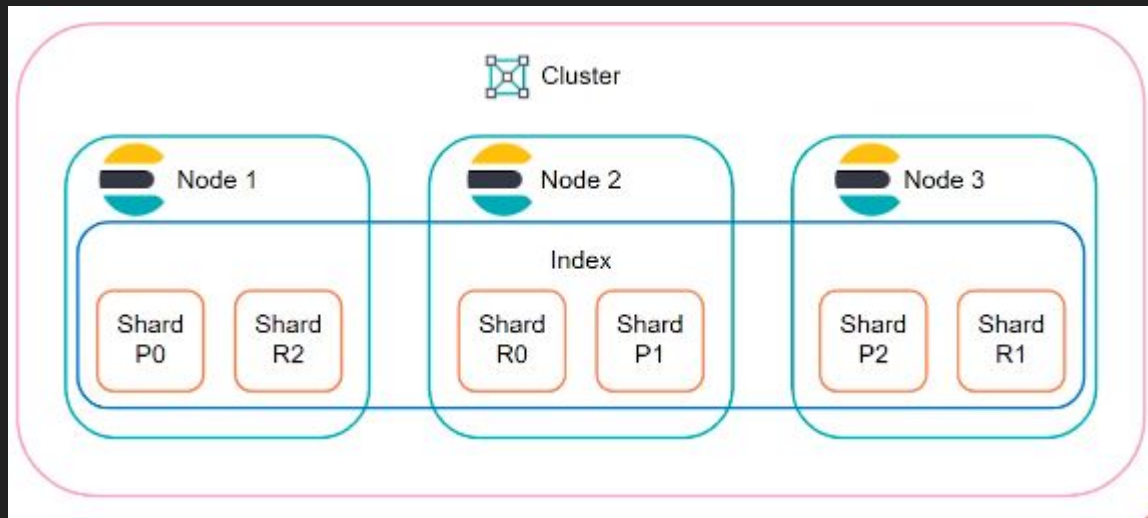
Filtering and Tokenization

Stop Words

.
.
.
.
a
and
is
the
we
.
.
.

Inverted Index

| Terms/Dictionary | Documents/Posting Lists |
|------------------|-------------------------|
| apple | 3, 5, 6 |
| australia | 1, 8 |
| basket | 6 |
| bombay | 4, 6 |
| crime | 9, 10 |
| digital | 2, 4, 8 |
| dog | 7 |
| elephant | 1, 6 |
| finland | 10, 11 |
| ... | ... |
| ... | ... |



Examples of entities using elasticsearch

Enterprises



OOZOU Projects



Setting up elasticsearch

- Download directly from <https://www.elastic.co/downloads/elasticsearch>
- Setup docker
 - You can setup multiple nodes and kibana as well
 - <https://www.elastic.co/guide/en/elasticsearch/reference/current/docker.html>

Demo