资源配置

环境搭建

服务安装

【第一步】下载安装包

文件有点大，可以用迅雷下载好了放到指定位置

```
curl -L -0
https://artifacts.elastic.co/downloads/Elas
```

```
ticsearch/Elasticsearch-6.4.2.zip
```

【第二步】修改配置文件

•配置外网访问默认配置外网通过无法访问，需修改配置

```
config/Elasticsearch.yml
```

中这一行打开并且改成 0.0.0.0

```
network.host: 0.0.0.0
```

- 修改系统环境变量 vm.max_map_count 和允许打开的最 大文件描述符数量[1] vm.max_map_count 设置

```
vi /etc/sysctl.conf
```

增加以下内容

```
vm. max_map_count=2 62144
```

[2]修改允许打开的最大文件描述符数量

```
vim /etc/security/limits.conf
```

加入

```
* soft nofile 65536
* hard nofile 65536
* soft nproc 4096
* hard nproc 4096
```

【第三步】启动

```
./bin/Elasticsearch
```

后台运彳丁

```
bin/Elasticsearch -d
```

*切记要用非 root 用户运行否则会扌艮错,*ES 不让使用 root 账户启动

```
[root@bogon elasticsearch-6.4.2]# ./bin/elasticsearch [2018-10-19T18:16:02,985][WARN ][o.e.b.ElasticsearchUncaughtExceptionHandler] [] uncaught exception in thread [main] org.elasticsearch.bootstrap.StartupException: java.lang.RuntimeException: can not run elasticsearch as root
        at org.elasticsearch.bootst rap.Elasticsearch.init(Elasticsearch.java:140) ~[elasticsearch-6.4.2.jar:6.4.2]
        at org.elasticsearch.bootst rap.Elasticsearch.execute(Elasticsearch.java:127) ~[elasticsearch-6.4.2.jar:6.4.2]
        at org.elasticsearch.cli.EnvironmentAwareCommand.execute(EnvironmentAwareCommand.java:86) ~ [elasticsearch-6.4.2.jar :6.4.2]
        at org.elasticsearch.cli.Command.mainWithoutErrorHandling(Command.java:124) ^[elasticsearch-cli-6.4.2.jar:6.4.2]
        at org.elasticsearch.cli.Command.main(Command.java:90) ~[elasticsearch-cli-6.4.2.jar:6.4.2]
        at org.elasticsearch.bootst rap.Elasticsearch.main(Elasticsearch.java:93) ~[elasticsearch-6.4.2.jar:6.4.2]
        at org.elasticsearch.bootst rap.Elast icsea rch.main(Elasticsea rch.j ava:86) ~[elasticsearch-6.4.2.jar:6.4.2] Caused by: java.lang.RuntimeException: can
```

【第 步】验证环境

not run elasticsearch as root

```
curl http://localhost:9200/?pretty
```

3172.16.86.101 Q **172.16.86.101** (1)

```
[coder（abogon ~]$ curl http://localhost:9200/?pretty

  "name" : ”yxQ_mL5”,
  "cluster^name"  :  "elasticsearch",  "cluster^uuid11  :  ,ltslSy76HTm-yJbBmHb-ZAg,1,
  "version" : {
    "number" : ”6.4.2“，
    "build_flavor”  ”buil:"default11 f
    d_type”          ：“zip”，  “04711C2”，
    "build.hash":       "2018-09-26T13：34:09.098244ZH,
    "build.date":
    l,build_snapshot11          :          false,          ”lucene_version”          :
    "7.4.0",                  ”minimum_wire_compatibility_version”                  :
    "5.6.0", ”minimum_index_compatibil:Lty_version” :

  "tagline" : "You Know, for Search"

[coder@bogon ~]$
```

可能遇到的报错

如果不改配置文件直接启动，可能会遇到以下几个错误

```
ERROR: L3J bootstrap checks failed
[1]   : max file descriptors [4096] for elasticsearch process is too low, increase to at least [65536]
[2]   : max number of threads [3790] for user [coder] is too low, increase to at least [4096]
[3]   : max virtual memory areas vm.max_map_count [65530] is too low, increase to at least [262144]
[2018-10-19T18:06:15,262][INFO ][o.e.n.Node                    ]  [yxQ_mL5] stopping ...
[2018-10-19T18:06:15,289][INFO ][o.e.n.Node                    ]  [yxQ_mL5] stopped
[2018-10-19T18:06:15,289][INFO ] [o.e.n.Node                   ]  [yxQ_mL5] closing     ...
[2018-10-19T18:06:15,328][INFO ] [o.e.n.Node                   ]  [yxQ_mL5] closed
[coderQbogon elasticsearch-6.4.2]$ ps -ef | grep elasticsearch
```

max file descriptors [4096] for Elasticsearch process is too low, increase to at least [65536]

