

# **elasticsearch.**

## What is it?

Elasticsearch is a flexible and powerful open source, distributed, real-time search and analytics engine, written in java.

It provides as full-text search engine with a RESTful web interface and schema-free JSON documents

```
{
  "_index": "users",
  "_type": "user",
  "_id": "14",
  "_score": 1,
  "_source": {
    "name": "Emma Watson"
  }
},
{
  "_index": "users",
  "_type": "user",
  "_id": "4",
  "_score": 1,
  "_source": {
    "name": "Alexandr Kovtunov"
  }
},
{
```

# elasticsearch.



## Why do we need it?

### - *real time data*

With Elasticsearch, real-time is the only time.

### - *scalable*

It is built to scale horizontally out of the box. As you need more capacity, just add more nodes, and let the cluster reorganize itself to take advantage of the extra hardware.

### - *document-oriented*

Store complex real world entities in Elasticsearch as structured JSON documents.

### - *schema free*

Toss it a JSON document and it will try to detect the data structure, index the data and make it searchable

and many more!

```
alexandr@alexandr-Lenovo-IdeaPad-Y500: ~/RailsWork/tire_sample
alexandr@alexandr-Lenovo-IdeaPad-Y500: ~/RailsWork/tire_sample X alexandr@alexandr-Lenovo-IdeaPad-Y500: ~/RailsWork/cube7
alexandr@alexandr-Lenovo-IdeaPad-Y500: ~/RailsWork/tire_sample$ curl localhost:9200/users/_stats | python -mjs
on.tool
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           Dload  Upload  Total   Spent    Left   Speed
100 4913  100 4913    0 1255k      0  --:--:-- --:--:-- --:--:-- 1599k
{
  "_all": {
    "primaries": {
      "completion": {
        "size_in_bytes": 0
      },
      "docs": {
        "count": 16,
        "deleted": 0
      },
      "fielddata": {
        "evictions": 0,
        "memory_size_in_bytes": 0
      },
      "filter_cache": {
        "evictions": 0,
        "memory_size_in_bytes": 0
      },
      "flush": {
        "total": 0,
        "total_time_in_millis": 0
      },
      "get": {
        "current": 0,
        "exists_time_in_millis": 0,
        "exists_total": 0,
        "missing_time_in_millis": 0,
        "missing_total": 0,
        "time_in_millis": 0,
        "total": 0
      },
      "id_cache": {
        "memory_size_in_bytes": 0
      },
      "indexing": {
        "delete_current": 0,
        "delete_time_in_millis": 0,
        "delete_total": 0,
        "index_current": 0,
        "index_time_in_millis": 21,
        "index_total": 48
      },
      "merges": {
        "current": 0,
        "current_docs": 0,
        "current_size_in_bytes": 0,
        "total": 0,
        "total_docs": 0,
        "total_size_in_bytes": 0,
        "total_time_in_millis": 0
      }
    }
  }
}
```

# elasticsearch.



## Where can we get it?

[www.elasticsearch.org](http://www.elasticsearch.org)

<http://karmi.github.com/retire/>

<https://github.com/elasticsearch/elasticsearch-rails>

<https://github.com/bleskes/sense>

# elasticsearch.



So, let me show you some code ;)