



链滴

# CentOS 7.9 安装 Elasticsearch 7.8.1

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原文链接: <https://ld246.com/article/1640915545955>

来源网站: [链滴](#)

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

## 安装环境

CentOS 安装的是最小版本：CentOS-7-x86\_64-Minimal-2009

```
[root@localhost ~]# cat /etc/redhat-release  
CentOS Linux release 7.9.2009 (Core)
```

关闭防火墙：

```
systemctl stop firewalld.service  
systemctl disable firewalld.service
```

## 前期准备

### 新建用户

默认情况下，Elasticsearch 不允许使用 root 用户启动。

```
groupadd esgroup  
useradd esapp -g esgroup
```

### 修改资源配置

修改 `/etc/security/limits.conf` 文件，在文件中添加以下内容：

```
esapp - nofile 65535  
esapp - nproc 4096
```

修改 `/etc/sysctl.conf` 文件，在文件中添加以下内容：

```
vm.max_map_count=262144
```

### 禁用内存交换

临时关闭命令：

```
swapoff -a
```

永久修改的方法：修改 `/etc/fstab` 文件，将注释掉所有包含 swap 的行。

全部配置完后，重启电脑，因为有些配置需要重启电脑才能生效。

### 关于 Java

因为 Elasticsearch 自带了 [OpenJDK](#)，所以我这里没有额外安装 JDK。

## 下载安装

使用 esapp 用户登录，或使用 `su - esapp` 切换到 esapp 用户，运行下面的命令：

```
wget https://artifacts.elastic.co/downloads/elasticsearch/elasticsearch-7.8.1-linux-x86_64.tar.g  
wget https://artifacts.elastic.co/downloads/elasticsearch/elasticsearch-7.8.1-linux-x86_64.tar.g  
.sha512
```

```
shasum -a 512 -c elasticsearch-7.8.1-linux-x86_64.tar.gz.sha512
tar -xzf elasticsearch-7.8.1-linux-x86_64.tar.gz
cd elasticsearch-7.8.1/
```

如果在校验时，提示 `-bash: shasum: command not found`，则需要安装 `perl-Digest-SHA`

```
yum install -y perl-Digest-SHA
```

### 修改配置文件

```
cd /home/esapp/elasticsearch-7.8.1/config
cp elasticsearch.yml elasticsearch.yml.bak
vi elasticsearch.yml
```

将 `network.host: 192.168.0.1` 改为 `network.host: 0.0.0.0` 并取消注释。以便外部浏览器可以访问。

添加 `discovery.type: single-node`。

## 启动并验证

### 启动

```
# 依然使用普通用户
cd /home/esapp/elasticsearch-7.8.1/bin
# 启动
./elasticsearch
```

### 检查是否启动成功

打开新的终端，输入下面的命令。

```
[root@localhost ~]# curl -X GET "localhost:9200/?pretty"
{
  "name" : "localhost.localdomain",
  "cluster_name" : "elasticsearch",
  "cluster_uuid" : "7iE1xknOQLiJiDnK7dJug",
  "version" : {
    "number" : "7.8.1",
    "build_flavor" : "default",
    "build_type" : "tar",
    "build_hash" : "b5ca9c58fb664ca8bf9e4057fc229b3396bf3a89",
    "build_date" : "2020-07-21T16:40:44.668009Z",
    "build_snapshot" : false,
    "lucene_version" : "8.5.1",
    "minimum_wire_compatibility_version" : "6.8.0",
    "minimum_index_compatibility_version" : "6.0.0-beta1"
  },
  "tagline" : "You Know, for Search"
}
```

在非本地浏览器中访问 <http://ES所在机器的IP:9200/>，正常的话同样也可以得到上面的信息。

```
192.168.153.99:9200 x +
← → ↻ ⚠ 不安全 | 192.168.153.99:9200
1 // 20211231093241
2 // http://192.168.153.99:9200/
3
4 {
5   "name": "localhost.localdomain",
6   "cluster_name": "elasticsearch",
7   "cluster_uuid": "7iE1xkn0QLiIjiDnK7dJug",
8   "version": {
9     "number": "7.8.1",
10    "build_flavor": "default",
11    "build_type": "tar",
12    "build_hash": "b5ca9c58fb664ca8bf9e4057fc229b3396bf3a89",
13    "build_date": "2020-07-21T16:40:44.668009Z",
14    "build_snapshot": false,
15    "lucene_version": "8.5.1",
16    "minimum_wire_compatibility_version": "6.8.0",
17    "minimum_index_compatibility_version": "6.0.0-beta1"
18  },
19   "tagline": "You Know, for Search"
20 }
```

