

Please visit website: <http://cxyroad.com>

```
" : {
  "user" : "朝阳区-老贾",
  "message" : "123,gogogo",
  "uid" : 5,
  "age" : 35,
  "city" : "北京",
  "province" : "北京",
  "country" : "中国",
  "address" : "中国北京市朝阳区建国门",
  "location" : {
    "lat" : "39.718256",
    "lon" : "116.367910"
  }
},
{
  "_index" : "twitter",
  "_type" : "_doc",
  "_id" : "5",
  "_score" : 0.48232412,
  "_source" : {
    "user" : "朝阳区-老王",
    "message" : "Happy Birthday My Friend!",
    "uid" : 6,
    "age" : 50,
    "city" : "北京",
    "province" : "北京",
    "country" : "中国",
    "address" : "中国北京市朝阳区国贸",
    "location" : {
      "lat" : "39.918256",
      "lon" : "116.467910"
    }
  }
}
]
}
}
```

查询出message字段包含`出`的文档

...

GET /twitter/_search

```
{
  "query": {
    "match": {
      "message": "出"
    }
  }
}
```

...

...

```
{
  "took" : 0,
  "timed_out" : false,
  "_shards" : {
    "total" : 1,
    "successful" : 1,
    "skipped" : 0,
    "failed" : 0
  },
  "hits" : {
    "total" : {
      "value" : 2,
      "relation" : "eq"
    },
    "max_score" : 1.0764678,
    "hits" : [
      {
        "_index" : "twitter",
        "_type" : "_doc",
        "_id" : "2",
        "_score" : 1.0764678,
        "_source" : {
          "user" : "东城区-老刘",
          "message" : "出发，下一站云南！ ",
          "uid" : 3,
          "age" : 30,
          "city" : "北京",
          "province" : "北京",
          "country" : "中国",
          "address" : "中国北京市东城区台基厂三条3号",
          "location" : {
            "lat" : "39.904313",
            "lon" : "116.412754"
          }
        }
      }
    ]
  }
}
```

```

    }
  },
  {
    "_index": "twitter",
    "_type": "_doc",
    "_id": "1",
    "_score": 0.8456129,
    "_source": {
      "user": "双榆树-张三",
      "message": "今儿天气不错啊，出去转转去",
      "uid": 2,
      "age": 20,
      "city": "北京",
      "province": "北京",
      "country": "中国",
      "address": "中国北京市海淀区",
      "location": {
        "lat": "39.970718",
        "lon": "116.325747"
      }
    }
  }
]
}
}
...

```

可以通过指定`min\_score`限定的文档相关性分数的最小值来减少文档的返回数量，例如将`min\_score`的值设置为1

```

...
GET /twitter/_search
{
  "min_score":1,
  "query": {
    "match": {
      "message": "出"
    }
  }
}
...
...

```

```
// 仅返回_score大于1的文档
{
  "took" : 23,
  "timed_out" : false,
  "_shards" : {
    "total" : 1,
    "successful" : 1,
    "skipped" : 0,
    "failed" : 0
  },
  "hits" : {
    "total" : {
      "value" : 1,
      "relation" : "eq"
    },
    "max_score" : 1.0764678,
    "hits" : [
      {
        "_index" : "twitter",
        "_type" : "_doc",
        "_id" : "2",
        "_score" : 1.0764678,
        "_source" : {
          "user" : "东城区-老刘",
          "message" : "出发，下一站云南！ ",
          "uid" : 3,
          "age" : 30,
          "city" : "北京",
          "province" : "北京",
          "country" : "中国",
          "address" : "中国北京市东城区台基厂三条3号",
          "location" : {
            "lat" : "39.904313",
            "lon" : "116.412754"
          }
        }
      }
    ]
  }
}
```

...

`match\_query`默认是`or`操作，这意味着

...

```
GET /twitter/_search
{
  "query": {
    "match": {
      "message": {
        "query": "出",
        "operator": "or"
      }
    }
  }
}
```

=== 等效于 ===

```
GET /twitter/_search
{
  "min_score":1,
  "query": {
    "match": {
      "message": "出"
    }
  }
}
```

...

