# Translate Zipkin-Log to Shiviz-Log

## Step 1 - Setup System

At first you should setup the train ticket system with Zipkin.

1. Move all the **directory** whose name is **start with "ts-"** to your server.
2. Move **pom.yml** and **docker-compose.yml** to your server
3. Enter the directory where **pom.yml** is located
4. Run the following 3 commands:

   *mvn clean package*

   *docker-compose build*

   *docker-compose up*

5. Waiting for the boot of the system.

```
[INFO] ts-preserve-other-service ......................... SUCCESS [0.570s]
[INFO] ts-basic-service .................................. SUCCESS [0.204s]
[INFO] ts-ticketinfo-service ............................. SUCCESS [0.190s]
[INFO] ts-price-service .................................. SUCCESS [0.197s]
[INFO] ts-notification-service ........................... SUCCESS [0.215s]
[INFO] ts-security-service ............................... SUCCESS [0.222s]
[INFO] ts-inside-payment-service ......................... SUCCESS [0.259s]
[INFO] ts-execute-service ................................ SUCCESS [0.216s]
[INFO] ts-payment-service ................................ SUCCESS [0.188s]
[INFO] ts-rebook-service ................................. SUCCESS [0.242s]
[INFO] ts-cancel-service ................................. SUCCESS [0.224s]
[INFO] ts-route-service .................................. SUCCESS [0.197s]
[INFO] ts-assurance-service .............................. SUCCESS [0.205s]
[INFO] ts-seat-service ................................... SUCCESS [0.182s]
[INFO] ts-travel-plan-service ............................ SUCCESS [0.214s]
[INFO] ts-route-plan-service ............................. SUCCESS [0.206s]
[INFO] ts-food-map-service ............................... SUCCESS [0.196s]
[INFO] ts-food-service ................................... SUCCESS [0.211s]
[INFO] ts-consign-price-service .......................... SUCCESS [0.183s]
