



链滴

ElasticSearch 安装使用介绍

作者: [450370050](#)

原文链接: <https://ld246.com/article/1524558756994>

来源网站: [链滴](#)

许可协议: [署名-相同方式共享 4.0 国际 \(CC BY-SA 4.0\)](#)

安装

Elastic 需要 Java 8 环境。

安装完 Java，就可以跟着[官方文档](#)安装 Elastic。直接下载压缩包比较简单。

```
[root@localhost] wget https://artifacts.elastic.co/downloads/elasticsearch/elasticsearch-6.2.3.tar.gz
[root@localhost] tar -zxvf elasticsearch-6.2.3.tar.gz
[root@localhost] mv elasticsearch-6.2.3 /usr/local/es
```

接着，进入es的目录，运行下面的命令，启动 es。

```
[root@localhost] ./bin/elasticsearch
```

es 默认本地访问，正式环境可以改成内网。为方便测试可以先改成0.0.0.0允许公网访问。

```
vi elasticsearch.yml
network.host: 0.0.0.0
```

错误解决

1.root启动错误

```
can not run elasticsearch as root
```

问题原因：es默认不允许root账号启动

解决方法：

方案一：在执行elasticSearch时加上参数-Des.insecure.allow.root=true，完整命令如下

```
./bin/elasticsearch -Des.insecure.allow.root=true
```

方案二：编辑elasticsearch文件，增加

```
ES_JAVA_OPTS="-Des.insecure.allow.root=true"
```

最好不要用root用户启动

2.用户权限错误

```
main ERROR Could not register mbeans java.security.AccessControlException: access denied ("java.management.MBeanTrustPermission" "register")
```

步骤一：可以看下config文件夹是否属于启动es的用户

步骤二：chown -R 775 config(给config文件夹读写权限)

步骤三：检查启动命令，不要在bin文件夹内启动es。已这样的路径运行 ./bin/elasticsearch

3.ulimit错误

[1]: max file descriptors [65535] for elasticsearch process is too low, increase to at least [65536]

解决方法: 修改ulimit 打开文件数

4.进程数错误

[1]: max number of threads [2048] for user [es] is too low, increase to at least [4096]

解决方法: 修改系统的打开进程数vi /etc/security/limits.d/90-nproc.conf

5.SecComp检查错误

[1]: system call filters failed to install; check the logs and fix your configuration or disable system call filters at your own risk

问题原因: 因为Centos6不支持SecComp

解决方法: 在elasticsearch.yml中配置bootstrap.system_all_filter为false, 注意要在Memory下面可以加在底部

使用

Elastic 就会在默认的9200端口运行。这时, 打开另一个命令行窗口, 请求该端口, 会得到说明信息。

```
{
  "name": "qv81z4g",
  "cluster_name": "elasticsearch",
  "cluster_uuid": "oBS8HzHgRC6kcfs_Uh_Luw",
  "version": {
    "number": "6.2.3",
    "build_hash": "c59ff00",
    "build_date": "2018-03-13T10:06:29.741383Z",
    "build_snapshot": false,
    "lucene_version": "7.2.1",
    "minimum_wire_compatibility_version": "5.6.0",
    "minimum_index_compatibility_version": "5.0.0"
  },
  "tagline": "You Know, for Search"
}
```

索引创建

创建索引articles _type:article 增加两个映射

title 关键字类型

create_time long类型

```
curl -X PUT 'http://localhost:9200/articles/' -d '{
```

```
"mappings": {
  "article": {
    "properties": {
      "title": {
        "type": "keyword"
      },
      "create_time": {
        "type": "long"
      }
    }
  }
}
```

Response:

```
{
  "acknowledged": true,
  "shards_acknowledged": true,
  "index": "articles"
}
```

索引查询

```
curl http://localhost:9200/articles/
```

Response:

```
{
  "articles": {
    "aliases": {},
    "mappings": {
      "article": {
        "properties": {
          "create_time": {
            "type": "long"
          },
          "title": {
            "type": "keyword"
          }
        }
      }
    }
  },
  "settings": {
    "index": {
      "creation_date": "1523172764380",
      "number_of_shards": "5",
      "number_of_replicas": "1",
      "uuid": "iiQlEh5ARhikWn2NF-JcA",
      "version": {
        "created": "6020399"
      }
    },
    "provided_name": "articles"
  }
}
```

```
}
  }
}
```