Highlighting

突出显示能够让你从搜索结果中一个字段或者多个字眼中获取突出显示的片段，以便向用户显示查询的匹配

...

```
GET /twitter/_search
{
  "query": {
    "match": {
      "address": "北京"
    }
  },
  "highlight": {
    "fields": {
      "address": {}
    }
  }
}
```

// 可以自定义高亮标签属性

GET /twitter/_search

```
{
  "query": {
    "match": {
      "address": "北京"
    }
  },
  "highlight": {
    "pre_tags": ["<my_tag>"],
    "post_tags": ["</my_tag>"],
    "fields": {
      "address": {}
    }
  }
}
```

...

...

```
{
  "took" : 42,
  "timed_out" : false,
  "_shards" : {
    "total" : 1,
    "successful" : 1,
    "skipped" : 0,
    "failed" : 0
  },
  "hits" : {
    "total" : {
      "value" : 5,
      "relation" : "eq"
    },
    "max_score" : 0.5253035,
    "hits" : [
      {
        "_index" : "twitter",
        "_type" : "_doc",
        "_id" : "1",
        "_score" : 0.5253035,
        "_source" : {
          "user" : "双榆树-张三",
          "message" : "今儿天气不错啊，出去转转去",
          "uid" : 2,
```

```
"age" : 20,
"city" : "北京",
"province" : "北京",
"country" : "中国",
"address" : "中国北京市海淀区",
"location" : {
  "lat" : "39.970718",
  "lon" : "116.325747"
}
},
"highlight" : {
  "address" : [
    "中国<em>北</em><em>京</em>市海淀区"
  ]
}
},
{
  "_index" : "twitter",
  "_type" : "_doc",
  "_id" : "3",
  "_score" : 0.5253035,
  "_source" : {
    "user" : "东城区-李四",
    "message" : "happy birthday!",
    "uid" : 4,
    "age" : 30,
    "city" : "北京",
    "province" : "北京",
    "country" : "中国",
    "address" : "中国北京市东城区",
    "location" : {
      "lat" : "39.893801",
      "lon" : "116.408986"
    }
  },
  "highlight" : {
    "address" : [
      "中国<em>北</em><em>京</em>市东城区"
    ]
  }
},
{
  "_index" : "twitter",
  "_type" : "_doc",
  "_id" : "5",
  "_score" : 0.48232412,
  "_source" : {
    "user" : "朝阳区-老王",
```

```
    "message" : "Happy Birthday My Friend!",
    "uid" : 6,
    "age" : 50,
    "city" : "北京",
    "province" : "北京",
    "country" : "中国",
    "address" : "中国北京市朝阳区国贸",
    "location" : {
      "lat" : "39.918256",
      "lon" : "116.467910"
    }
  },
  "highlight" : {
    "address" : [
      "中国<em>北</em><em>京</em>市朝阳区国贸"
    ]
  }
},
{
  "_index" : "twitter",
  "_type" : "_doc",
  "_id" : "4",
  "_score" : 0.46336812,
  "_source" : {
    "user" : "朝阳区-老贾",
    "message" : "123,gogogo",
    "uid" : 5,
    "age" : 35,
    "city" : "北京",
    "province" : "北京",
    "country" : "中国",
    "address" : "中国北京市朝阳区建国门",
    "location" : {
      "lat" : "39.718256",
      "lon" : "116.367910"
    }
  },
  "highlight" : {
    "address" : [
      "中国<em>北</em><em>京</em>市朝阳区建国门"
    ]
  }
},
{
  "_index" : "twitter",
  "_type" : "_doc",
  "_id" : "2",
  "_score" : 0.40042,
```

```

    "_source" : {
      "user" : "东城区-老刘",
      "message" : "出发，下一站云南！ ",
      "uid" : 3,
      "age" : 30,
      "city" : "北京",
      "province" : "北京",
      "country" : "中国",
      "address" : "中国北京市东城区台基厂三条3号",
      "location" : {
        "lat" : "39.904313",
        "lon" : "116.412754"
      }
    },
    "highlight" : {
      "address" : [
        "中国<em>北</em><em>京</em>市东城区台基厂三条3号"
      ]
    }
  }
}
...

```

Prefix_query

返回提供字段中包含指定前缀的文档

```

...
GET /twitter/_search
{
  "query": {
    "prefix": {
      "user": {
        "value": "朝"
      }
    }
  }
}
...