[INFO] ts-consign-price-service .......................... SUCCESS [0.182s]
[INFO] ts-admin-order-service ............................ SUCCESS [0.196s]
[INFO] ts-admin-basic-info-service ....................... SUCCESS [0.210s]
[INFO] ts-admin-route-service ............................ SUCCESS [1.327s]
[INFO] ts-admin-travel-service ........................... SUCCESS [0.202s]
[INFO] ts-admin-user-service ............................. SUCCESS [0.190s]
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time: 12.545s
[INFO] Finished at: Tue Jul 03 19:14:20 CST 2018
[INFO] Final Memory: 98M/769M
[INFO] ------------------------------------------------------------------------
[root@centos-minion-1 ts]#
```
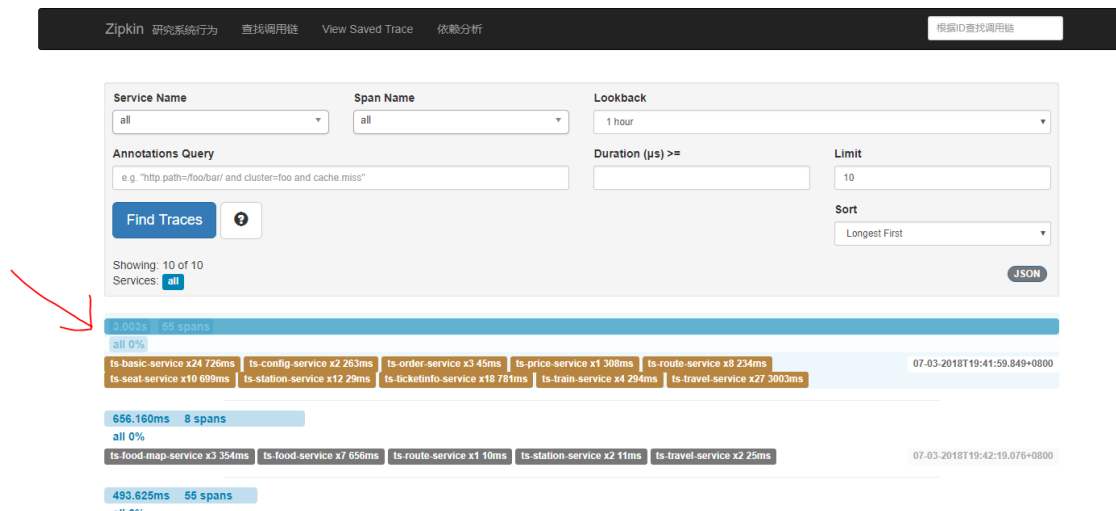
```
Removing intermediate container d06274031c7a
Successfully built d43a3dc8100b
Building ts-admin-travel-service
Step 1/4 : FROM java:8-jre
 ---> e44d62cf8862
Step 2/4 : ADD ./target/ts-admin-travel-service-1.0.jar /app/
 ---> 3ca85d20123d
Removing intermediate container 67a327e45090
Step 3/4 : CMD java -Xmx200m -jar /app/ts-admin-travel-service-1.0.jar
 ---> Running in 7ff77a922a5e
 ---> cca576ab4459
Removing intermediate container 7ff77a922a5e
Step 4/4 : EXPOSE 16114
 ---> Running in 4ab5291b1fb1
 ---> f7357b20484c
Removing intermediate container 4ab5291b1fb1
Successfully built f7357b20484c
Building ts-admin-user-service
Step 1/4 : FROM java:8-jre
 ---> e44d62cf8862
Step 2/4 : ADD ./target/ts-admin-user-service-1.0.jar /app/
 ---> df07d4d57911
Removing intermediate container a2f82c369f91
Step 3/4 : CMD java -Xmx200m -jar /app/ts-admin-user-service-1.0.jar
 ---> Running in bb0a8081ffc6
 ---> f7748cc2992b
Removing intermediate container bb0a8081ffc6
Step 4/4 : EXPOSE 16115
 ---> Running in 55190cdd7492
 ---> 1b5cb36ba8db
Removing intermediate container 55190cdd7492
Successfully built 1b5cb36ba8db
[root@centos-minion-1 ts]#
```
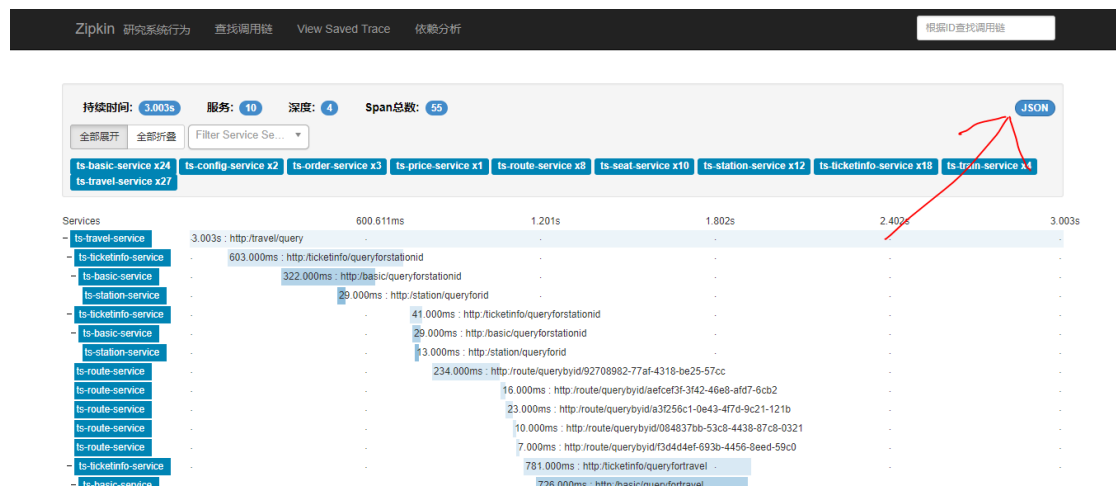
## Step 2 - Collect Log in Zipkin