创建文档

```
curl -X PUT 'http://localhost:9200/articles/' -d '{"title":"画江湖之不良人? ","create_time":152313408}'
```

Response:

```
{
  "_index": "articles",
  "_type": "article",
  "_id": "1",
  "_version": 1,
  "result": "created",
  "_shards": {
    "total": 2,
    "successful": 1,
    "failed": 0
  },
  "_seq_no": 0,
  "_primary_term": 1
}
```

单条查询

```
curl http://localhost:9200/articles/article/1
```

Response:

```
{
  "_index": "articles",
  "_type": "article",
  "_id": "1",
  "_version": 3,
  "found": true,
  "_source": {
    "title": "画江湖之不良人? ",
    "create_time": 1523123408
  }
}
```

简单分页查询

size: 每页大小

from: 开始位置

```
curl http://localhost:9200/articles/article/_search?size=20&from=0
```

Response:

```
{
  "took": 2,
  "timed_out": false,
  "_shards": {
    "total": 5,
    "successful": 5,
    "skipped": 0,
    "failed": 0
  },
  "hits": {
    "total": 1,
    "max_score": 1,
    "hits": [
      {
        "_index": "articles",
        "_type": "article",
        "_id": "1",
        "_score": 1,
        "_source": {
          "title": "画江湖之不良人? ",
          "create_time": 1523173408
        }
      }
    ]
  }
}
```

简单精准匹配

```
curl -X POST 'localhost:9200/articles/article/_search' -d '
```

```
{
  "query": {
    "match": {
      "title": "画江湖之不良人? "
    }
  }
}'
```

Response:

```
{
  "took": 3,
  "timed_out": false,
  "_shards": {
    "total": 5,
    "successful": 5,
    "skipped": 0,
    "failed": 0
  },
  "hits": {
    "total": 1,
    "max_score": 0.2876821,
```

```
"hits": [
  {
    "_index": "articles",
    "_type": "article",
    "_id": "1",
    "_score": 0.2876821,
    "_source": {
      "title": "画江湖之不良人？",
      "create_time": 1523173408
    }
  }
]
```

通配符匹配

```
curl -X POST 'localhost:9200/articles/article/_search' -d '{
  "query": {
    "wildcard": {
      "title": "*之*"
    }
  }
}'
```

Response:

```
{
  "took": 6,
  "timed_out": false,
  "_shards": {
    "total": 5,
    "successful": 5,
    "skipped": 0,
    "failed": 0
  },
  "hits": {
    "total": 1,
    "max_score": 1,
    "hits": [
      {
        "_index": "articles",
        "_type": "article",
        "_id": "1",
        "_score": 1,
        "_source": {
          "title": "画江湖之不良人？",
          "create_time": 1523173408
        }
      }
    ]
  }
}
```

简单字段排序

```
curl -X POST 'localhost:9200/articles/article/_search' -d '{
  "sort": { "create_time": { "order": "desc" }}
}'
```

Response:

```
{
  "took": 3,
  "timed_out": false,
  "_shards": {
    "total": 5,
    "successful": 5,
    "skipped": 0,
    "failed": 0
  },
  "hits": {
    "total": 3,
    "max_score": null,
    "hits": [
      {
        "_index": "articles",
        "_type": "article",
        "_id": "3",
        "_score": null,
        "_source": {
          "title": "画江湖之不良人3? ",
          "create_time": 1523175608
        }
      },
      {
        "sort": [
          1523175608
        ]
      },
      {
        "_index": "articles",
        "_type": "article",
        "_id": "2",
        "_score": null,
        "_source": {
          "title": "画江湖之不良人2? ",
          "create_time": 1523173608
        }
      },
      {
        "sort": [
          1523173608
        ]
      },
      {
        "_index": "articles",
        "_type": "article",
        "_id": "1",
        "_score": null,
        "_source": {
```



```
    "title": "画江湖之不良人? ",
    "create_time": 1523173408
  },
  "sort": [
    1523173408
  ]
}
]
```

官方文档

es十分强大更多功能请查看官方文档介绍。

<https://www.elastic.co/guide/cn/elasticsearch/guide/current/index.html>

中文分词

可以安装ik插件

<https://github.com/medcl/elasticsearch-analysis-ik>

按步骤安装即可