若尝试使用 root 用户启动，则会报错：

```
[root@localhost bin]# ./elasticsearch
[2021-12-31T02:26:51,276][ERROR][o.e.b.ElasticsearchUncaughtExceptionHandler] [localhost.l
caldomain] uncaught exception in thread [main]
org.elasticsearch.bootstrap.StartupException: java.lang.RuntimeException: can not run elastics
arch as root
    at org.elasticsearch.bootstrap.Elasticsearch.init(Elasticsearch.java:174) ~[elasticsearch-7.8
1.jar:7.8.1]
    at org.elasticsearch.bootstrap.Elasticsearch.execute(Elasticsearch.java:161) ~[elasticsearch-
7.8.1.jar:7.8.1]
    at org.elasticsearch.cli.EnvironmentAwareCommand.execute(EnvironmentAwareComma
d.java:86) ~[elasticsearch-7.8.1.jar:7.8.1]
    at org.elasticsearch.cli.Command.mainWithoutErrorHandling(Command.java:127) ~[elast
csearch-cli-7.8.1.jar:7.8.1]
    at org.elasticsearch.cli.Command.main(Command.java:90) ~[elasticsearch-cli-7.8.1.jar:7.8.
1]
    at org.elasticsearch.bootstrap.Elasticsearch.main(Elasticsearch.java:126) ~[elasticsearch-7
8.1.jar:7.8.1]
    at org.elasticsearch.bootstrap.Elasticsearch.main(Elasticsearch.java:92) ~[elasticsearch-7.8
1.jar:7.8.1]
Caused by: java.lang.RuntimeException: can not run elasticsearch as root
    at org.elasticsearch.bootstrap.Bootstrap.initializeNatives(Bootstrap.java:111) ~[elasticea
ch-7.8.1.jar:7.8.1]
    at org.elasticsearch.bootstrap.Bootstrap.setup(Bootstrap.java:178) ~[elasticsearch-7.8.1.ja
:7.8.1]
    at org.elasticsearch.bootstrap.Bootstrap.init(Bootstrap.java:393) ~[elasticsearch-7.8.1.jar:7
8.1]
    at org.elasticsearch.bootstrap.Elasticsearch.init(Elasticsearch.java:170) ~[elasticsearch-7.8
1.jar:7.8.1]
    ... 6 more
uncaught exception in thread [main]
java.lang.RuntimeException: can not run elasticsearch as root
```

```
at org.elasticsearch.bootstrap.Bootstrap.initializeNatives(Bootstrap.java:111)
at org.elasticsearch.bootstrap.Bootstrap.setup(Bootstrap.java:178)
at org.elasticsearch.bootstrap.Bootstrap.init(Bootstrap.java:393)
at org.elasticsearch.bootstrap.Elasticsearch.init(Elasticsearch.java:170)
at org.elasticsearch.bootstrap.Elasticsearch.execute(Elasticsearch.java:161)
at org.elasticsearch.cli.EnvironmentAwareCommand.execute(EnvironmentAwareComma
d.java:86)
at org.elasticsearch.cli.Command.mainWithoutErrorHandling(Command.java:127)
at org.elasticsearch.cli.Command.main(Command.java:90)
at org.elasticsearch.bootstrap.Elasticsearch.main(Elasticsearch.java:126)
at org.elasticsearch.bootstrap.Elasticsearch.main(Elasticsearch.java:92)
For complete error details, refer to the log at /home/esapp/elasticsearch-7.8.1/logs/elasticsea
ch.log
```

## 相关资料

[Install Elasticsearch from archive on Linux or MacOS](#)

[Important System Configuration](#)