You could do some ticket operation and then collect log from Zipkin listening on port 9411.

In our example, we click **FlowOne,** then **Login**, **Search for a ticket**, and then **Select a contacts**, **confirm a ticket**. 10.141.212.21 is my address of train ticket.

After these operation, we visit **10.141.212.21:9411** Zipkin page and click the traces you want to convert. We have an example locates at **train_ticket\Json2Shiviz\example\zipkin_log\case1\success\example.json**
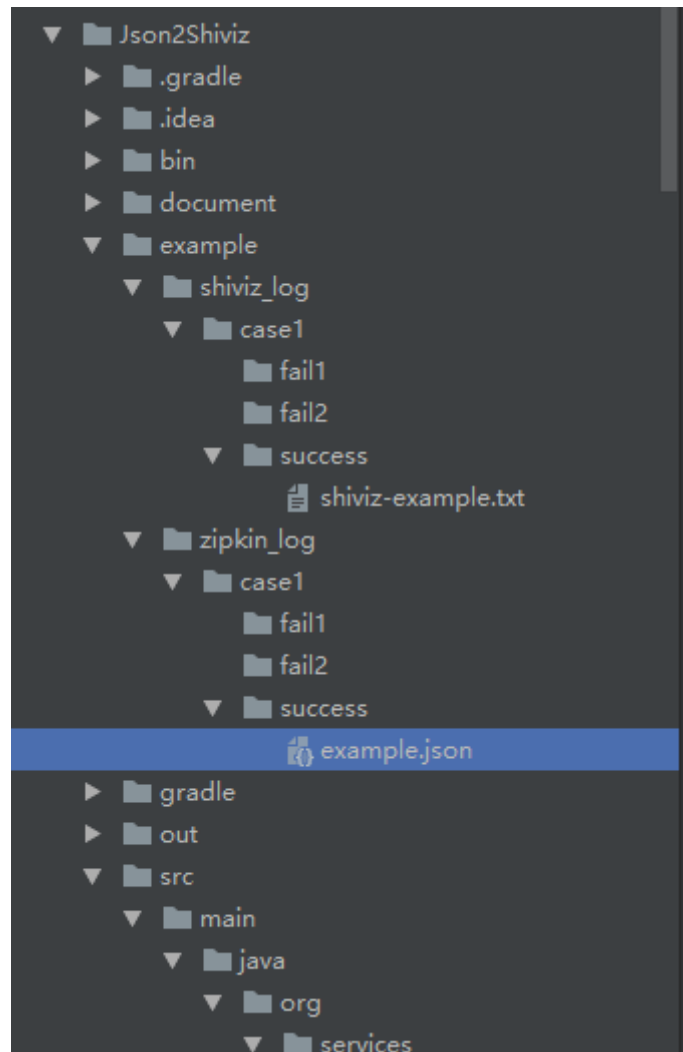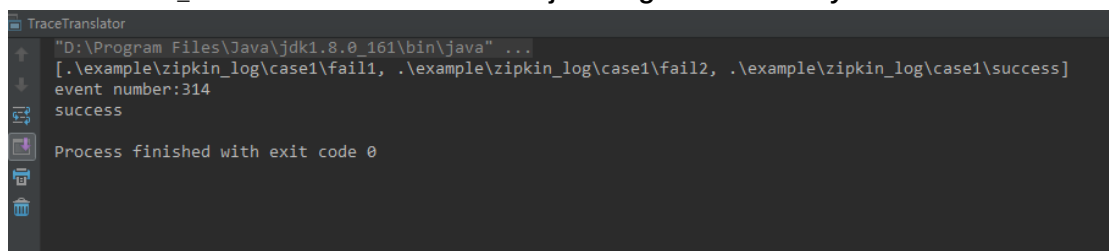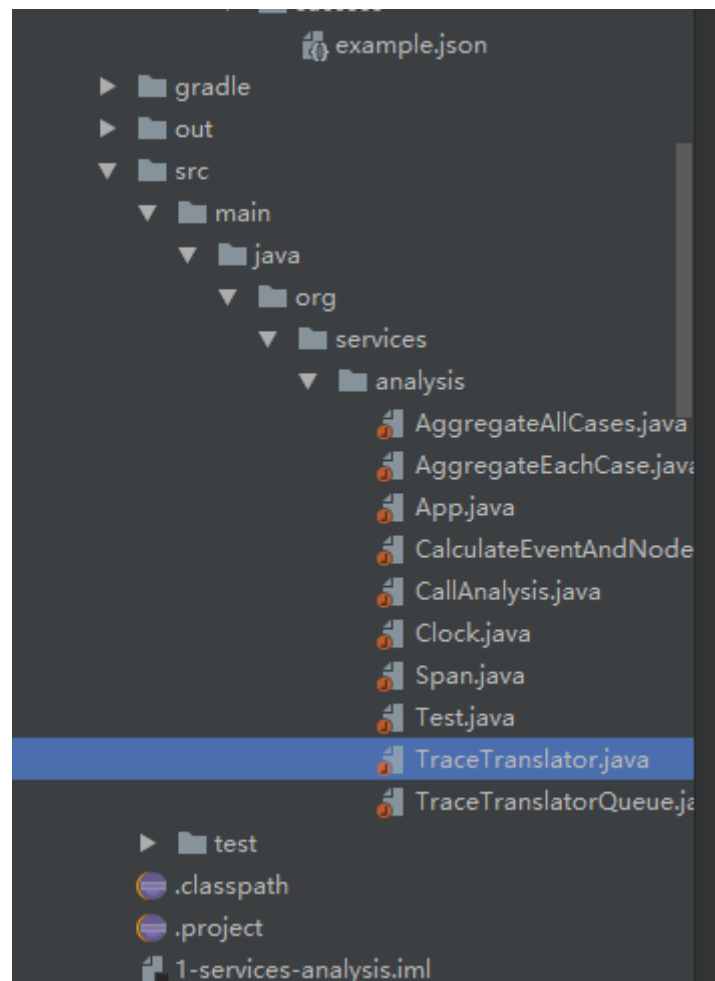