```

```
...
{
  "took" : 6,
  "timed_out" : false,
  "_shards" : {
    "total" : 1,
    "successful" : 1,
    "skipped" : 0,
    "failed" : 0
  },
  "hits" : {
    "total" : {
      "value" : 2,
      "relation" : "eq"
    },
    "max_score" : 1.0,
    "hits" : [
      {
        "_index" : "twitter",
        "_type" : "_doc",
        "_id" : "4",
        "_score" : 1.0,
        "_source" : {
          "user" : "朝阳区-老贾",
          "message" : "123,gogogo",
          "uid" : 5,
          "age" : 35,
          "city" : "北京",
          "province" : "北京",
          "country" : "中国",
          "address" : "中国北京市朝阳区建国门",
          "location" : {
            "lat" : "39.718256",
            "lon" : "116.367910"
          }
        }
      },
      {
        "_index" : "twitter",
        "_type" : "_doc",
        "_id" : "5",
        "_score" : 1.0,
        "_source" : {
          "user" : "朝阳区-老王",
          "message" : "Happy BirthDay My Friend!",
          "uid" : 6,
          "age" : 50,
          "city" : "北京",
```

```

        "province" : "北京",
        "country" : "中国",
        "address" : "中国北京市朝阳区国贸",
        "location" : {
            "lat" : "39.918256",
            "lon" : "116.467910"
        }
    }
}
]
}
}

```

...

Term_query

在给定字段中进行精确字词的匹配

...

GET /twitter/_search

```

{
  "query": {
    "term": {
      "user.keyword": {
        "value": "朝阳区-老贾"
      }
    }
  }
}

```

...

...

```

{
  "took" : 1,
  "timed_out" : false,
  "_shards" : {
    "total" : 1,
    "successful" : 1,
    "skipped" : 0,
    "failed" : 0
  },
  "hits" : {

```

```

"total" : {
  "value" : 1,
  "relation" : "eq"
},
"max_score" : 1.540445,
"hits" : [
  {
    "_index" : "twitter",
    "_type" : "_doc",
    "_id" : "4",
    "_score" : 1.540445,
    "_source" : {
      "user" : "朝阳区-老贾",
      "message" : "123,gogogo",
      "uid" : 5,
      "age" : 35,
      "city" : "北京",
      "province" : "北京",
      "country" : "中国",
      "address" : "中国北京市朝阳区建国门",
      "location" : {
        "lat" : "39.718256",
        "lon" : "111"
      }
    }
  }
]
}

"query" : "false", "fields" : [ "available" ] } } ] } } } |
| `OrderBy` | `findByAvailableTrueOrderByNameDesc` | { "query" : {
"bool" : { "must" : [ { "query_string" : { "query" : "true", "fields" : [
"available" ] } } ] } }, "sort": [{"name": {"order": "desc"}}] } } |

```

新增文档

```

...

@Test
public void test_save(){
    String json1 = "{\"user\":\"双榆树-张三\",\"message\":\"今儿天气不错啊，出去转转去\",\"uid\":2,\"age\":20,\"city\":\"北京\",\"province\":\"北京\",\"country\":\"中国\",\"address\":\"中国北京市海淀区\",\"location\":{\"lat\":\"39.970718\",\"lon\":\"116.325747\"}}";
    String json2 = "{\"user\":\"东城区-老刘\",\"message\":\"出发，下一站云南！\",\"uid\":3,\"age\":30,\"city\":\"北京\",\"province\":\"北京\",\"country\":\"中国\",\"address\":\"中国北京市东城区台基厂三条3号\",\"location\":{\"lat\":\"39.904313\",\"lon\":\"116.412754\"}}";
    String json3 = "{\"user\":\"东城区-李四\",\"message\":\"happy birthday!\",\"uid\":4,\"age\":30,\"city\":\"北京\",\"province\":\"北京\",\"country\":\"中国\",\"address\":\"中国北京市东城区\",\"location\":{\"lat\":\"39.893801\",\"lon\":\"116.408986\"}}";
}