当前用户拥有的建文件描述的权限太低，知道需要 65536 个

解决办法

切换到 root 用户下面，

vim /etc/security/limits.conf

在最后添加前面的*号是所有用户，可以指定单个用户把火 替换成用户名

```
* soft nofile 65536
* hard nofile 65536
```

```
TTF #(astudent        1 IU 1    1 J J nproc          丄 u uw
                VT                                    20
#@faculty             soft      nproc                20
#@faculty             hard      nproc                50
#ftp                  hard      nproc                0
#@student                       maxlogins            4
* hard nofile    65536

* hard nofile    65536
"/etc/security/limits.conf" 63L, 2462C 已写入
[root@bogon elasticsearch-6.4.2]# su              coder
```

max virtual memory areas vm.max_map_count [65530] is too low, increase to at least [262144]内存 权限太小了

换到 root 用户

```
sysctl -w .max_map_count
```

```
ERROR: [1] bootstrap checks failed
[1]: max number of threads [3790] for user [coder] is too low, increase to at least [4096] [2018-10-19T18:18:06,796] [INFO       ]
                                [o.e. n.Node                    ] [yxQ__mL5]    stopping    ...
[2018-10-19T18:18:06,844][INFO  ][o.e.n.Node                    ]  [yxQ_mL5]    stopped
[2018-10-19T18:18:06,844][INFO  ]  [o.e.n.Node                  ]  [yxQ_mL5]    closing    ...
[2018-10-19T18:18:06,895][INFO  ]  [o.e.n.Node                  ]  [yxQ_mL5]    closed
```

max number of threads [3790] for user [coder] is too low, increase to at least [4096]用户最大线程数不够 解决办法 vim /etc/security/limits.conf

```
* soft nproc 4096
* hard nproc 4096
```

注，修改后需要从新登陆当前用户才能生效

<-今 C 。。不安全 | 172.16.86.101:9200

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```
"name" : "yxQ_mL5",
"cluster_name" : "elasticsearch",
"cluster_uuid" : "tslSy76HTm-yJbBmHb-ZAg", "version" : {
"number" : "6.4.2",
"build_flavor"      :"default",
"build^type":         zip ,
"build_hash":       "04711C2",
"buildZdate":       "2018-09-26T13:34:09.098244Z",
      "build_snapshot" : false,
      "lucene_version" : "7.4.0",
      "minimum_wire_compatibility_version" : "5.6.0",
      "minimuni_index_compatibility_version" : "5.0.0"

   "tagline" : "You Know, for Search"
```


远程访问成功，ES 搭建成功

基本操作操作

ES 是对外提供的 restful 协议接口一种情况是可以直接用 url 操作，一种是页面操作，页面的话需要安装插件

head 插件安装

【第一步】下载文件

从 git 下载插件

```
git clone
git://github · com/mobz/Elasticsearchhead, git
```

head 依赖 node.js,需要在之前安装好 node.js

【第二步】node.js 安装

•下载 n ode.js


```
https://nodejs.org/en/download/
```

• ZX 格式安装下载下来是 zx 格式需要在系统添加

```
yum -y install xz
```

•解压缩包

```
xz -d node*.tar.xz tar -xvf node*.tar
```

•配置环境变量

```
vi /etc/profile
export NODE_HOME=/home/coder/server/node-
v8.12.0-linux-x64
export PATH=$PATH:$NODE_HOME/bin source
/etc/profile
```

【第三步】grunt 安装

head 6 以后使用 grunt 构建

• npm 安装

```
tar -zxvf npm-1.4.9.tgz
cd npm/

./configure
make && make install
```

放到 node 目录下试试

```
sudo npm install -g grunt-cli
```

进入目录执行找到 package.json 所在目录参考：
*/node_modules/grunt/node_modules/grunt- cli/package.json

•构建

```
sudo npm install grunt —— save-dev
```

•验证

```
grunt -version
```

安装成功

[root（aiocalhost grunt-cli]# grunt -version grunt-cli vl.3.1
grunt V0.4.5
[root@localhost grunt-cli]# ，

【第四步】head 配置文件修改

connect: {

• Gruntfile.js Elasticsearch-head/Gruntfile.js

server: {
options: { port: 9100, base:'.',
Keepalive: true,
hostname:

} ）；
'Gruntfile.js" 116L, 2190C written 'rnn-b/Ahnnnn al ac-hi rcaa rrh_haad 1 *tt*.

设置为

```
hostname:
```

• app.js Elasticsearch-head/_site/app.js

```
defaults: {
        base_uri: null
},
init: function(parent) {
        this._super();
        this.prefs = services. Preferences. ins 伊 iiec();
        this.base_uri = this.config.base_uri 11 this.prefs.get("app-base_uri") || "http://172.16.86.101:9200"; if
        ( this.base_uri.charAt( this.base_ub •"叫仆  –i ) i==                                    "
                // XHR request fails if the URL is not ending with a this.base_uri +=
        }
        if( this.config.auth_user ) {
                var credentials = window.btoa( this.config.auth_user + "+ this.config.auth_password ); $.ajaxSetup({
                        headers: {
                                "Authorization": "Basic " + credentials
                        }
                ));
        }
        this.cluster = new services.Cluster({ base_uri: this.base_uri });
        this._clusterState = new services.ClusterState({
                cluster: this.cluster
        ));
"_site/app.js" 4473L, 145200C written
```

