



链滴

# 基础框架系列 -01：zipkin 的简单使用

作者：[xiaoheitalk](#)

原文链接：<https://ld246.com/article/1566872716606>

来源网站：[链滴](#)

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

zipkin的使用涉及到两方面内容，一个是zipkin-client，一个是zipkin-server；

1. zipkin-server确定数据的存储方式及数据的传输方式；
2. zipkin-client依据zipkin-server 的传输方式配置。

## 1. zipkin-client的使用配置如下

### 1.1 需要在项目的pom.xml引入lls-zipkin的依赖。

dependency依赖

```
<dependency>
  <groupId>com.lls.framework</groupId>
  <artifactId>lls-zipkin</artifactId>
</dependency>
```

### 1.2 需要在application.properties 配置zipkin信息。

properties配置

```
## zinkin开关，默认为true
#spring.zipkin.enabled=false
## zipkin地址
spring.zipkin.base-url=http://172.16.90.168:9411
## 链路跟踪采集比例，默认为0.1
spring.sleuth.sampler.probability=1

## zipkin-server默认使用http收集数据，如需使用rabbitmq收集数据时，需要配置rabbit
spring.zipkin.sender.type=rabbit
spring.zipkin.rabbitmq.queue=zipkin
spring.rabbitmq.host=127.0.0.1
spring.rabbitmq.port=5672
spring.rabbitmq.username=guest
spring.rabbitmq.password=guest
```

## 2. zipkin-server的使用配置

### 2.1 启动参数

启动参数说明：[zipkin-server](#)

如果在Windows系统启动，启动参数前要增加 -D，如

```
## windows系统启动
java -jar -DRABBIT_ADDRESSES=localhost:5672 -DRABBIT_USER=guest -DRABBIT_PASSWORD=guest zipkin-server-2.12.0-exec.jar

## linux系统启动
RABBIT_ADDRESSES=localhost:5672 RABBIT_USER=guest RABBIT_PASSWORD=guest java -jar zipkin-server-2.12.0-exec.jar
```

## 2.2 数据收集的传输方式

默认使用http方式收集，可支持kafka, rabbitmq等，下面以rabbitmq为例。

配置参考 [collector-rabbitmq](#)

```
RABBIT_ADDRESSES=172.16.90.168:5672 RABBIT_USER=lls RABBIT_PASSWORD=lls java -jar zipkin-server-2.12.0-exec.jar
```

## 2.3 数据的存储方式

默认使用内存方式进行存储，可支持elasticsearch, mysql等。

### 2.3.1 elasticsearch

#### 2.3.1.1. 启动命令

```
STORAGE_TYPE=elasticsearch ES_HOSTS=http://172.16.90.168:9200 ES_HTTP_LOGGING=BASIC java -jar zipkin-server-2.12.0-exec.jar
```

#### 2.3.1.2. 配置说明

- \* `ES\_HOSTS`: A comma separated list of elasticsearch base urls to connect to ex. http://host:200.  
Defaults to "http://localhost:9200".
- \* `ES\_PIPELINE`: Indicates the ingest pipeline used before spans are indexed. No default.
- \* `ES\_TIMEOUT`: Controls the connect, read and write socket timeouts (in milliseconds) for Elasticsearch Api. Defaults to 10000 (10 seconds)
- \* `ES\_INDEX`: The index prefix to use when generating daily index names. Defaults to zipkin.
- \* `ES\_DATE\_SEPARATOR`: The date separator to use when generating daily index names. Defaults to '-'.
- \* `ES\_INDEX\_SHARDS`: The number of shards to split the index into. Each shard and its replicas are assigned to a machine in the cluster. Increasing the number of shards and machines in the cluster will improve read and write performance. Number of shards cannot be changed for existing indices, but new daily indices will pick up changes to the setting. Defaults to 5.
- \* `ES\_INDEX\_REPLICAS`: The number of replica copies of each shard in the index. Each shard and its replicas are assigned to a machine in the cluster. Increasing the number of replicas and machines in the cluster will improve read performance, but not write performance. Number of replicas can be changed for existing indices. Defaults to 1. It is highly discouraged to set this to 0 as it would mean a machine failure results in data loss.
- \* `ES\_USERNAME` and `ES\_PASSWORD`: Elasticsearch basic authentication, which defaults to empty string.  
Use when X-Pack security (formerly Shield) is in place.
- \* `ES\_HTTP\_LOGGING`: When set, controls the volume of HTTP logging of the Elasticsearch Api.  
Options are BASIC, HEADERS, BODY

### 2.3.2 mysql

2.3.2.1. 在mysql数据库上创建zipkin所需要的表, 执行的sql语句见[mysql](#) (需要找匹配版本的sql) 者 ./sql/mysql.sql (对应zipkin-server-2.12.0)

2.3.2.2. 启动zipkin-server时加上mysql的配置参数, 例如

```
STORAGE_TYPE=mysql MYSQL_DB=zipkin MYSQL_HOST=172.16.90.168 MYSQL_TCP_PORT=306 MYSQL_USER=root MYSQL_PASS=123456 MYSQL_MAX_CONNECTIONS=100 java -jar zipkin-server-2.12.0-exec.jar
```

2.3.2.3. Mysql 的配置说明

MYSQL\_DB: The database to use. Defaults to "zipkin".

MYSQL\_USER and MYSQL\_PASS: MySQL authentication, which defaults to empty string.

MYSQL\_HOST: Defaults to localhost

MYSQL\_TCP\_PORT: Defaults to 3306

MYSQL\_MAX\_CONNECTIONS: Maximum concurrent connections, defaults to 10

MYSQL\_USE\_SSL: Requires `javax.net.ssl.trustStore` and `javax.net.ssl.trustStorePassword`, defaults to false.