```

```

        String json4 = "{ \"user\": \"朝阳区-老贾\", \"message\": \"123,gogogo\", \"uid\": 5, \"age\": 35, \"city\": \"北京\", \"province\": \"北京\", \"country\": \"中国\", \"address\": \"中国北京市朝阳区建国门\", \"location\": { \"lat\": \"39.718256\", \"lon\": \"116.367910\" } }";
        String json5 = "{ \"user\": \"朝阳区-老王\", \"message\": \"Happy Birthday My Friend!\", \"uid\": 6, \"age\": 50, \"city\": \"北京\", \"province\": \"北京\", \"country\": \"中国\", \"address\": \"中国北京市朝阳区国贸\", \"location\": { \"lat\": \"39.918256\", \"lon\": \"116.467910\" } }";
        String json6 = "{ \"user\": \"虹桥-老吴\", \"message\": \"好友来了都今天我生日, 好友来了, 什么 birthday happy 就成!\", \"uid\": 7, \"age\": 90, \"city\": \"上海\", \"province\": \"上海\", \"country\": \"中国\", \"address\": \"中国上海市闵行区\", \"location\": { \"lat\": \"31.175927\", \"lon\": \"121.383328\" } }";

```

```

        List<String> list = Arrays.asList(json1, json2, json3, json4, json5, json6);
        for (String json : list) {
            Twitter twitter = JSON.parseObject(json, Twitter.class);
            twitterRepository.save(twitter);
        }
}

```

match_query

```

@Test
public void test_match_query(){
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()
        .withQuery(QueryBuilders.matchQuery("city", "北京"))
        .build();
    SearchHits<Twitter> searchHits =
        elasticsearchRestTemplate.search(searchQuery, Twitter.class);
    for (SearchHit<Twitter> searchHit : searchHits.getSearchHits()) {
        LOGGER.info("查询结果为:{", searchHit.getContent());
    }
}

```

```

@Test
public void test_match_query_with_min_score(){
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()
        .withQuery(QueryBuilders.matchQuery("message", "出"))
        .withMinScore(1.0f)

```

```

        .build();
        SearchHits<Twitter> searchHits =
elasticsearchRestTemplate.search(searchQuery, Twitter.class);
        for (SearchHit<Twitter> searchHit : searchHits.getSearchHits()) {
            LOGGER.info("文档得分score:{} 文档内容
content:{}",searchHit.getScore(),searchHit.getContent());
        }
    }
}

```

...

HightLighting

```

...

@Test
public void test_match_query_with_high_lighting(){
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()
        .withQuery(QueryBuilders.matchQuery("address", "北京"))
        .withHighlightFields(new
HighlightBuilder.Field("address").preTags("<em>").postTags("</em>"))
        .build();
    SearchHits<Twitter> searchHits =
elasticsearchRestTemplate.search(searchQuery, Twitter.class);
    for (SearchHit<Twitter> searchHit : searchHits.getSearchHits()) {
        LOGGER.info("查询结果为:{}",searchHit.getContent());
        String highLighting =
searchHit.getHighlightFields().get("address").get(0);
        LOGGER.info("高亮显示为:{}",highLighting);
    }
}
}

```

...

prefix_query

```

...

@Test
public void test_prefix_query(){
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()
        .withQuery(QueryBuilders.prefixQuery("user", "朝"))
        .build();

    SearchHits<Twitter> searchHits =

```

```

elasticsearchRestTemplate.search(searchQuery, Twitter.class);
    for (SearchHit<Twitter> searchHit : searchHits) {
        LOGGER.info("查询结果为:{}",searchHit.getContent());
    }
}

```

...

term_query

...

```

@Test
public void test_term_query(){
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()
        .withQuery(QueryBuilders.termQuery("user.keyword", "朝阳区
-老贾"))
        .build();
    SearchHits<Twitter> searchHits =
elasticsearchRestTemplate.search(searchQuery, Twitter.class);
    for (SearchHit<Twitter> searchHit : searchHits) {
        LOGGER.info("查询结果为:{}",searchHit.getContent());
    }
}

```

...

terms_query

...

```

@Test
public void test_terms_query(){
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()
        .withQuery(QueryBuilders.termsQuery("user.keyword",
Arrays.asList("双榆树-张三", "东城区-老刘")))
        .build();

    SearchHits<Twitter> searchHits =
elasticsearchRestTemplate.search(searchQuery, Twitter.class);
    for (SearchHit<Twitter> searchHit : searchHits) {
        LOGGER.info("查询结果为:{}",searchHit.getContent());
    }
}

```

...