```
app-base_uri")
Hhttp://172.16.86.101:9200
```

- Elasticsearch.yml config/Elasticsearch.yml

```
http.cors.enabled:                              true
http.cors.allow-origin: "*"
```

head 安装成功

<--> C O ①不安全 I 172.16.86.101:9100

Elasticsearch http://172.16.86.101：9200/ 连接 **elasticsearch**

：：： 应用 S 工具 & 课程 & English 已常用网站 S 文摘 & 杂物 S bbb 臼 company

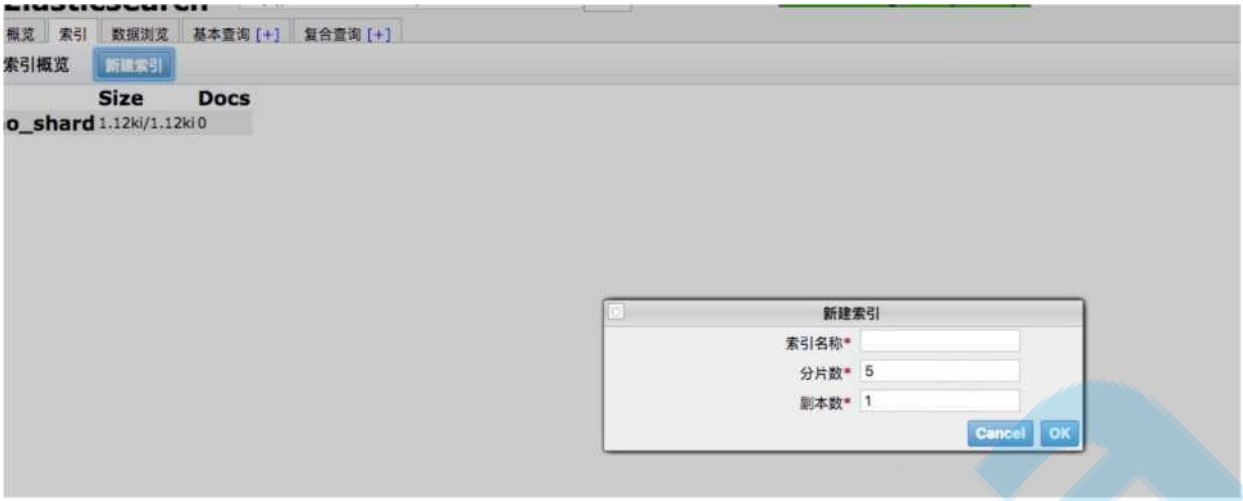
概竟 索引 数据浏览 基本查询[+]

集群概览 序 **Sort Indices ▼ | | View Aliases ▼** Index Filter

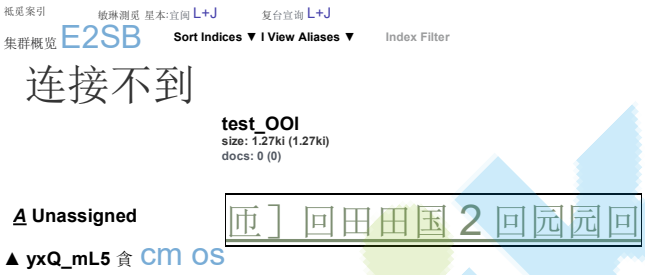
yxQ_mL5 复合查询[+]

索引基本操作

添加索引



选择分片数和副本数；由于我们现在是一台机器副本没有 用，选择成 0； 如果选择非 0 个副本，索引状态里会有索引




```
curl -XPUT -H
application/j son'
'http://⊥oca ⊥host:9200/test_ur ⊥/test_url/l
-d '{
    "user" : "kkb",
    "shards":0
    "post_date" : "2018-10-15T14:12:12",
    "message" : " Elastic Search"
}'
```

删除索引

url

```
curl -XDELETE
'http://172.16.86.101:9200/test/'
```

页面删除

查询

```
curl -i -XPOST
 'http://172.16.86.101:9200/_count?pretty
-H 'Cont                                -d
'{"query":{"match_all":{}}}'
```

HTTP/1.1 200 OK
content-type: application/json；

content-length: 116
charset=UTF-8

count" : 1, 索引 1 个
"_shards" : { 分区。个
"total" : 15,
"successful" ：15,成功 15 个
"failed" : 0 失败。个

防火墙关闭

systemctl stop firewalld.service