Then download the Zipkin-Trace log.



## Step 3 – Translate to Shiviz-Format

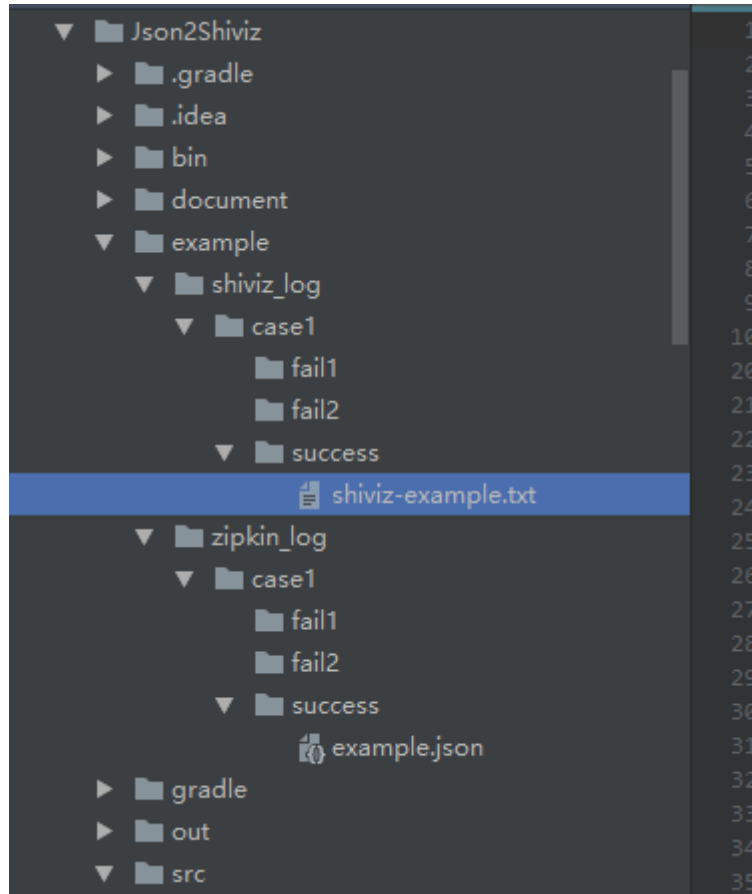Put the JSON file of zipkin in the directory **train_ticket\Json2Shiviz\example\zipkin_log\case1\success**