复合查询

```
...  
@Test  
public void test_compound_query(){  
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()  
        .withQuery(QueryBuilders.boolQuery()  
            .must(QueryBuilders.termQuery("city.keyword", "北京"))  
            .must(QueryBuilders.termQuery("age", 30))  
        )  
        .build();  
  
    SearchHits<Twitter> searchHits =  
elasticsearchRestTemplate.search(searchQuery, Twitter.class);  
    for (SearchHit<Twitter> searchHit : searchHits) {  
        LOGGER.info("查询结果为:{",searchHit.getContent());  
    }  
}  
...
```

位置查询

```
...  
@Test  
public void test_geo_query(){  
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()  
        .withQuery(QueryBuilders.boolQuery()  
            .must(QueryBuilders.matchQuery("address", "北京"))  
            .filter(QueryBuilders  
                .geoDistanceQuery("location")  
                .distance("3", DistanceUnit.KILOMETERS)  
                .point(39.920086, 116.454182)  
            )  
        )  
        .build();  
    SearchHits<Twitter> searchHits =  
elasticsearchRestTemplate.search(searchQuery, Twitter.class);  
    for (SearchHit<Twitter> searchHit : searchHits) {  
        LOGGER.info("查询结果为:{",searchHit.getContent());  
    }  
}  
}
```

...

范围查询

...

```
@Test
public void test_range_query(){
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()
        .withQuery(QueryBuilders.rangeQuery("age").gte(30).lte(40))
        .build();
    SearchHits<Twitter> searchHits =
elasticsearchRestTemplate.search(searchQuery, Twitter.class);
    for (SearchHit<Twitter> searchHit : searchHits) {
        LOGGER.info("查询结果为:{}",searchHit.getContent());
    }
}
```

...

Exists 查询

...

```
@Test
public void test_exists_query(){
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()
        .withQuery(QueryBuilders.existsQuery("city"))
        .build();
    SearchHits<Twitter> searchHits =
elasticsearchRestTemplate.search(searchQuery, Twitter.class);
    for (SearchHit<Twitter> searchHit : searchHits) {
        LOGGER.info("查询结果为:{}",searchHit.getContent());
    }
}
```

...

短语匹配

...

```
@Test
public void test_phrase_query(){
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()
```

```

        .withQuery(QueryBuilders.matchPhraseQuery("message", "happy
birthday")).slop(2))
        .build();
    SearchHits<Twitter> searchHits =
    elasticsearchRestTemplate.search(searchQuery, Twitter.class);
    for (SearchHit<Twitter> searchHit : searchHits) {
        LOGGER.info("查询结果为:{",searchHit.getContent());
    }
}
...

```

match_phrase_prefix_query

```

...
@Test
public void test_phrase_prefix_query(){
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()
        .withQuery(QueryBuilders.matchPhrasePrefixQuery("message",
"happy birthday m"))
        .build();
    SearchHits<Twitter> searchHits =
    elasticsearchRestTemplate.search(searchQuery, Twitter.class);
    for (SearchHit<Twitter> searchHit : searchHits) {
        LOGGER.info("查询结果为:{",searchHit.getContent());
    }
}
...

```

match_bool_prefix_query

```

...
@Test
public void test_match_bool_prefix(){
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()
        .withQuery(QueryBuilders.matchBoolPrefixQuery("message",
"happy birthday m"))
        .build();

    SearchHits<Twitter> searchHits =
    elasticsearchRestTemplate.search(searchQuery, Twitter.class);
    for (SearchHit<Twitter> searchHit : searchHits) {
        LOGGER.info("查询结果为:{",searchHit.getContent());
    }
}

```

```
}  
}  
...
```

通配符匹配

```
...  
@Test  
public void test_wildcard_query(){  
    NativeSearchQuery searchQuery = new NativeSearchQueryBuilder()  
        .withQuery(QueryBuilders.wildcardQuery("city.keyword", "*京"))  
        .build();  
  
    SearchHits<Twitter> searchHits =  
        elasticsearchRestTemplate.search(searchQuery, Twitter.class);  
    for (SearchHit<Twitter> searchHit : searchHits) {  
        LOGGER.info("查询结果为:{},searchHit.getContent());  
    }  
}  
...
```

> 参考博客

: [elasticstack.blog.csdn.net/article/det...](http://cxyroad.com/
"https://elasticstack.blog.csdn.net/article/details/102728604")

> 项目地址: [gitee.com/GJay/java-l...](http://cxyroad.com/
"https://gitee.com/GJay/java-learn/tree/master/learn-elasticsearch")

原文链接: <https://juejin.cn/post/7378014138137821235>