Run **train_ticket\Json2Shiviz\src\main\java\org\services\analysis\TraceTranslator**
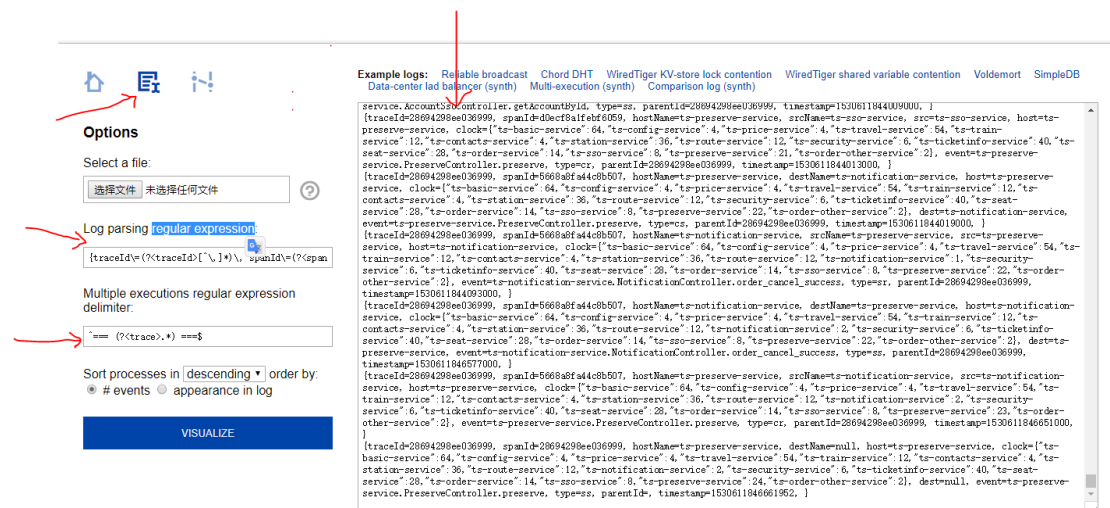


```
TraceTranslator
    "D:\Program Files\Java\jdk1.8.0_161\bin\java" ...
    [.\example\zipkin_log\case1\fail1, .\example\zipkin_log\case1\fail2, .\example\zipkin_log\case1\success]
    event number:314
    success

    Process finished with exit code 0
```

You will see the result at **train_ticket\Json2Shiviz\example\shiviz_log\case1\success**

## Step 4 – Display in Shiviz

Visit *https://bestchai.bitbucket.io/shiviz/* , and then Input **regular expression** and **Shiviz Log**

The regular expression locates in **train_ticket\Json2Shiviz\document\regular_expr**



Then click **Visualize**, you will see the trace of Shiviz.

Log lines    Motifs

TestCase1 case1\success\example Success execution 1

ts-preserve-service.PreserveController.preserve

ts-preserve-service.PreserveController.preserve

ts-sso-service.AccountSsoController.verifyLoginT

ts-sso-service.AccountSsoController.verifyLoginT

6  ts-preserve-service.PreserveController.preserve

ts-preserve-service.PreserveController.preserve
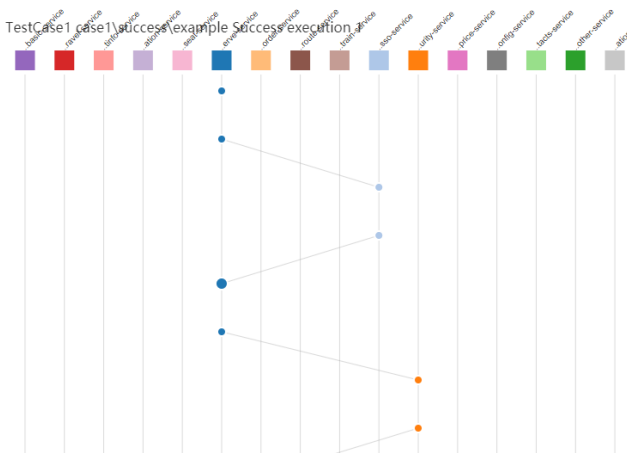
ts-security-service.SecurityController.check

ts-security-service.SecurityController.check

Search the visualization                    SEARCH

TestCase1 case1\success\example Success execution 1

ts-preserve-service.PreserveController.preserve

| | |
|---|---|
| traceId: | 28694298ee |
| spanId: | 0cfc82ea0c9 |
| hostName: | ts-preserve- |
| srcName: | ts-sso-servic |
| src: | ts-sso-servic |
| host: | ts-preserve- |
| type: | cr |